

New Strategic Investment Targets in the Turkish Automotive Sector 2015



About the Survey

The survey aims to determine sector-related projections of Turkey's automotive sector executives. The survey has been conducted by ERA Research & Consultancy in cooperation with the Association of Automotive Distributors (ODD), Automotive Manufacturers Association (OSD), Association of Automotive Parts and Components Manufacturers (TAYSAD), Association of Authorized Dealers (OYDER) and members of these associations under the supervision of KPMG Turkey.

In addition to the general questions put to the members of the four associations, special questions were addressed to the members of each association under the scope of the work. General questions included in the study, the first edition of which was carried out in 2012, are reported on a comparative basis. The graphics are created according to the report of the relevant year. Utilizing the online survey method, the questionnaire was prepared in liaison with KPMG Turkey, and was evaluated with the support of all associations. About 200 executives from the leading companies of Turkish automotive sector, which are members of 4 associations, participated in the survey carried out between November 20, 2014 and January 5, 2015. While the results are reported in total for all members of all associations, the sampling of each association has an equal weight.

Preface

The Turkish automotive sector should aim for new strategic investments in the upcoming years to achieve its high targets. In an environment where the product features and production technologies are expected to develop to a new level, new players and changing customer behaviours are influencing the market and the global markets are reorganized, the Turkish automotive sector has to determine its strategy.

According to the 2015 results of KPMG Turkey's Automotive Executives Survey, carried out for the third time this year, the anticipation that the market will keep growing and production will increase in the next 5 years is sustained. However, we can see that the participants of this year see a clearer and direct connection between the industry and the domestic market. For the industry to achieve the desired levels, the domestic market must grow, too. High levels of sales taxes are considered to be the most important challenge to be overcome for the sector to grow. If the balance between the industry and the domestic market is ensured by considering Turkey's trade balances as well, the future of the Turkish automotive sector looks bright. Due to the importance of this matter, it is crucial that the parties gather and agree on a new strategy and action plan for the sector.

R&D and critical technology investments are considered to be important matters by the manufacturers and the supplier industry. The current manufacturers in the Turkish automotive sector continue to increase their investments. However, it will be necessary to aim for new strategic investments to move into the next level and increase the added value in production. This can be either attracting new investors to Turkey or investing in new technologies. Although this is a wide area, investing in product features currently not available in Turkey such as connectivity, Head-Up Display, self-driving

vehicles, etc. or recent technologies such as additive manufacturing and 3D printing might be options.

On the other hand, as a quite ambitious option, becoming a player in one or the other future technology can be aimed for as well.

Free trade agreements are also among issues gaining importance. On one hand, the emerging markets are becoming more important and Turkish companies are giving more importance to bilateral free trade agreements to enter these markets under the best conditions since they are also competing globally. On the other hand, the EU and the USA are discussing the TTIP (Transatlantic Trade and Investment Partnership) agreement to increase their trade and this agreement would have important outcomes for the Turkish Automotive industry and increase the competition within the EU, which is the main market for Turkey. In the supplier industry, dominated by family businesses, institutionalization and strategic roadmaps will be focus areas.

We would like to thank four important associations of the sector, ODD, OSD, OYDER and TAYSAD for their support in preparing the KPMG Turkey 2015 Automotive Executives Survey.

We hope that our survey will be a useful resource for the executives following the automotive sector and wish you a pleasant time reading it.

Best regards,



Ergün Kış
KPMG Turkey,
Head of Automotive Sector
Partner, Audit



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Executive Summary

GENERAL INFORMATION



- Taxes are increasingly growing in importance. The scrap vehicle program and environment-friendly vehicles are also gaining importance.
- 88% of the executives foresee a growth of the market but it's also anticipated that the growth will slow down.
- Tax burdens are the leading impact factor for the growth of the automotive sector with a difference of 13%.
- 63% of the participants anticipate that BRIC* automotive manufacturers will enter the European market and these investments will be realized shortly.
- The fact that the Eastern European countries lost points didn't reflect to Turkey as an opportunity for growth.
- The anticipation for new investments in the Turkish automotive sector in the next 5 years has significantly decreased.
- Improvement of the investment environment and the growth of the domestic market are the most important conditions for new investments.

* BRIC: Brazil, Russia, India, China.



Are companies betting on the right technologies?



Which topics stand out in the automotive sector?

Who is best positioned for sustainable growth?



How important is safety considered to be?



MARKET

ODD

- On the market side, growth rate of national income per capita and the future of Europe after the crisis are among the most important issues this year as well.
- 25% believe that the success in the market depends on pricing and sales incentives. When financial services are included, the overall percentage rises up to 47%.
- The majority of the executives expect a decrease of profitability in profit centers.
- Sales, service and support services tailored to the needs of the customer are keys to customer satisfaction.
- Safety features have become more important in purchase decisions and ranked the second after fuel efficiency.
- Following service and spare parts, communication is the third most important aftersales service topic.
- 86% of the participants anticipate that the growth in auto leasing sector will be at least 10% above the automotive market.

OYDER

- "Profitability not meeting the risks" and "Inequality in relations with suppliers" are by far the most important issues of authorized dealership.
- "Governmental policies about the sector" and "Economic fluctuations and instability" are the most important external factors affecting the profession.
- Authorized dealers anticipate that the road tax (Motor Vehicles Tax) system will be changed and be based on emission" in the next 5 years.
- 3 out of 4 authorized dealers believe that "Buying cars still has a social effect on the class definition".
- Authorized dealers are expected to establish "professional used vehicle (second hand) sales organizations" in the next 5 years.



INDUSTRY

OSD

- Manufacturers are 100% sure that manufacturing will increase in the next 5 years.
- The anticipation for capacity growth has a downward trend to a lower level.
- This year, the leading challenge for a new investment into Turkey is the uneconomic size of the domestic market with a significant rise compared to last year.
- Bilateral agreements with emerging markets are becoming more important.
- Though R&D and product development activities were already considered very important, they grew in importance even more.
- Establishment of R&D and testing infrastructure, the most important matters for the supplier industry and common design in new vehicle projects, have become more important.

TAYSAD

- R&D is once again a top priority for the supplier industry. However, interest in supply chain management is decreasing.
- Electric/electronic vehicle technologies are considered the most positive strategic investment area this year.
- Along with the improvement of incentive and investment environment, the need for R&D cooperation is also highlighted.
- While Russia still ranks the first despite a decrease of 14%, China is catching up. Interest the Eastern European countries is on the rise again.
- Plans for investment in Russia are decreasing while China, Eastern Europe, Germany and India are gaining importance.



What is driving consumer demand?

General Information

Issues of Priority

Which issues/developments will be of priority during the course of the next five years in the Turkish automotive market?

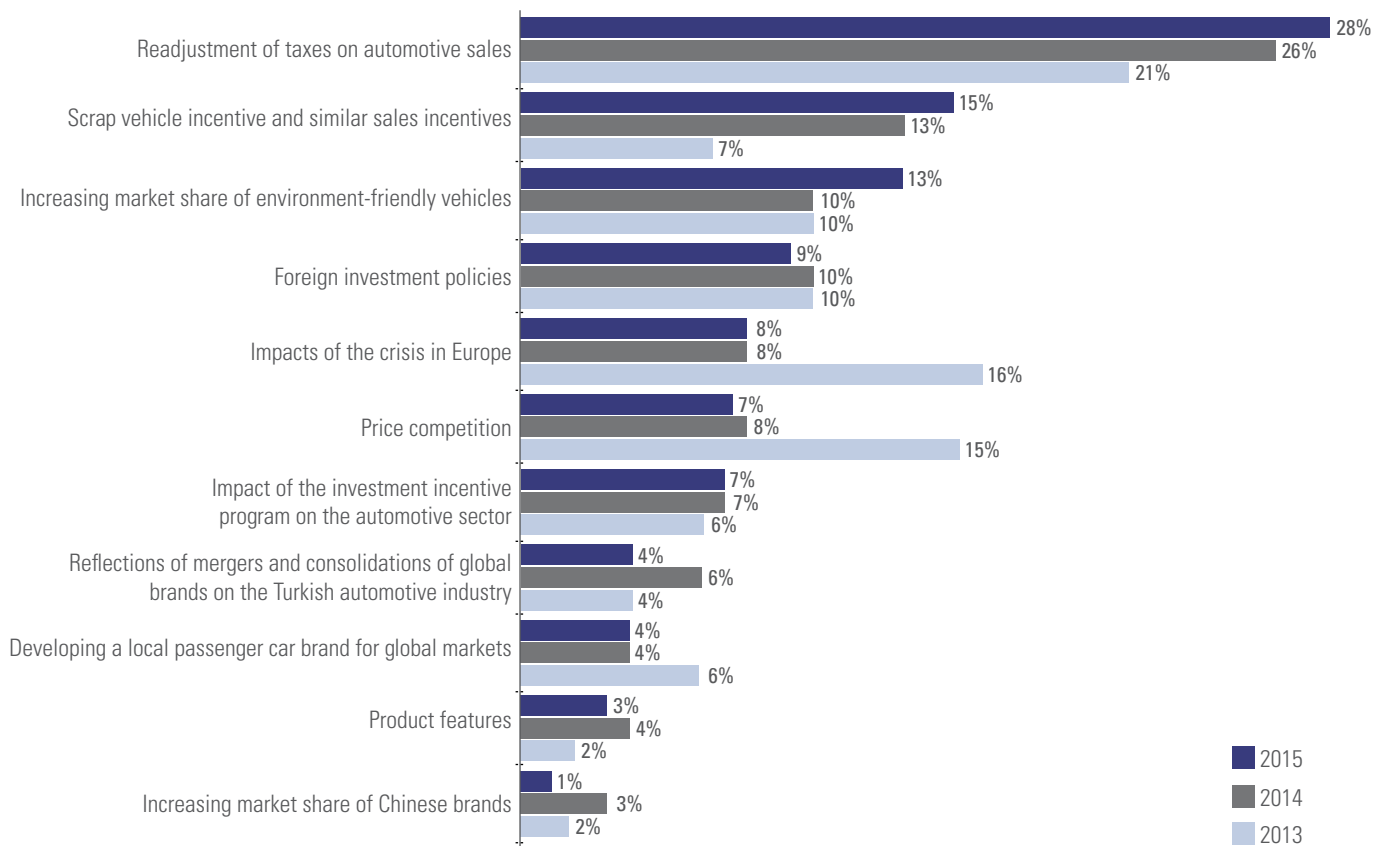
Although the readjustment of the automotive sales taxes was already at a high level, it ranks again the first with a significant increase. This topic is still the most important problem of the sector.

Scrap vehicle program also showed a significant increase. It ranks the second just like the previous year but the already old vehicle park has become older.

Another topic of interest is the fact that the option "increasing market share of environment-friendly vehicles" option ranks the third presenting the greatest rate of increase.

Taxes are increasingly growing in importance. The scrap vehicle program and environment-friendly vehicles are also gaining importance.

Issues of priority for the automotive sector during the course of the next five years





Mustafa Bayraktar
ODD, Chairman

This survey of KPMG, which has been carried out regularly for 3 years now casting light upon the sector, shows that the negative impacts of the reflection of taxes to sales prices, the need for modernizing the old vehicle park and the need for improvement of the investment environment in the country are still the most important issues for the automotive sector.

The first half of 2014 was very tough for the sector and with a slight recovery in the second half, the market for passenger cars and light commercial vehicles achieved a sales figure of 767.681 units with a drop of 10%. With the heavy commercial vehicles, the automotive market closed the year with a sales figure of 807.486 units. 2014 was a positive year for the exports despite the difficulties in the domestic market. Thanks to the recovery process in Europe and launch of new models, the exports increased by 7%. And the production showed a growth of 4%.

We can define 2015 as a year with uncertainties. It is likely that our economy and our sector will undergo changes depending on the cyclical developments.

However, the effects of the recovery in the USA market and the developments regarding the monetary policies of FED should be monitored closely. The answers to questions like "Would there be an increase in the interest rates in 2015? Would it be fast or slow?" would have an impact on us, too. We also consider it wise to monitor closely the inflation, current deficit and reform actions in the domestic market. The more there are positive developments the positively will the automotive sector be affected. Our estimation is that the year-end figures of 2015 will be slightly better than last year with sales between 825.000 and 875.000 units.

Unfortunately, one of the most important issues of our sector is still "the old vehicle park". We can see the positive results of the efforts so far for the heavy commercial vehicles and we wish for them to be expanded to cover passenger cars as well, with additional measurements. We hope that this issue will be on the agenda in 2015 and our recommendations that we express on every platform will be implemented to modernize our vehicle park.



General Information

Estimated Size of the Automotive Market

What are your expectations for the next five years for the Turkish automotive market, which closed 2013* with a total sales figure of 893,124 units consisting of 664,655 cars, 188,723 light commercial vehicles and 39,746 heavy commercial vehicles?

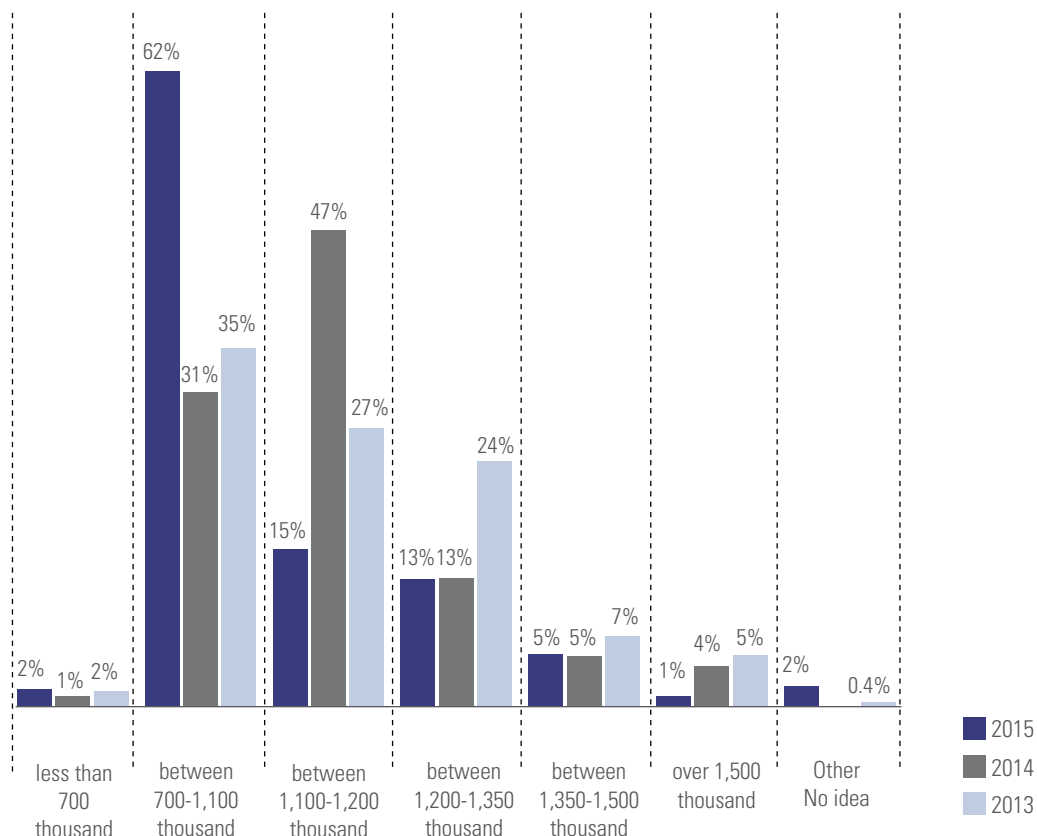
Despite the shrinkage of 10% in the Turkish automotive market in 2014, it is still expected that it will grow in the next five years. The expectations for growth are not as optimistic as before due to the difficulties arising from the taxes in particular.

While the number of passenger cars per 1000 people was 95 in 2003, it increased to 164 in 2013 and to 173 in 2014 with the growth in the last 11 years.

According to the findings of the survey, the expectations of the executives in the Turkish automotive sector regarding the growth of the market, which was 92% last year, have dropped slightly to 88% this year. The interesting point is that: 32% changed their opinions when compared with 2013. The same number of participants as those expecting the market to be over 1.1 million units last year anticipate a slowdown of the growth this year and the market to be below 1.1 million.

88% of the executives anticipate a growth in the market but it's also anticipated that the growth will slow down.

Growth projections for the next five years



* Since the preparations of the survey started in 2014, the figures of 2013 were used.

General Information

Factors Affecting the Growth of the Automotive Market

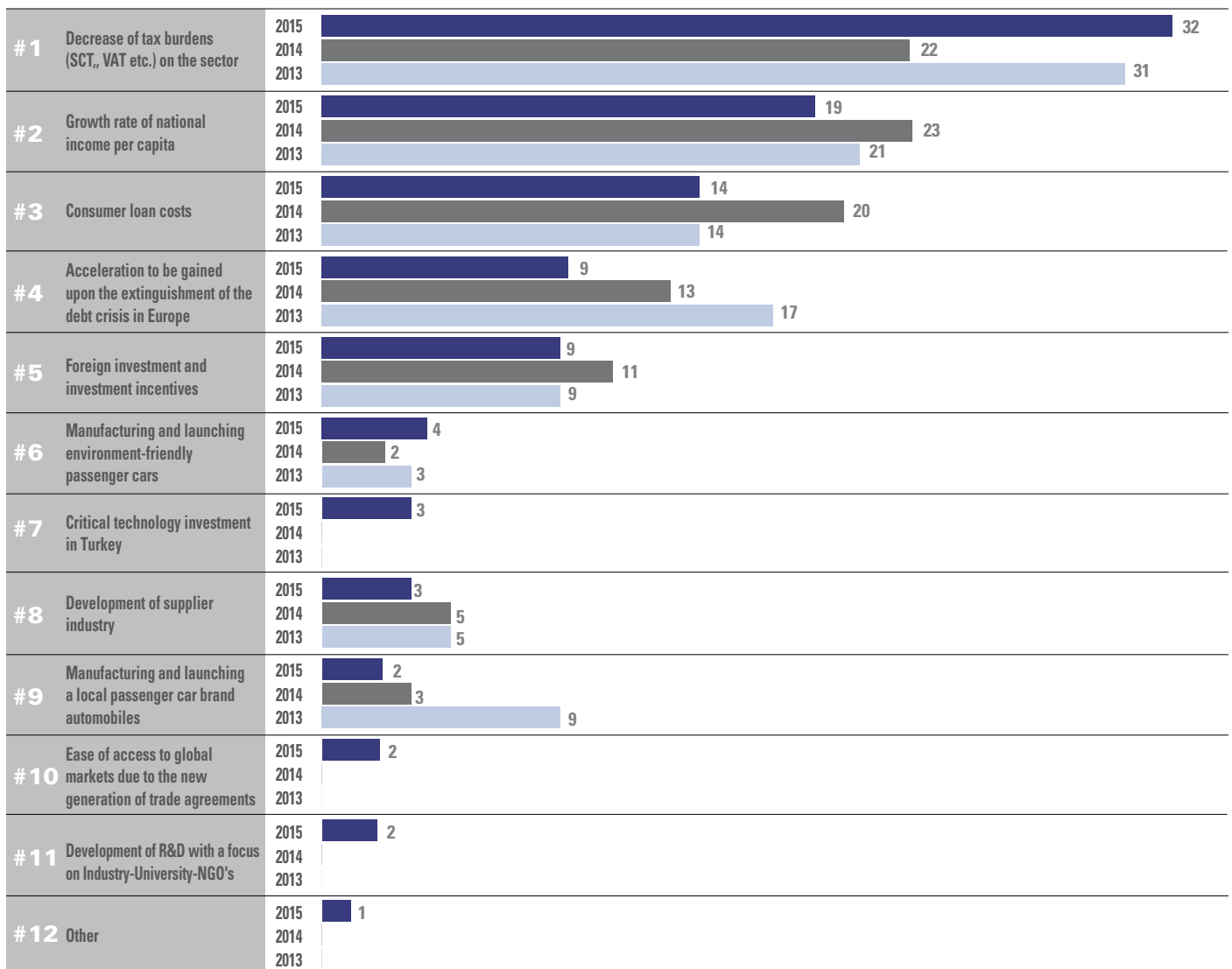
Which factors will affect the growth of the Turkish automotive sector over the next five years?

While the importance of decreasing the tax burdens for the growth of the sector slightly decreased last year, 32 % of the participants considered this again the most important issue with a significant increase of 10% this year.

The decrease in "the growth rate of national income per capita" and "consumer loan costs" was reflected to the "decrease of tax burdens (Special Consumption Tax, VAT etc.) on the sector" option.

Tax burdens are the leading impact factor for the growth of the automotive sector with a difference of 13%.

Factors affecting the growth of the sector over the five-year period





Z. Alp Gülan
OYDER, Chairman

Arrangements Needed for the Use of Environment-Friendly and Safer Vehicles

Despite the fact that 2014 started unfavorably with the increase in Special Consumption Tax, the increase in exchange rates, BRSA arrangements, and the increase in interest rates, the increase in the last quarter of the year and the situation at the end of the year allowed us to be more optimistic about 2015.

Sales expectations for 2015 are over 90 million units worldwide and it is estimated the Turkish market will close the year with 800-850 thousand units. We are aware of the fact that we still have a long way to go in a country where the number of passenger cars per 1000 people is below all European countries. We also believe that the perspective that the market will not shrink if there are no additional taxes will clear the way for new investments.

One of the most important expectations in the sector is that a permanent practice regarding end-of-life vehicles is put in place. We believe that such a practice will benefit the environment as well as vehicle and pedestrian safety.

There are 1650 thousand passenger cars and 230 thousand light commercial vehicles over 20 years of age in Turkey and, while CO₂ (carbon dioxide) emissions of the old generation vehicles are 220 g/km, the average level in new generation vehicles is 130 g/km. According to a calculation made in Europe, the cost of cleaning the air pollution caused by an old vehicle is 8494 Euro per vehicle.

If a quarter of this amount is spent for conversion, many old generation vehicles will be removed from traffic. Other than the increase in vehicle safety by the new technologies in new vehicles and the environmental impacts, a continuous practice regarding the end-of-life vehicles will help enliven the market as well.

We can see the benefits of good arrangements clearly in ASBIS and sales/transfer of used vehicles. ASBIS practices not only made vehicle registration procedures extremely convenient but also removed a significant burden from the public authorities.

Thanks to the fact that the sales/transfer procedures for used vehicles can be completed at a single point for 100 TL only, the number of used cars transferred annually increased from 1.400.000 units to 5.500.000 units which helped recording the 2nd hand trade, eliminating the lawsuits arising from lack of transfer, increasing the speed and convenience of the procedures which all together provided great benefits to the public, the traders and the end users.

We hope that all the arrangements to take our export leader sector to further will be implemented soon and we are ready to work with all the stakeholders in the sectors towards this objective. I would like to thank all the associations and KPMG family for this valuable study.

General Information

Penetration of BRIC Countries into the European Market

Do you expect automotive manufacturers of BRIC countries (particularly China) to penetrate the European market?

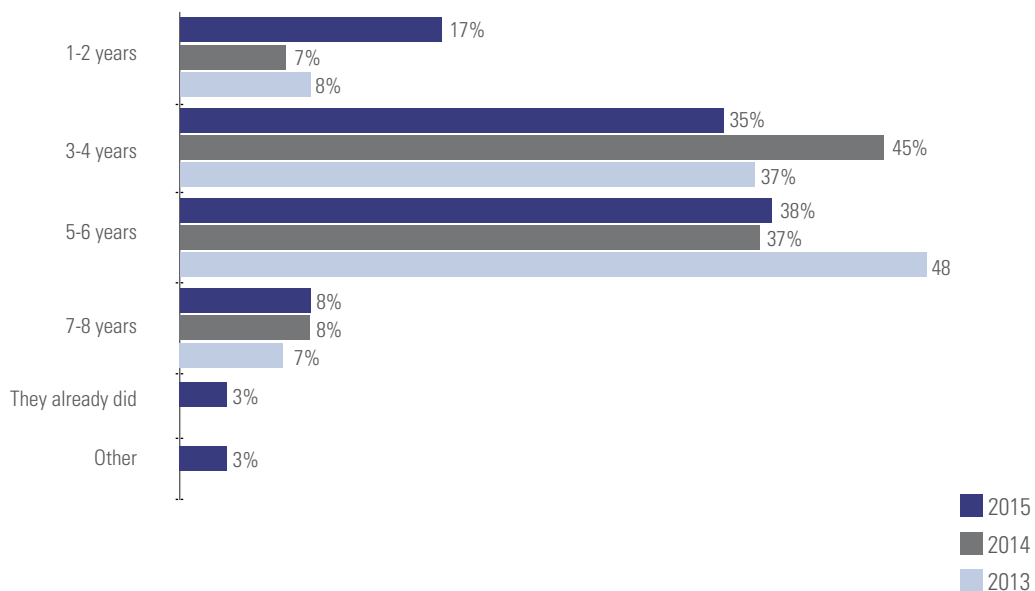
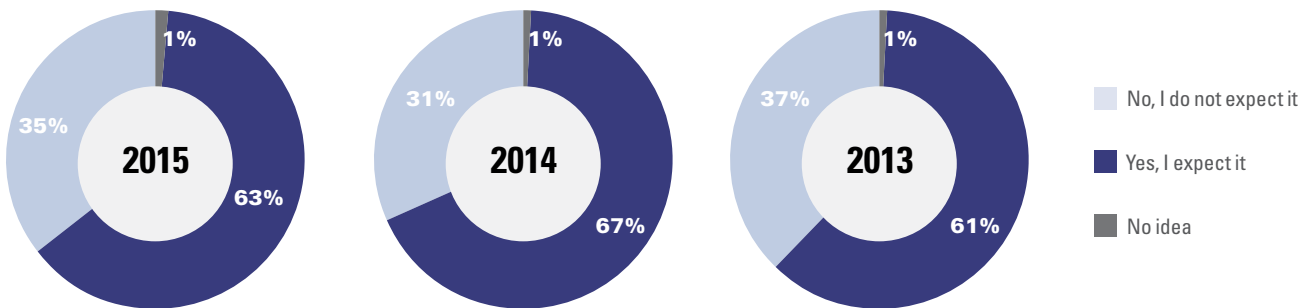
While those expecting BRIC manufacturers to invest in Europe are still the majority, the expectation dropped from 67% to 63%.

52% of the participants expect the investments to take place in the next 4 years. Another interesting point is that the rate of those expecting the investments in the next 1-2 years increased by 10%.

We can think that the investments of Chinese investors in various sectors in Turkey and the region in the recent years have reflected upon the expectations in the automotive sector.

63% of the participants expect that BRIC* automotive manufacturers will enter the European market and these investments will be realized shortly.

Expectations as to the penetration of BRIC countries' automotive manufacturers into the European market





Kudret Önen
OSD, Chairman

2015 Expectations of the Automotive Sector and the Steps to be Taken to Attract Foreign Investment

Despite the domestic demand expected to develop horizontally, manufacturing is expected to be over 2014 with the increase in exports in 2015. With the implementation of new investment projects at the end of 2015 and in 2016, our country is expected to become an important center in Europe for manufacturing of passenger cars after light commercial vehicles.

A horizontal development is also expected in the market in 2015 due to the increase in exchange rates as well as the measures limiting the use of credits and other similar measures in the mid-term plan.

Within overall exports of USD 170 billion, as foreseen for 2015, our industry will sustain its first rank among all industries with a share of 14-15%. EU countries and the US market will keep dominating our export market.

On the other hand, according to the data from the Ministry of Science, Industry and Commerce as per 2014, the automotive sector ranks the first with 50 out of 165 R&D centers operating.

Acceleration and maintaining of the success achieved on improvement of the R&D and innovation capacity under "National Science, Technology and Innovation Strategy 2011-2016" approved by the 22nd Supreme Council for Science and Technology is among the expectations of priority of our industry.

The legislation on the Government Supports for investments includes effective provisions encouraging our automotive industry, however a balanced tax system to expand the demand in the domestic market steadily is of strategic importance.

For the future and sustainable growth of our industry, the following should be supported:

- Successful implementation of the investments accelerated after the incentives provided,
- Creation of an environment where there are no instant decisions such as tax increases to affect the demand in the market adversely,
- Creation of a safe environment with a market that has achieved slow but sustainable growth,
- Opportunity to become a strong market and a global R&D center attracting new investors.

Within this framework, upon completion of infrastructural works in the field of R&D in the near future, our aim is to domestically carry out R&D studies, leading to savings in terms of resources and time. Finalization of the works on establishment of a testing track within the framework of the objective of "Improving the R&D Structure", which has been specified in the Strategy Document for the Automotive Industry as the goal with the highest priority is of utmost importance for our industry.

General Information

Countries Preferred by BRIC Countries While Penetrating the European Market

Which countries do you think automotive manufacturers of BRIC countries (particularly China) will primarily prefer (as a manufacturing center for the European market) in the event that they penetrate the global market?

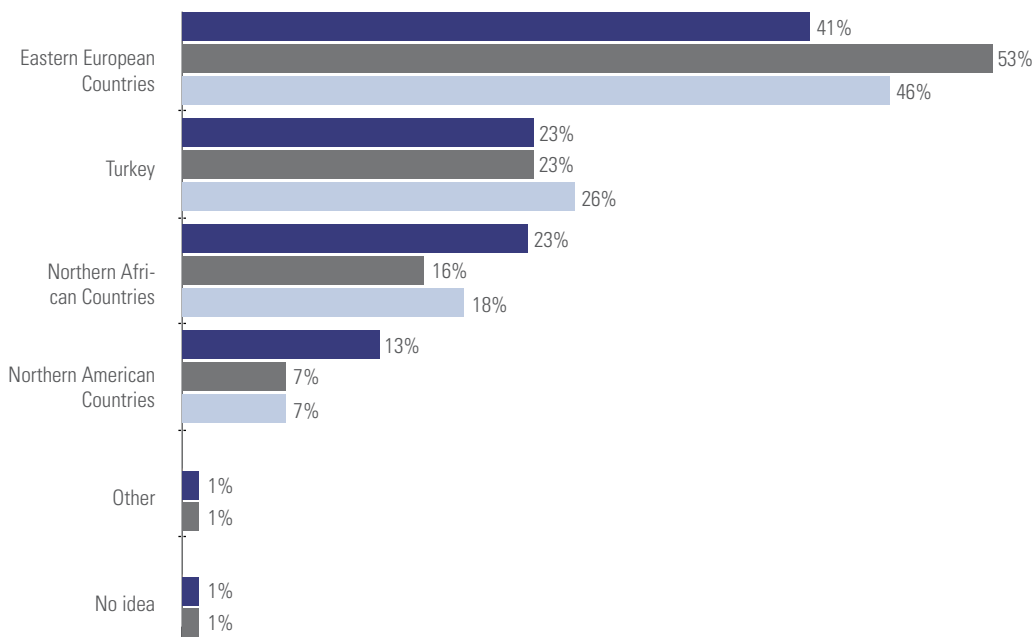
According to the answers to this question, Turkey sustained its position as the previous year. 23% of the participants still consider Turkey advantageous in this context.

60 to 80% of the vehicles manufactured in Turkey are exported every year and this trend is going upwards. Therefore, it is quite clear that Turkey is a manufacturing center in this context. However, although the Eastern European countries lost their advantage although they are still the first among the countries considered fit for investments, this did not reflect upon Turkey as an opportunity. Among the most important candidates to be a gateway for BRIC countries, the Northern African countries (23%) and the Northern American countries (13%) showed a significant rise.

The expectation for the manufacturing to move back to the US seems interesting. The re-growth of the US market and the fall in energy costs were effective here. An interesting point is that the Southern American and Russian regions were not preferred.

The fact that the Eastern European countries lost points did not reflect to Turkey as an opportunity for growth.

Countries preferred by BRIC countries while penetrating the European Market





Ergün Kış
KPMG Turkey
Head of Automotive
Partner, Audit

"No problem!?"

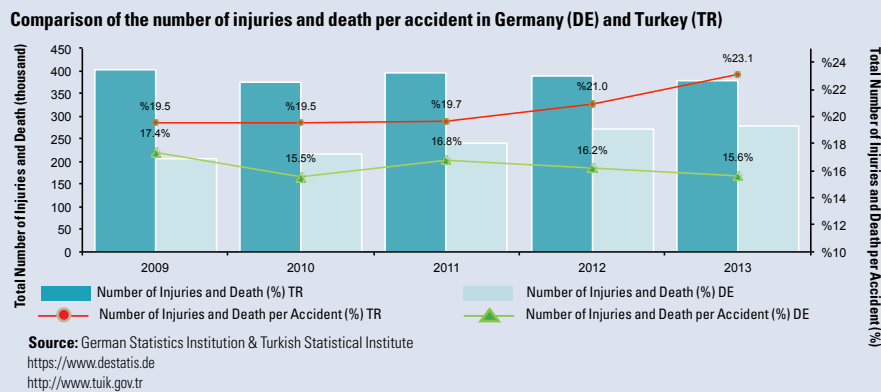
"Having no problems is the biggest problem of all."*

According to the automotive executives, safety will be one of the most important matters in the purchasing decisions of consumers in the next 5 years. In the past, safety was not mentioned within the top answers. Why has this changed? Why is safety so important?

Due to the importance of this matter we wanted to include a specific article on this topic.

According to the data from between 2009-2013, we can see a positive trend in the traffic accidents in Turkey. Considering the number of vehicles, the rate of accidents in Turkey decreased from 14.8% to 13.0%. However, it is obvious that there is still plenty of room for improvement when compared with other countries. The rate of traffic accidents in Germany during the same period was 5.6%.

The situation is more serious in the accidents with injuries and death. While the number of fatalities in accidents in 2009 was 4324, fell to 3685 in 2013 with a decrease by 15%. While this is an obvious improvement, we can see that there is an increase of 35% when the total number of injuries and fatalities is considered. This is a very high figure considering the recent vehicle safety systems and comparing with those countries with higher levels of safety.



The following elements are of critical importance for safety in traffic:

1. Vehicle features

- Passive safety systems
- Active safety systems

2. Government arrangements

3. Education and awareness

1. Vehicle features:

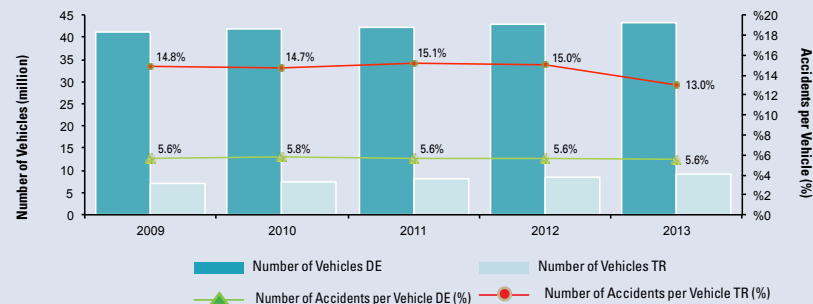
• Passive safety systems

Innovations such as airbags or passenger compartments are good examples for vehicle safety. Safety belts are the most widely known passive safety system already exist in all vehicles. In

* Taiichi Ohno (1912-1990), Former Vice President of the Board of Toyota Motor Corporation and founder of Toyota Production System, also referred to as lean production.

¹ It is obligatory to use seat belts "for drivers and front passengers in cars and off-road vehicles and vans registered as automobiles" since 18.06.1986.

Comparison of the number of registered vehicles and accidents in Germany (DE) and Turkey (TR)



Source: German Statistics Institution & Turkish Statistical Institute

<https://www.destatis.de>

<http://www.tuik.gov.tr>

order to get rid of the “fasten seat belt” warning, it is possible to purchase a “safety belt buckle” everywhere in Turkey. In this case, the driver is not protected in case of an accident. On the other hand, an airbag, which opens at a speed of 300 km/h, can pose a great danger for the driver and the passengers when not used properly.

• Active safety systems

These are the systems integrated into the vehicle and intended to avoid an accident in case of a critical situation in traffic. The most commonly known systems are ABS and ESP, however smart vehicles capable of seeing, hearing and sensing the surroundings during the drive are expected to be introduced in the future. New generation of vehicles equipped with modern technologies such as radar, lidar, GPS and computerized view will be able to perform the basic functions of a conventional vehicle automatically. This innovation is also known as “autonomous driving feature” and the experts consider it one of the most important trends of the future.

The most controversial discussed topic is which party will be responsible in case of an accident by an autonomous vehicle. Some people especially from the internet sector answer this question very optimistic and self-confidently but also a bit provocative as follows: “This question is useless because these vehicles won’t have accidents!”

2. Government arrangements

Turkey could show better results in 2012-2013 with the new safety arrangements, road safety campaigns and traffic education. For instance, the rate of using safety belts in Ankara and Afyonkarahisar increased from below 8% to over 50%. While we consider it a significant improvement, the graphics say that it’s not enough. The government arrangements such as compulsory use of winter tires (started in 2013-2014) and regulated vehicle examinations will lead the way to positive developments.

3. Education and Awareness

The education we talk about should also raise awareness about the following in addition to the basic traffic rules:

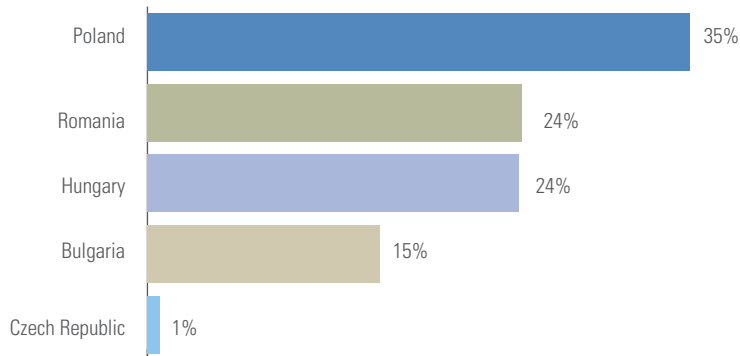
- respectful traffic behaviors
- use of safety belts
- not driving under effect of alcohol or similar drugs
- not using mobile devices without a system integrated in the vehicle to allow hands free operation of the mobile device

Education of drivers, driver instructors, police officers, drivers of commercial vehicles, journalists and social media users will contribute to the positive effect.

Negligence is an important factor in traffic accidents. We need to identify problems and take steps to prevent them. We are all responsible for education and awareness.

Countries in Eastern European Market to be Preferred by BRIC Countries*

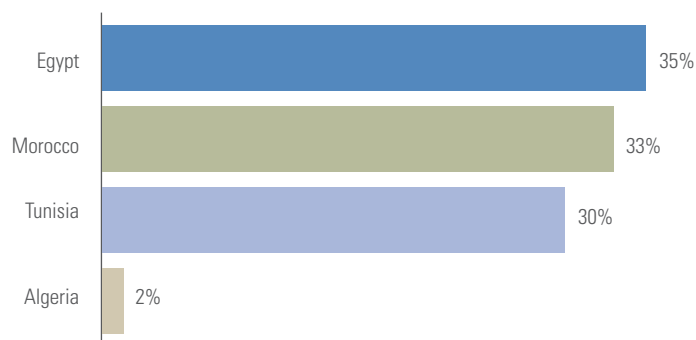
Through which Eastern European countries do you think BRIC countries will penetrate the market?



* Expectation of those who have opted for Eastern Europe

Countries in Northern African Market to be Preferred by BRIC Countries*

Through which Northern African countries do you think BRIC countries will penetrate the market?



* Expectation of those who have opted for Northern Africa

General Information

Prospects for new investments in Turkey

Do you think that new investments will be made in Turkey in the next 5-year period (investment of a passenger car or light commercial vehicle manufacturer which is not currently engaged in manufacturing activities in Turkey)?

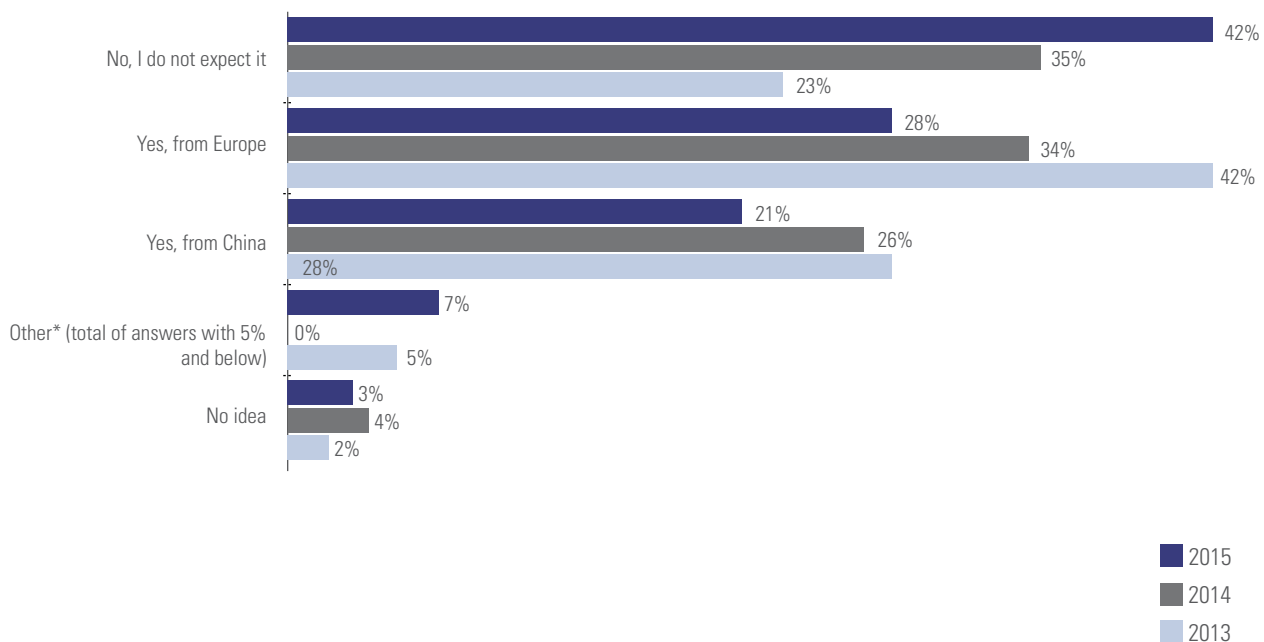
While 61 % of the automotive sector executives anticipated new investments in Turkey in the next 5 years, this rate dropped to 55 % this year. It is also interesting that the rate of the participants not anticipating investments increased from 23 % in 2013 to 42 % this year.

On the other hand, although the majority (28 %) still believes that the investment will come from Europe, this anticipation dropped 15 % in the last three years. The rate of those anticipating new investment from China also dropped from 28 % in 2013 to 21 % this year.

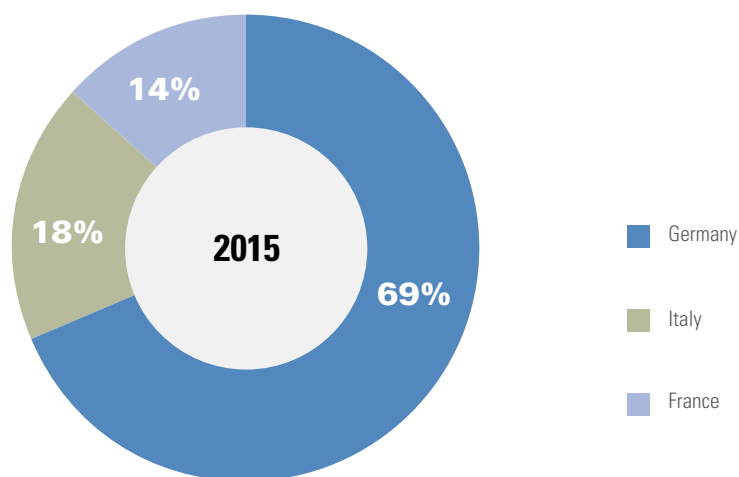
Accordingly, it is possible to say that the participants who believe that no investments will come from Europe and China do not anticipate investment from other regions as well.

The anticipation for new investments in the Turkish automotive sector in the next 5 years has significantly decreased.

Projections for new investments in Turkey within the next five years

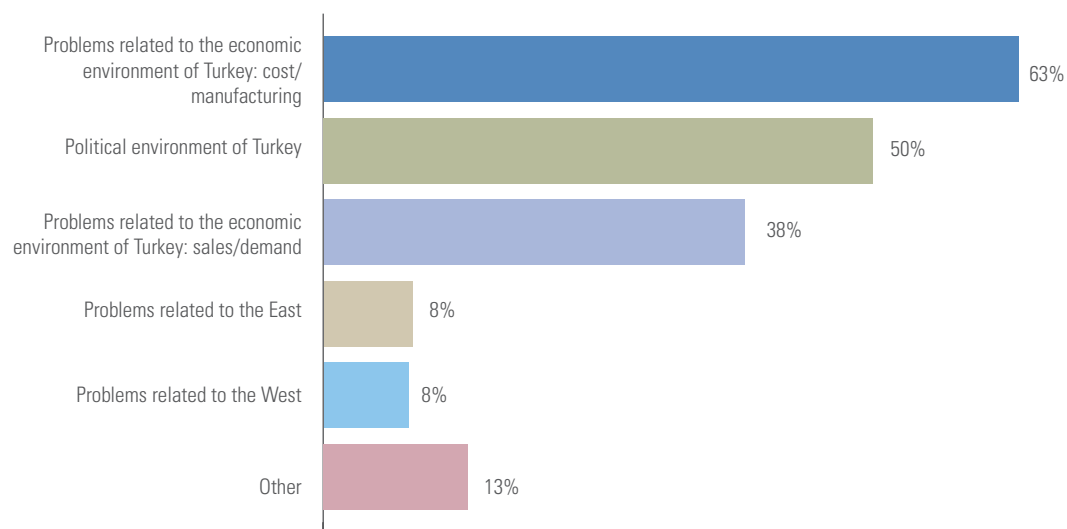


From which European country do you anticipate new investments to come to Turkey in the next 5 years?*



*Asked to the participants anticipating investment from Europe.

What are the obstacles new investments into Turkey in the next 5 years?*



*Asked to the participants not anticipating new investments into Turkey in the next 5 years.

General Information

Important Factors for New Investments into Turkey

In your opinion, which factors are important for new investments into Turkey in the next 5 years?

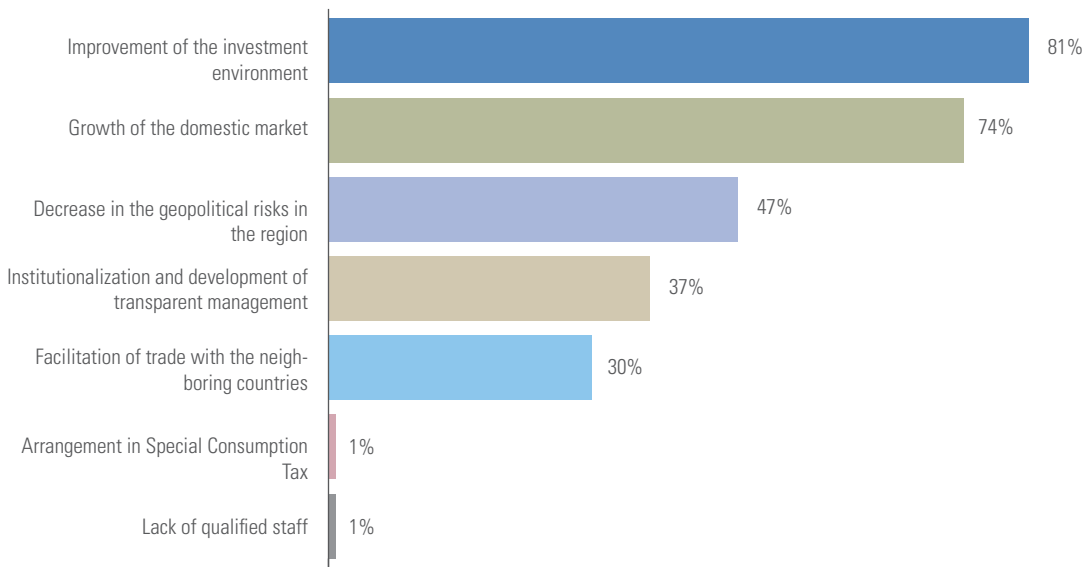
When we asked the executives in Turkish automotive sector which factors are important for new investments in Turkey in the next 5 years, "Improvement of the investment environment" ranked the first with 81%, "Growth of the domestic market" ranked the second with 74% and "Decrease in the geopolitical risks in the region" ranked the third with 47%.

It is a well-known fact that the manufacturers who have already invested in Turkey are increasing their investments. However, the plans of the new automotive manufacturers are not being discussed.

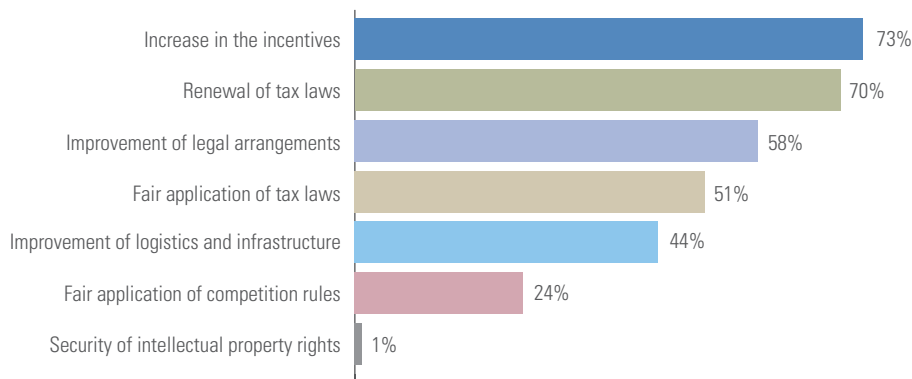
Improvement of the investment environment does not only mean incentives but it also includes many other factors ranging from taxation to legal arrangements, logistics, infrastructure and competition rules.

Improvement of the investment environment and the growth of the domestic market are the most important conditions for new investments.

Important factors for new investments into Turkey

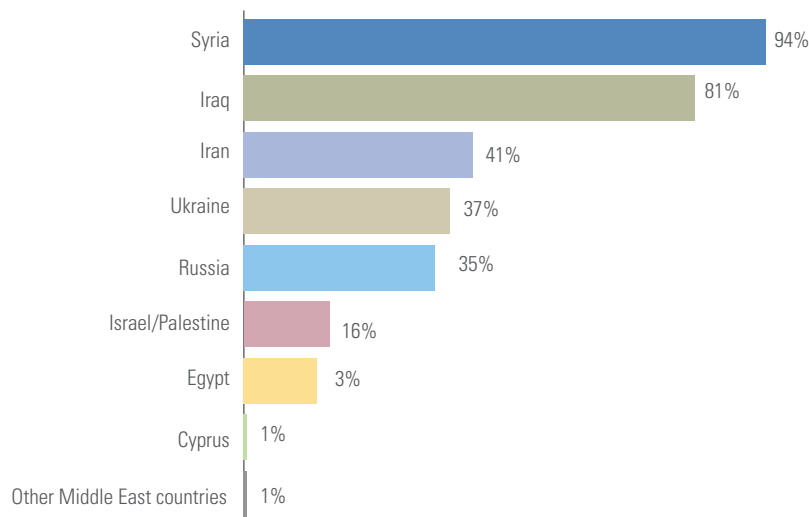


In your opinion, which factors are important for improvement of the investment environment?*



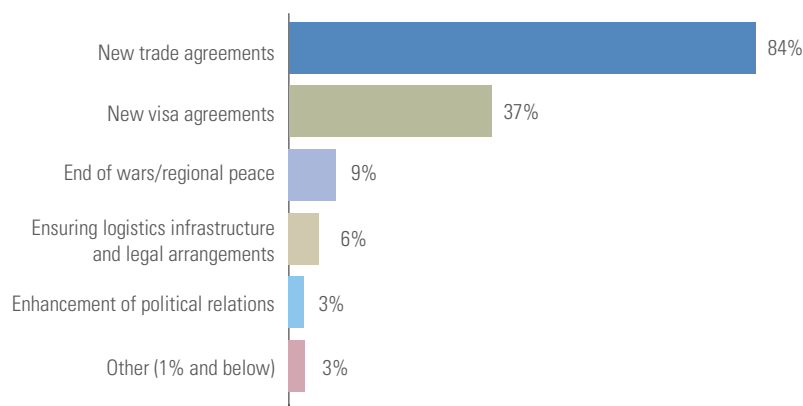
*Asked to participants answering "Improvement of the investment environment".

In your opinion, decreasing the geopolitical risks in which region is important for new investments to come to Turkey?*



*Asked to participants answering "Decreasing the geopolitical risks in the region".

In your opinion, what should be done to facilitate trade with the neighboring countries?*



*Asked to participants answering "Facilitation of trade with the neighboring countries".



Mehmet Dudaroğlu
TAYSAD Chairman

Chronic Problems of the Sector: High Levels of Taxes and Domestic Market Below its Potential

We carried out this survey, prepared to determine the expectations of the automotive sector executives for the 5-year period ahead of us, for the 3rd time this year. Being carried out with the representation of the industry and market sections of the automotive sector, this survey is fully supported by TAYSAD, OSD, OYDER and ODD.

The data pool of 3 years created with the answers of nearly 200 executives clearly shows the expectations of the sector.

According to the results of the survey, high level of taxes and the domestic market below its potential are the most important and chronic problems of our sector. The message of the sector representatives with this survey is very clear: Unless these two chronic problems of the sector are solved, radical improvements cannot be expected.

We express in every venue that the automotive sector is driven by the domestic market. The critical issue in strengthening the domestic market is attracting new big investments in the country.

At this point, I regret to say that we can't win new OEM investment and the supply companies with foreign capital that currently have manufacturing plants in the country are moving their new projects to Eastern European countries.

The main reason for this is the continuously increasing manufacturing costs. In order to avoid missing the new opportunities in the future, the burdens on the industrialists and the final consumer should be relieved.





Dieter Becker

Global Head of Automotive
KPMG International

Automakers need to understand what drives customers' behavior

Communication technologies such as car-2-car, car-2-infrastructure or car-2-home may bring significant benefits to consumers, but these factors, known collectively as the 'internet of things' simply represent a commodity. To capture the real value of connectivity, vehicle manufacturers have to use the power of data to get inside customers' heads, understand what drives their behavior and adapt business models to ever-smaller target groups of like-minded individuals.

Connected car technologies can be a crucial interactive media, especially when linked to location, offering not just traffic guidance, but also useful local retail or leisure options, personalized news and entertainment, and other services — all of which can provide a healthy revenue stream.

Ultimately, it should be possible to predict what products and services the customer is most likely to want.

To move to the 'Internet of Behaviors' level and harvest the undoubted potential of data, OEMs should consider customers' lives as a whole, rather than viewing them as 'drivers' only, towards building a personal relationship to increase loyalty.

Technology also enables predictive product analytics, where automakers can constantly monitor vehicle performance and component wear and tear. Such a strategy is supported by modularization and standardization, which enables more cost-efficient production and makes it easier to replace or adapt different parts of the automobile.

As a warning: development cycles can differ widely between hardware and software, so these two areas should be managed separately, with a central interface to ensure compatibility.



Market

Market: ODD

Factors Affecting the Growth of Automotive Market

Can you please put the following factors in order according to their level of importance in terms of their contributions to the growth of the Turkish automotive market in the next five-year period?

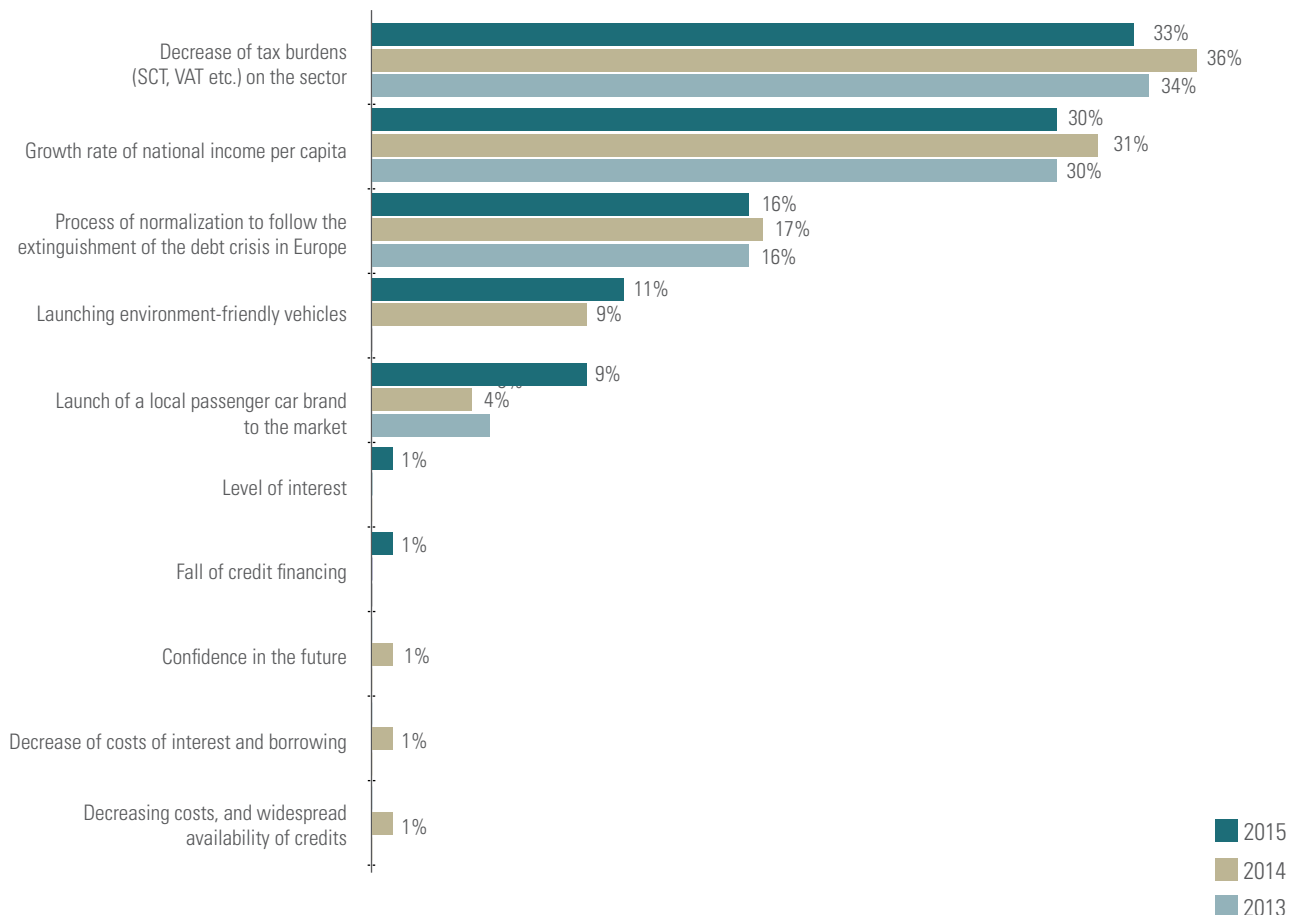
The ranking of the top three answers for this question has not changed for three years. Tax burdens on the sector, growth rate of national income per capita and the process of normalization to follow the extinguishment of the debt crisis in Europe are still among the most important issues.

The automotive sales in Turkey reached to 807 thousand units in 2014 with a decrease of nearly 10% in comparison to 2013 (893 thousand units).

Although the ranking of the top five issues remained the same as last year, there was a decrease in the rates of the top three.

On the market side, the national income growth rate and the future of Europe after the crisis are among the most important issues this year as well.

Factors affecting growth of the market during the five-year period



Market: ODD

Success in automotive market

Which issues will gain importance to be successful in the Turkish automotive market in the next five years?

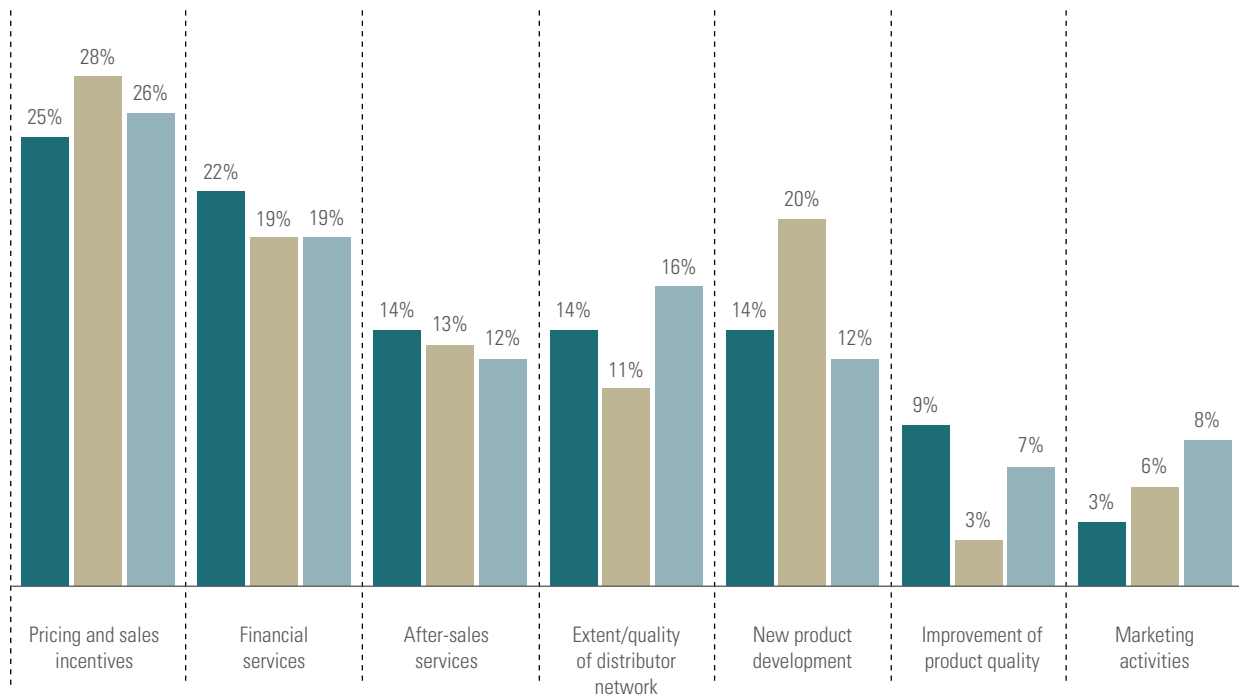
The pricing and sales incentives have been the most important issues for three years. While financial services ranked the second with 22%, new product development which ranked the second with 20% last year decreased by 6%. Furthermore, the improvement of the product quality also increased by 6%.

While the importance of the extent/quality of distributor network had fallen a little behind last year, it gained importance again with 14%.

The most stable trend is observed in marketing activities. We can say that this issue lost importance for the second time.

25% believes that the success in the market depends on pricing and sales incentives. When financial services are included, the overall percentage rises up to 47%.

Success factors in competition





Ali Bilaloğlu

ODD, Deputy
Chairman

Comments on 2014

It is observed that in 2014 the passenger car and light commercial vehicle market shrank about 10% compared to the same period of 2013 and 767.681 units were sold in total. In general, we can say that it has been a year in line with our expectations.

Expectations in 2015: Variability has become “the new normal”.

The turbulences in the global economy recently have become a part of our lives. The automotive sector, the locomotive of economy, is directly affected by these changes.

In addition to the macroeconomic variability throughout the world, our lives have new standards with the differentiation of customer expectations, increase in digitalization and technological advancements. This requires all sectors and the automotive sector in particular to redefine the way of doing business.

In this environment referred to as “the new normal”, you should analyze the risk factor better, know your customer

better and include all technological developments to your way of doing business optimally. We need to analyze the ever-evolving and changing needs in the market and create our roadmap.

Although the monthly changes in the sector challenge us when preparing our annual plans, I believe that we can act with a positive anticipation. The main reasons for having such a positive anticipation are the young and dynamic population in the country, course of economy being more stable than the past years and lower level of vehicle ownership than the average of Europe.

Each increase in the automotive sector will affect the overall economy and create a leverage effect. Our country might become the country with the most potential of consumption in Europe over the next 10 years.

For this purpose, we should take advantage of this potential, make our business plans according to the facts of “the new normal” with a focus on quality, efficiency and cost, and offer the best customer service while doing business in the most efficient way.



Hayri Erce, PhD.

ODD, Executive Coordinator

In 2014, the rise in the exchange and interest rates, the increase in Special Consumption Tax for passenger cars, restrictions by Banking Regulation and Supervision Agency (BRSA) for the credit procedures, deceleration in the growth rate, weakness in the consumption and investments of private sector caused shrinkage in the automotive market. The results were not good for the sector in the first quarter of 2014. There was a slight recovery in the market after the elections. Accordingly, the first quarter will be higher with the base effect in 2015. International Istanbul Autoshow to be held in May will also bring mobility to the market.

In 2015, the expectation regarding the decision of the Federal Reserve of the United States (FED) to increase the policy interest in parallel with the recovery in economy, the European Central Bank (ECB) decision to continue quantitative easing to support economic recovery, geopolitical developments, the determination of CBRT to fight against inflation, improvement of the current accounts deficit, steps to be taken regarding the structural reforms and the electoral process will have effects on the sector.

As included in the results of the KPMG survey, the tax burden on the sector continues to affect many stages from sales to maintenance. The rates of Special Consumption Tax particularly impact demand increase to a great extent.

New investments in our country are important for both our economy and our sector. However, as we express from time to time, it is important to improve the domestic market size and investment environment in order to ensure the necessary environment for new investments.

Looking at the domestic markets of global players in manufacture such as the United States, Japan, Germany, France and Korea, we can clearly see that they have massive domestic market quantities.

Therefore, we need incentives and practices to take our domestic market to the level of global players in the automotive sector.

KPMG's valuable survey, conducted for three years running and shedding light on the sector as well as defining all sector dynamics, includes once again important findings to guide the projections for future. We would like to thank everyone involved.

Market: ODD

Profit Centers of the Automotive Sector

What will the profitability trends of the next 5 years be for the automotive sector's sales, service, spare parts, sales and after-sales business development services (motor insurance, insurance, accessories, tires), which constitute profit centers of the sector?

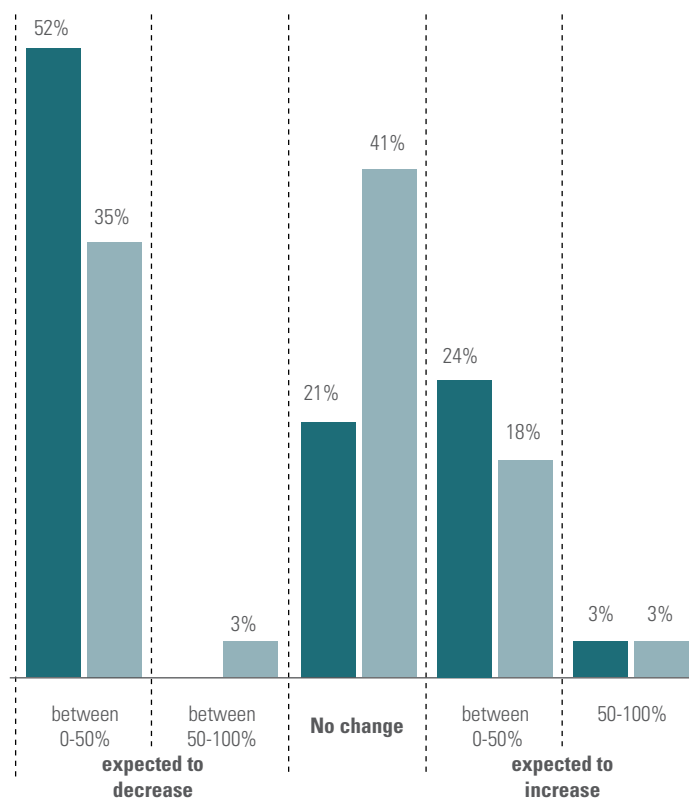
The majority of the participants (52%) is expecting a decrease in the profitability of profit centers. The total rate of those expecting an increase is 27% and 21% of the participants isn't expecting a change.

It is interesting that there is an increase in expectations for both a decrease and an increase compared to the previous year.

In recent years, profit centers have seen a shift from sales towards after-sales services, resulting in a decrease in profitability. If this trend continues in the profit centers, the stress on the market players will increase and such a situation will require new solutions and operation models.

The majority of the executives expect a decline of profitability in profit centers.

The profitability trends in the automotive sector



■ 2015
■ 2014

Market: ODD

Customer Satisfaction in The Automotive Sector

Which applications aimed at improving customer satisfaction in the automotive sector will stand out in the next five years?

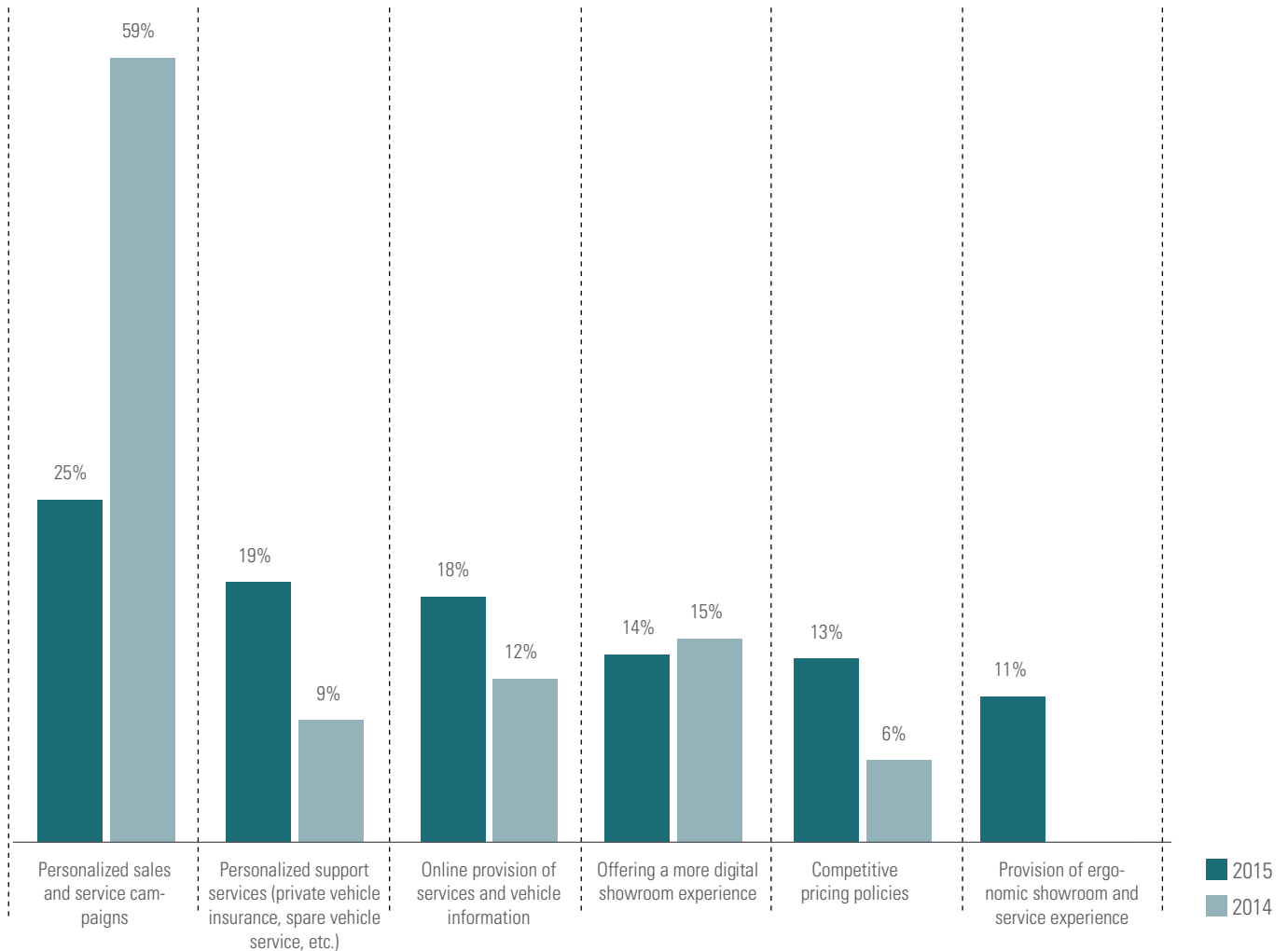
It can be conferred that the personalized sales, service and support services should be diversified to increase customer satisfaction in the next five years.

However, while personalized sales and service was very important last year (59%), the importance given to this issue seems to have dropped significantly (25%), although it still ranks the first. Personalized support services increased from 9% to 19%. Considering these two issues together, the rate of 68% from last year seems to have dropped to 44% this year.

Competitive pricing policies and provision of ergonomic showroom and service experience are also among the issues that grew in importance this year.

Sales, service and support services tailored to the needs of the customer are keys to customer satisfaction.

Important applications for increasing customer satisfaction



Market: ODD

Important Product Features in Automotive Purchase Decisions

How significant do you think the following product features will be for the consumers' purchasing decision making process in the next five years, in terms of the Turkish automotive market?

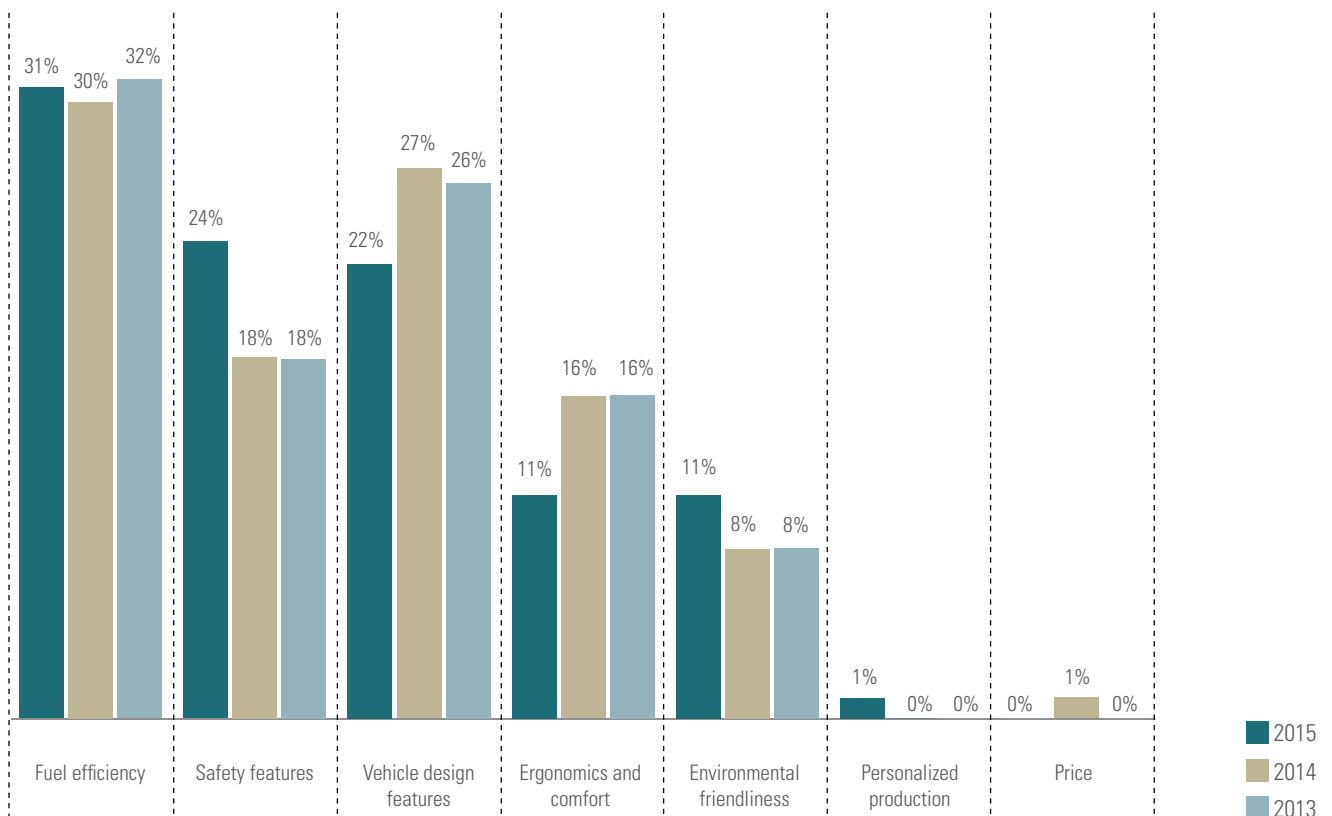
There are significant developments in terms of product features. We asked the participants which product features they think will be more important in the near future according to the consumer demands and their own expectations.

When compared with the world, due to the high cost of fuel reflected to the consumer, fuel efficiency is the most important product feature in purchase decisions for the third time this year. As an important and pleasing development, safety features rank the second this year (we prepared a special KPMG Insight for this issue to highlight its importance.)

Although it dropped to the third place, vehicle design features is still important for the consumers. The importance of environment-friendly features of vehicles in purchase decisions is given more importance this year with an increase of 3 points.

Safety features have become more important in purchasing decisions and ranked the second after fuel efficiency.

Important product features in automotive purchase decisions



Market: ODD

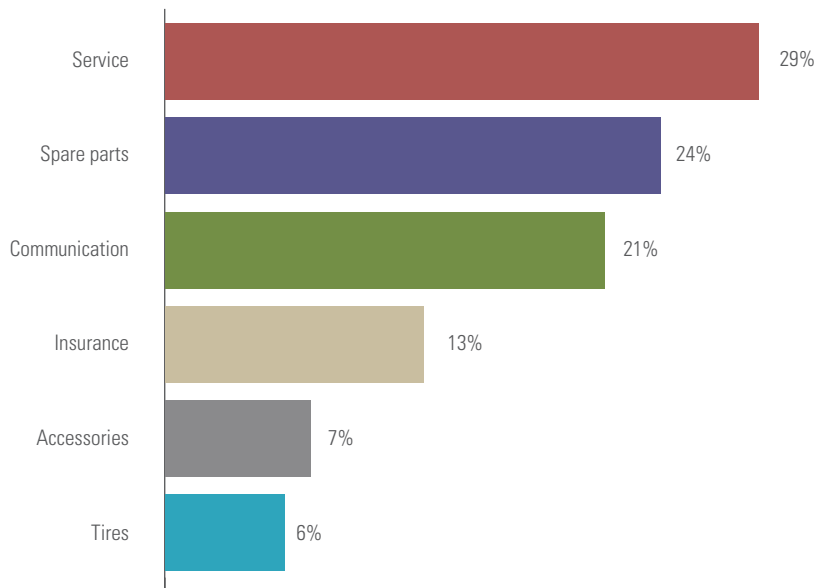
Important Aftersales Service Features in Automotive Purchase Decisions

How significant do you think the following aftersales service features will be for the consumers' purchasing decision making process in the next five years, in terms of the Turkish automotive market?

Along with the product features, aftersales service is the second perspective influencing the customer. The more diversification in product features gets the more important becomes aftersales service.

The participants were asked about their opinion regarding which aftersales service features will be important to what extent for the purchase decisions of the consumers in the next five years and 29% opted for services, 24% opted for spare part services and 21% opted for communication services. Communication is important in every issue but it is interesting that it is so important in the aftersales service features as a separate topic.

Following service and spare parts, communication is the third most important aftersales service topic.



Market: ODD

Views on the Auto Leasing Sector

How will the automotive leasing sector change in Turkey in the next 5 years?

The global rising trend from vehicle ownership to usership applies for Turkey as well. The expectations of the sector in this area are interesting.

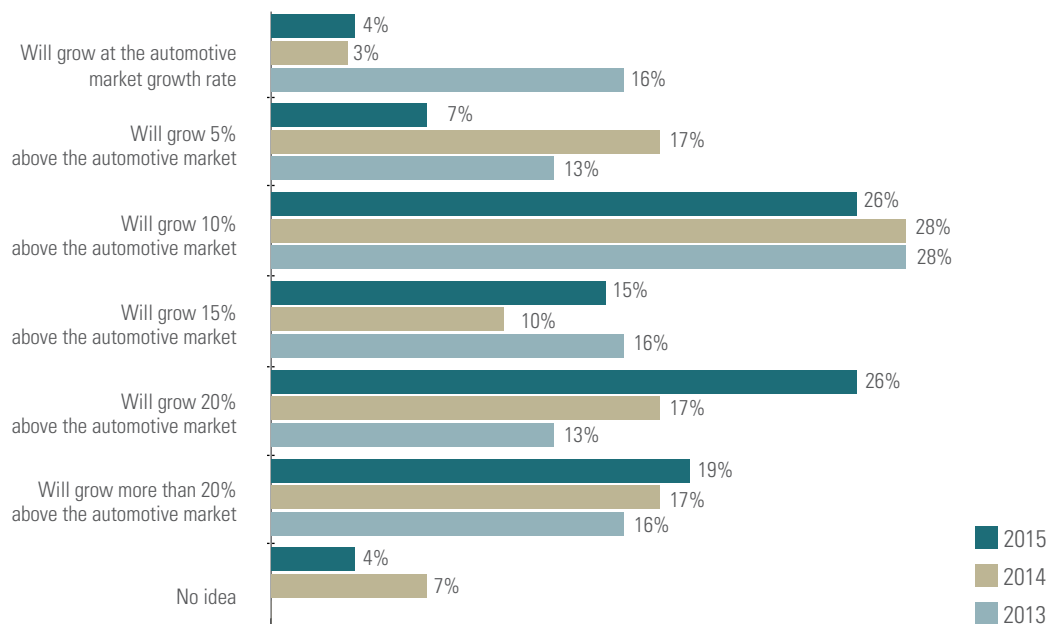
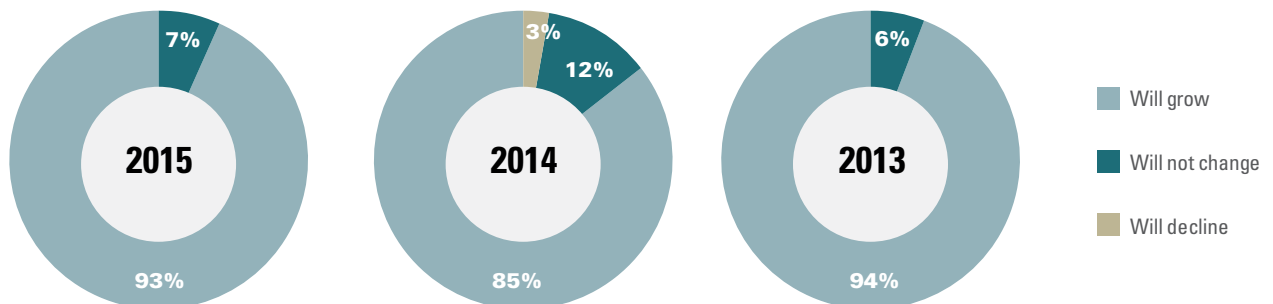
It is expected that the automotive leasing sector will grow significantly in Turkey in the next 5 years due to the cost and service advantages it offers.

While the rate of those expecting growth of the sector had dropped to 85% last year, 93% of the participants are more optimistic about growth and it seems that 2013 levels are achieved again. It is also interesting that no one expects this market to shrink.

However, many challenges faced by the automotive sector apply for the auto leasing sector as well. Therefore, the general policies for the automotive sector in the next 5 years will also steer the automotive leasing sector.

86% of the participants expect that the growth in the automotive leasing sector will be at least 10% above the automotive market.

Changes occurring in the Turkish automotive rental sector in the next 5 years





Fikret Çetinkaya

KPMG Turkey
Partner, Tax

You Have a Car, You Have Tax!

The high levels of Special Consumption Tax (SCT) and Value Added Tax (VAT) for vehicle sales is among the most important problems regarding the taxes in KPMG Turkish Automotive Executives surveys every year. As shown in the table below, the taxes applied in the vehicle sales constitute a significant part of the total sales price and they even exceed the cost of the vehicle in vehicles with capacity over 1600 cm³. (See Graphic 1)

It is a fact that the high level of taxes such as SCT and VAT increases the sales prices of vehicles, decreases sales and shrinks the market. However, the taxes in the automotive sector are not just limited to the sales taxes, there are also some other taxes arising from the use of vehicles and worrying the vehicle owners.

The first one of them is Motor Vehicles Tax, which varies depending on criteria such as the type, capacity, weight and age of the vehicle. In 2014, the total of all taxes paid by the vehicle owners according to the said criteria constituted 1.8% of the budget revenue.

On the other hand, another important tax arising from the use of vehicles is Special Consumption Tax and Value Added Tax collected from the sale of fuel. According to the Pricing Report dated January 2015 of the Energy Market Regulatory Authority, 68.01% of the price of one

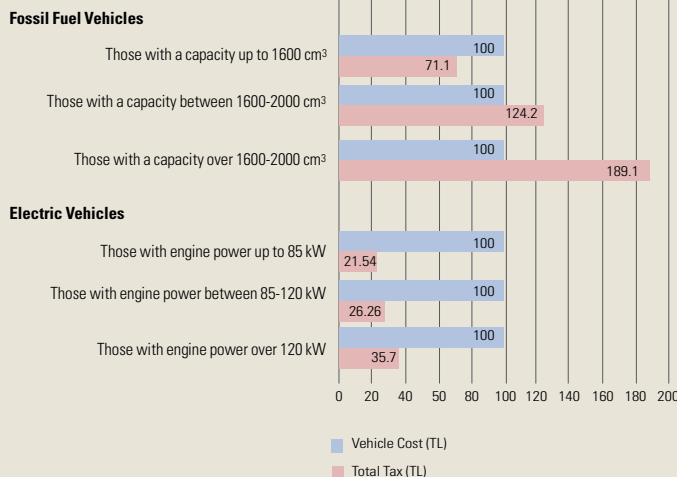
liter of Unleaded Gasoline 95 Octane, which is 4,13TL/lt in the Anatolian Side of Istanbul, is tax. (See Graphic 2)

As shown in the graphic, the vehicle owners pay significant taxes not only when purchasing but also when using their vehicles. When you add the duties, highway/bridge passing charges as well as the taxes collected from the insurance, servicing and repair costs, vehicles simply become tax collection offices. Finally, all these taxes to be paid have a dissuasive effect in both the purchase and the use of vehicles.

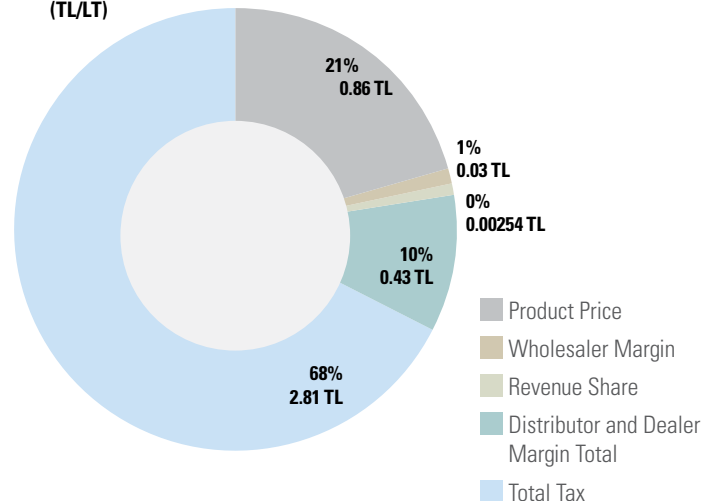
However, it doesn't seem likely that the governments will waive from the above mentioned taxes in the short term in particular. The global trend of increasing indirect taxes and decreasing direct charges also applies for Turkey and these taxes regarding vehicles keep being included in the budget targets of 2015 in a similar manner.

It's obvious that the automotive sector will have to live with these taxes at least in mid-term. So, it seems that we will be discussing more about the national income growth rate, scrap car scheme and similar sales incentives and increasing the sector share of environment-friendly vehicles in the upcoming days.

Graphic 1 - Total of Special Consumption Tax and Value Added Tax in Fossil Fuel and Electric Vehicles



Graphic 2 - Unleaded Gasoline 95 Octane (TL/LT)



Market: OYDER

The Most Important Problem of Authorized Dealership

In your opinion, what is the most important problem of the authorized dealership?

The participants were asked about the most important problem of the authorized dealership and the top two answers were "Profitability not meeting the risks" (42%) and "Inequality in relations with suppliers" (39%). "Excessive competition and inefficient working hours" followed with 11%.

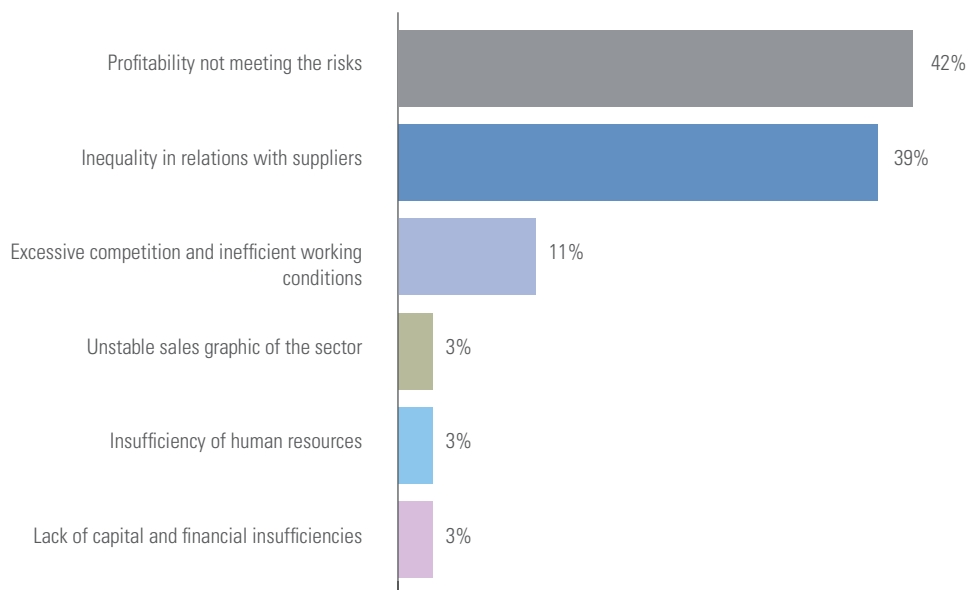
It is interesting that, except for these, there are no other factors considered important. The sales graphic, human resources and financial facilities are not considered as problems.

The fact that the profitability of dealership is continuously under a growing stress is an issue that is gaining importance. The importance of this issue is understood much better in the years when sales drop as in 2014. While this problem can be associated with the impact of many external factors such as the high level of taxes, internal factors should not be ignored as well.

This shows the need for institutionalization and growth. The inequality in the relations with suppliers also shows that the players need to grow. All these facts indicate that Turkey is likely to go into a trend of consolidation as seen in the rest of the world.

"Profitability not meeting the risks" and "Inequality in relations with suppliers" are by far the most important issues in authorized dealership.

The most important problem of authorized dealership





Murat Şahsuvaroğlu

OYDER, Deputy
Chairman

The Profit Shrinkage in the Sector Forces the Authorized Dealers to Develop Their Businesses

This survey which was carried out with KPMG for the third time this year and which allows us to express ourselves from the perspective of the sector executives in a transparent manner is also a guide for the investors to come to our country.

It is obvious that our colleagues think that their earnings are very low when compared to the risks they take. Furthermore, it is commonly thought that the relation between the suppliers and the dealers should be reviewed. This is not true for just our country but recently, BMW made an agreement to make rebate of USD 820 million to the dealers in China who couldn't achieve a sufficient level of profitability in 2014. This shows that meeting at the same point gives all of us the key to success.

Another important problem for our colleagues regarding the Domestic Market is the heavy burden of taxes on automobiles. Today, the taxes are about 71% for 1600 cc vehicles and this goes up to 184% in larger capacities.

This results in a very limited movement upward for the domestic market. I personally believe that, with the relief of the tax burden on the sector, many foreign investors operating in both manufacturing and marketing fields of the automotive sector will come to our country. It is obvious from our past experiences that a movement of 10 points in prices decreases or increases the market by 30%.

The sector believes that, if the national income reaches to USD 15,000 the domestic market would grow by 50%. So it can be said that there is still a

significant potential in the sector but some conditions must be met first.

The retail investors are looking for new profit centers or new ways to operate the existing ones more effectively due to the lack of profitability in vehicle sales. In the recent years, the Authorized Dealers are getting increasingly interested in used vehicle trade and they had to invest in many other areas such as accessory sales, car care services and insurance.

We have to improve ourselves continuously in this profession and we started working to make sure that we are ready for the upcoming "Y-Z" generation which will be our customers in the near future. Big investments are being made in human resources and CRM applications and we are working hard to train our teams and make them ready for tomorrow.

The economic crisis in the world has not ended yet. It is obvious that we can't be successful in providing our industry with new opportunities before the upsetting economic fluctuations in Greece and the crisis in the Southern Europe recovers completely.

Our industry capable of producing 1.2 million units today could double or triple this figure due to the quality manufacture and perfect location. The planned production in Automotive Strategy Document the 2023 vision was 4 million units. Although we are located on a very difficult location geopolitically, we are the most stable country in the region. In my opinion, even the successes under these conditions alone indicate that the future will be brighter for us.

Market: OYDER

External Factors Affecting Authorized Dealership

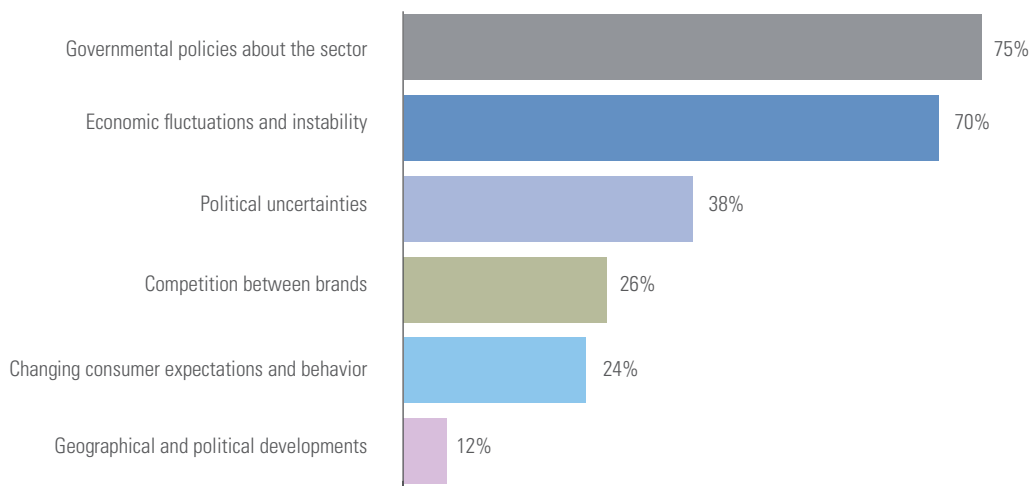
In your opinion, what are the most important external factors affecting the authorized dealership?

The participants were asked about the most important external factors affecting the authorized dealership and 75% answered "Government policies regarding the sector", 70% answered "Economic fluctuations and instability" and 38% answered "Political uncertainties".

These external factors indicate that the stable growth of the sector and the passenger car sales depend on foreseeable and stable government policies.

"Governmental policies about the sector" and "Economic fluctuations and instability" are the most important external factors affecting the profession.

External factors affecting the authorized dealership



Market: OYDER

Expectations for Change in the Automotive Sector in the Next 5 Years

Are there any practices in the automotive sector that you expect to change in the next 5 years?

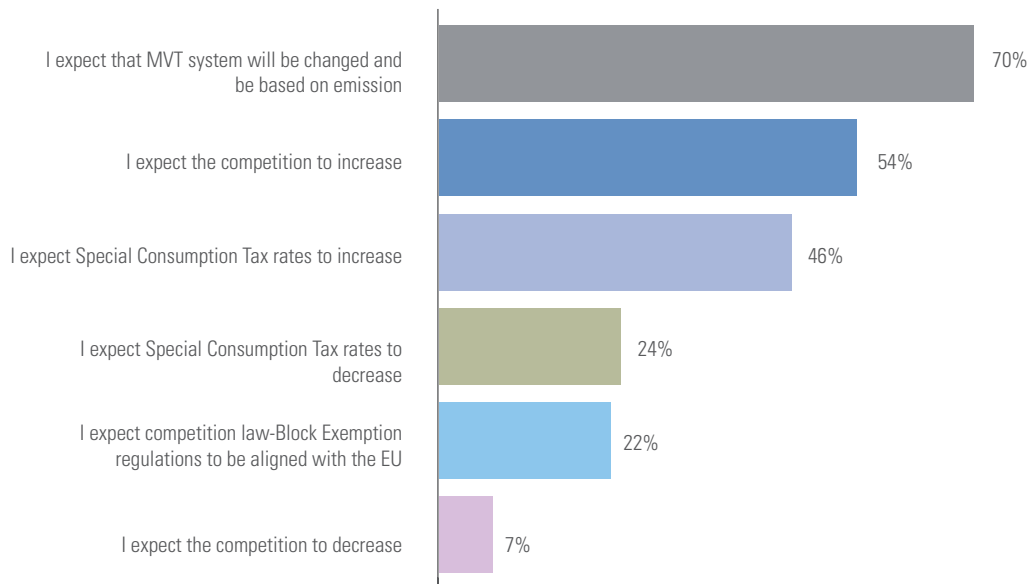
When asked about the practices in the automotive sector that they expect to change in the next 5 years, 70% answered "I expect the road tax (Motor Vehicles Tax/MVT) system to change depending on the emission" while 54% answered "I expect the competition to increase".

It is interesting that the most widely expected change in the next 5 years is the change of the MVT system depending on the emission. So far, the MVT calculation in Turkey has been based on the age and capacity of the vehicle. However, there are various practices for "road tax" in EU countries based on the carbon emissions.

Soon, the MVT will be calculated on the basis of the carbon emission values in addition to the age and capacity of the vehicle. Accordingly, environment-friendly vehicles will be subject to lower levels of tax.

Authorized dealers anticipate that "MVT system will be changed and be based on emission" in the next 5 years.

Expectations for change in the automotive sector in the next 5 years



Market: OYDER

Passenger Car Ownership Approach

In your opinion, how do passenger car ownership approaches change in Turkey?

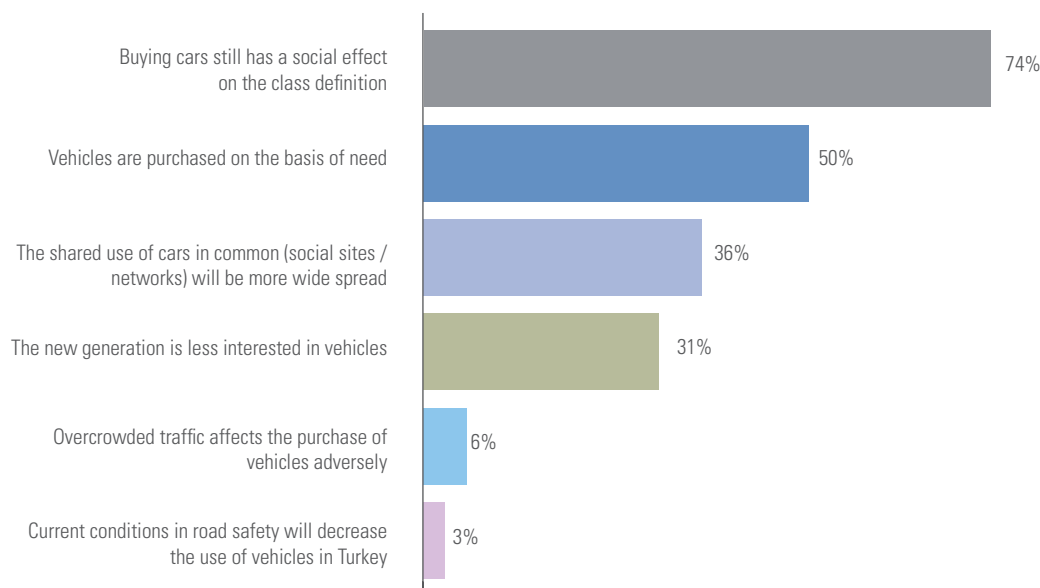
Passenger car ownership is a general topic of discussion around the world. We asked the authorized dealers about their opinions regarding the change in passenger car ownership approaches in Turkey. While 74% thinks that buying passenger cars still has a social effect on the class definition, 50% believes that vehicles are purchased on the basis of need. A relatively high rate of the participants (36%) thinks that the shared use of cars will be more wide spread.

It is interesting that 3 out of every 4 people think that buying cars still has a social effect on the class definition. Although we could predict the importance of this issue, it is still remarkable that it has such a high rate and so higher than the vehicle need.

The expectations are that the said passenger car ownership approach will continue in this direction in the upcoming years. 36% of the participants expect that shared use of cars will become popular and only 31% expect that the interest of the new generation in passenger cars will decrease.

3 out of 4 authorized dealers believe that "Buying cars still has a social effect on the class definition".

Passenger car ownership approach





Özgür Tezer

OYDER, Secretary General

Taking Measures to Grow the Domestic Market Will Contribute to Attracting Foreign Investments

This third survey carried out with KPMG also indicated that the reason of limited movement in the domestic market is the high level of tax rates on the automotive sector. Since an increase of 11% is planned in the 2015 budget projections of the Ministry of Finance, we can see that a downward arrangement will not be made in taxes this year as well.

However, this causes the foreign investors to consider our country an area with limited opportunity for development rather than a feasible market to invest. Despite its great potential with passenger car ownership of 170 people out of 1000, Turkey cannot control its power due to the limited domestic market and loses a market in term of both investment and employment. The results of the survey also indicates that 42% of the participants don't expect investment in the country and a significant rate of the executives think that "investment=domestic market".

The recent years have been a period with continuously negative results in achieving the intended profit rates for the Authorized Dealers.

It is a fact that selling vehicles is no more a profit center and profit is gained from other sales. Last year we saw that some Authorized Dealers who couldn't keep up with this situation had to leave the sector. At this stage, we observe that the Authorized Dealers investing in the human resources, customer loyalty and satisfaction practices, technologic developments and financing resources management are getting prepared for a long term and challenging period.

The most important expectation of us regarding 2015 is a practice for removing "End-of-Life Vehicles" from traffic.

Discussed for a long time but always postponed from implementation, this issue has a very important position in KPMG Surveys. Today, there are 19 million motor vehicles on the roads of Turkey. 3,6 million of this figure is vehicles over 16 years of age and it has become an urgent problem to be dealt with in terms of both environment and safety.

On the aftersales services side, the fact that the customers are coming back to the Authorized Dealers due to the problems between the insurance companies and their clients as result of the preferences of the insurance companies during repairs shows that the cooperation will increase in the future. With a recent communique by the General Directorate of Insurance under the Undersecretariat of Treasury, it seems very close that an arrangement will be made in the insurance sector regarding the use of Equivalent Spare Parts.

So far, very low quality spare parts were identified as equivalents and used in repairs. Although these developments are pleasing, the fact that sufficient controls cannot be carried out yet shows that the insurance experts should be more effective in supervision of the practices.

I think that the preparations for the next year's survey have already started and translating this survey like the previous ones and sharing it with the other countries will be very important for the foreign investors to know more about Turkey. Thanks to everyone involved.

Market: OYDER

Investment Trends of Authorized Dealers

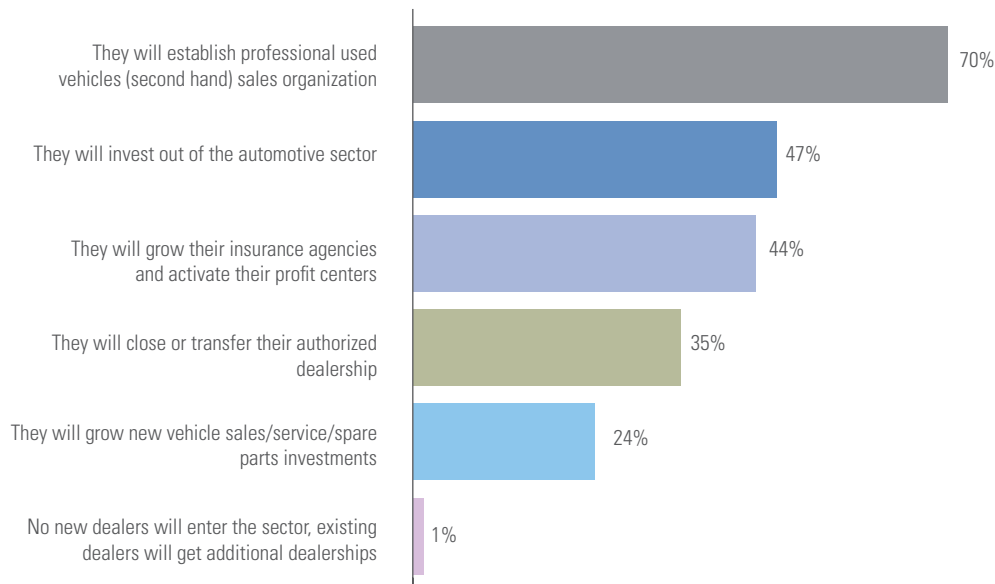
In your opinion, how will authorized dealers make their investments in the sector in the next 5 years?

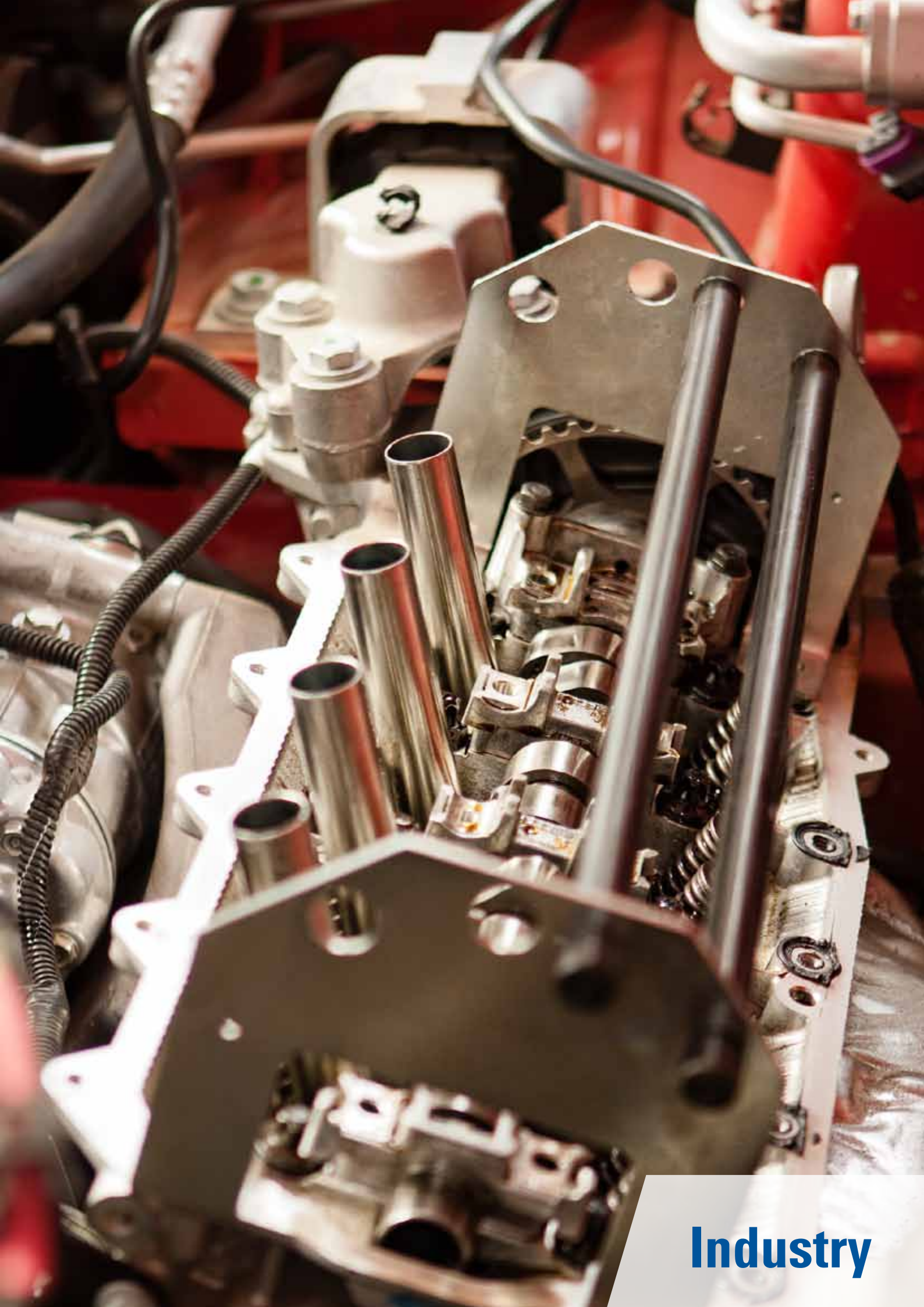
The participants were asked about their anticipations regarding the investments of the authorized dealers in the sector in the next 5 years and 70% answered "they will establish professional used vehicle organization", 47% answered "will invest out of the automotive sector" and 44% answered "they will grow their insurance agencies and activate their profit centers".

The majority of executives expect the authorized dealers to establish professional used vehicle sales organizations. This creates new employment opportunities, but on the other hand, it shows the importance of the used vehicle sales management and how different the dynamics are. Additionally, executives expect the authorized dealers to move away from their current profession: expectations are high on one hand the investment out of the automotive sector (47%) and on the other hand closing/handover (35%).

Authorized dealers are expected to establish "professional used vehicle (second hand) sales organization" in the next 5 years.

Investment trends of authorized dealers





Industry

**Kaveh Taghizadeh**

KPMG Turkey Head of
Management Consulting,
Partner

**Gençer Keser**

KPMG Turkey
Senior Manager,
Management Consulting

**Jens Krause**

KPMG Germany
Manager, Management
Consulting

Additive Manufacturing

It is possible to produce many products from dinnerware to artificial knee cap, from machine parts to automobile equipment or aircraft parts with 3D printing. The fields of application of this method involving digital 3D design data obtained by application of the material consisting of layers (also referred to as additive manufacturing) is extremely wide. It will be possible to produce cars, houses, foodstuff or even human organs with this method in the future.

But is this new 3D technology changing production significantly or is it initiating the fourth technical revolution as some suggest?

The truth is that additive manufacturing exceeds the limits of the traditional production methods. This technology increases the freedom of design and makes it possible to configure and integrate the functions optimally, make economic production at small quantities and offer a higher level of personalization for the products. Furthermore, it provides benefits at the points where traditional R&D, production and design must be reviewed to produce new solutions.

A successful method

It is not surprising that 3D printing is moving from a cost-intensive niche technology in various sectors towards a rapid production technology for many products made of different materials. Particularly the companies in the sectors depending on innovation are increasingly using the additive manufacturing process not only in prototype development but also in serial production. New technological possibilities for businesses bring many questions. We can list these questions as follows:

*How sustainable is the development? Is this a temporary movement or a real challenge to be faced?

*What are the impacts of 3D printing on its own field, business model and supply and value chains? What legal risks are there in terms of intellectual property?

*What is the starting point of action?

Currently it is difficult for the companies to make an assessment. The technology is very recent and the knowledge is not sufficient yet.

Is it a movement or a challenge?

Additive manufacturing brings many possibilities. The companies are starting to notice these possibilities. According to another survey by KPMG, additive manufacturing is still an important issue for the companies despite the existing restrictions for the relevant investments. Currently, reliable calculation of the investments associated with additive manufacturing

is very difficult in terms of business case. Therefore many companies find it difficult to take the next step although they recognize the importance of new technologies and the opportunities they offer. After the initial enthusiasm, now the need to create the potential for the next steps is seen.

It also means that additive manufacturing should become an important part of the corporate strategy in order to create the comprehensive and accurate knowledge consisting the foundation for efficient use of the new technology.

Big change

Additive manufacturing will develop the traditional manufacturing models with digital strategies and do this in various ways. Thus, the logistics sector for instance, will localize the traditional operations more strongly. Furthermore the new technologies also allow the businesses to operate as service providers through digital business models.

Additive manufacturing will also have a big impact on the supply and value chain. The component design changes the traditional industrial production and thus the manner of use of final or intermediate products. Thanks to the new technologies, the suppliers will be able to adapt to the supply chain from a completely different perspective and the transformation period will probably get shorter. The spare parts stocks will depend on the printer capacity available. Thus, the storage costs of the molds and spare parts used for production of the spare parts in order to ensure supply security as per the laws will be affected directly. The production can also be supported through the networks and thus, the working capital might be affected as well.

Intellectual and digital rights

New challenges are arising for the companies with the increasing importance of management of digital rights such as data protection by duplication rights and copyrights. The secure transmission of the compressed data, licenses or CAD (computer assisted design) data between the network printers is an important issue for future. The basic factor for highlighting the potential brought by the new technologies and implement them in the market successfully is integrated approach. It is important to integrate additive manufacturing into basic business departments such as supply and value chains, purchasing, manufacturing and logistics. Furthermore, the structure, the relevant programs and the production, stocking and allocation for stock of spare parts should be harmonized with the requirements of 3D printing. Because a radical change in a business occurs in the overall structure first. Therefore, the most challenging task for the executives is discovering the existing opportunities and realizing future-focused practices.

But who will pioneer?

What Will Additive Manufacturing Change?

- Will change the manufacturing of products significantly and trigger the 4th industrial revolution.
- Will have an important impact on its own field and the business where it's utilized. 3D printing is changing the existing business models. Therefore, new strategies and approaches are needed.
- While it affects the supply and value chains significantly, its impacts on other operating processes can also be felt.
- The companies are facing new challenges in terms of security, safety standards and protection of intellectual property such as copyright, royalty, license rights or commercial rights.
- It forces minds to work "more comprehensively" regardless of the sector or department.
- It is necessary to strengthen the connection of various business departments and ensure transfer between departments in order to be able to utilize it in a wider context. The biggest challenge to be faced in the context of Industry 4.0 (Additive manufacturing should be utilized here) is removing the interfaces or making them transitive, termination of departments or reorganizing them with a view on customer orientation.

Industry: OSD

Projections Related to Manufacturing Figures

What are your next five years' projections related to the manufacturing figures of the Turkish automotive industry, where total manufacturing quantity has been realized as 1.1 million units and total manufacturing capacity emerged as 1.6 million in 2013; and total manufacturing quantity realized as 1.2 million and total manufacturing capacity emerged as 1.7 million in 2014?

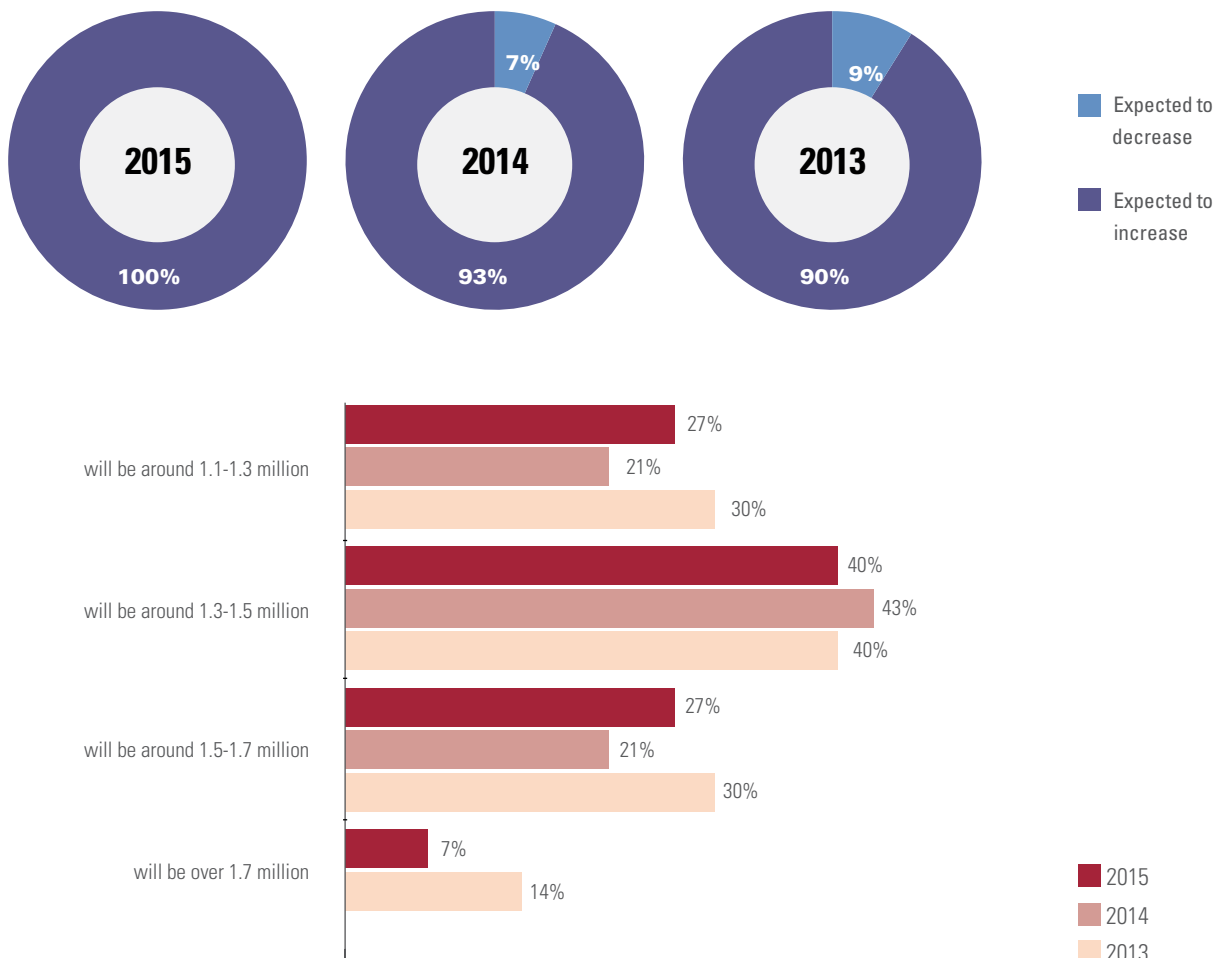
It is expected that the increase in manufacturing we witnessed in the recent years will continue and even increase. We studied the opinions of the participants on this issue.

They are almost certain that the manufacturing will increase with the currently announced investments. However, the majority (2 people out of 3) don't expect the production figures exceed 1.5 million. Of course, the increase in manufacturing will depend on utilization of the capacity created.

Although there is a positive picture, we could expect a more optimistic picture considering the increase in capacity announced by the manufacturers. The fact that there is no new and strategic investments on the horizon causes less optimistic expectations.

Manufacturers are 100% sure that manufacturing will increase in the next 5 years.

Manufacturing expectations of the automotive industry for the next 5 years



Industry: OSD

Projections Related to Capacity Figures

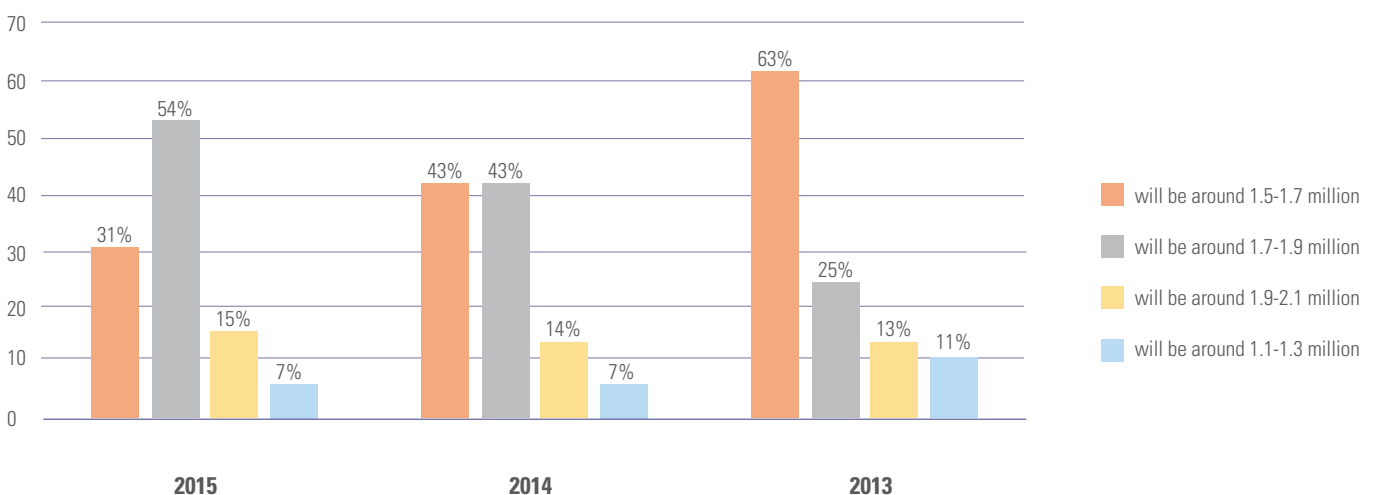
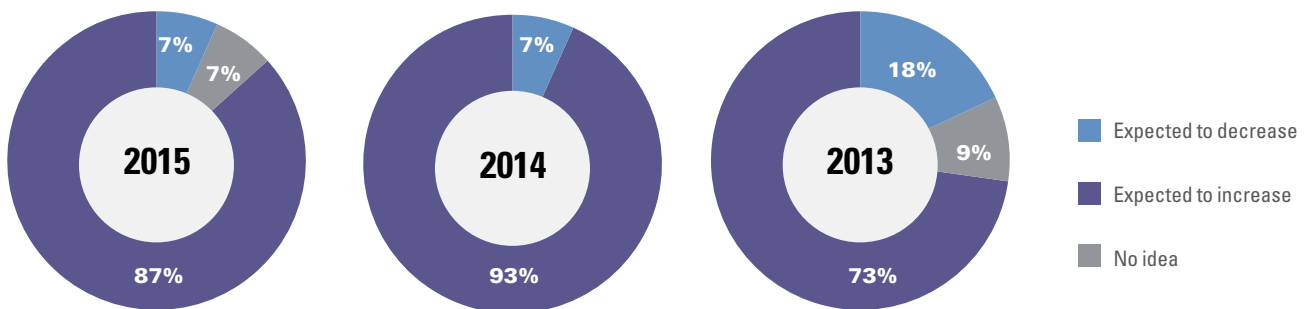
What are your next five years' projections related to the capacity figures of the Turkish automotive industry, where total manufacturing quantity realized as 1.1 million and total manufacturing capacity as 1.6 million in 2013; and total manufacturing quantity realized as 1.2 million units and total manufacturing capacity as 1.6 million in 2014?

Pleasing new investment and news came from the automotive manufacturers in Turkey in recent years. However, the investments need to continue to achieve the big production targets of Turkey.

Although an increase is still expected based on the results of this year, we can observe a trend towards a lower level. While this situation seems conflicting considering the production expectations and the investment plans announced, it can be construed as follows: Except for the new investments announced, the expectations for new and strategic investments in the future decreased as in the expectations for manufacturing.

The anticipation for capacity growth has a downward trend to a lower level.

Capacity expectations of the automotive industry for the next 5 years





Osman Sever
OSD, Secretary General

Assessment of the Automotive Industry in 2014

The application of additional macroprudential measures in economy continued in 2014 as well. Thus, the economy administration implemented a process to keep the inflation and current deficit under control.

Along with these developments, there were increases in the exports and manufacturing with the new investment projects despite the shrinking domestic market in 2014. There was an increase of 4 percent in production in 2014 in comparison to the previous year and the production reached 1 million 170 thousand units. Thus, the record of 1 million 190 thousand units in 2011 was almost achieved.

The positive results of the investments for automobile production were obtained rapidly in 2014 and there was an increase of 16 percent in automobile production when compared to the previous year. The exports in automotive industry increased by 7 percent in 2014 when compared to the previous year and the total amount of exports reached to 885 thousand units.

On the other hand, 2014 started with a surprise for the sector. Although there was a regression in the domestic market in the first half of 2014, which started with the increase in Special Consumption Tax on 01.01.2014, the Market started to recover towards the end of the second half of the year. Consequently, as result of the increase in Special Consumption Tax as well as the exchange rates and interest and the restrictions imposed on credit operations by the Banking Regulation and Supervision Agency, the market decreased by 10 percent and ended the year with 807 thousand units in 2014. The automobile market decreased by 12 percent and the light commercial vehicles market decreased by 30 percent.

The market had a significant drop in the light commercial vehicles, which is the important product of our industry, in the new year. Later on, the market increased with the arrangement in the charge for K2

certificate. Turkey ranked the first in the EU in production with the products of domestic design for light commercial vehicles.

The total global automotive production increased by 3.6 percent and reached to 90 million units. The automotive production in the USA reached to the highest level of the last 10 years and the sales almost reached the levels before the crisis. Although the production in the EU increased in 2014 in comparison to the previous year, it is still below the levels before the crisis. Ranked the 17th in total production in 2013, Turkey maintained this position in 2014 with 1.170 thousand units. Likewise, our company maintained its position among the EU countries and ranked the 6th again.

On the other hand, our industry has been having foreign trade surplus since 2006 (except for 2011) meeting the entire sector imports with a sustainable export production thanks to the new product projects developed in R&D centers. Our foreign trade had a surplus of 2,3 billion Dollars in 2014.

2014 was a very important year for our industry with the new model and additional capacity investments. New investment projects worth 4.4 billion Dollars were announced and our total capacity increased to 1,7 million units with an increase of 9 percent thanks to the new investments.

As a result of the export success of the automotive industry and the added value it provided despite the regression in the domestic market, our exports increased by 7 percent in comparison to 2013 and reached to 22,8 billion Dollars.

With this success, the automotive industry still ranks the 1st among the sectors providing added value to the Turkish exports and economy. Along with the growth of total exports of our industry with the recovery in the EU market, which is our primary market, the increase of 20 percent in the automobile exports is a proud development.

Industry: OSD

Obstacles for New Investments in Turkey

What are the obstacles for new investments in Turkey?

Although the new investments show a positive trend in the recent years, it is important that the investments continue to reach the big targets of Turkey. In order to ensure this continuity, Turkey should address the issues considered as obstacles by the investors.

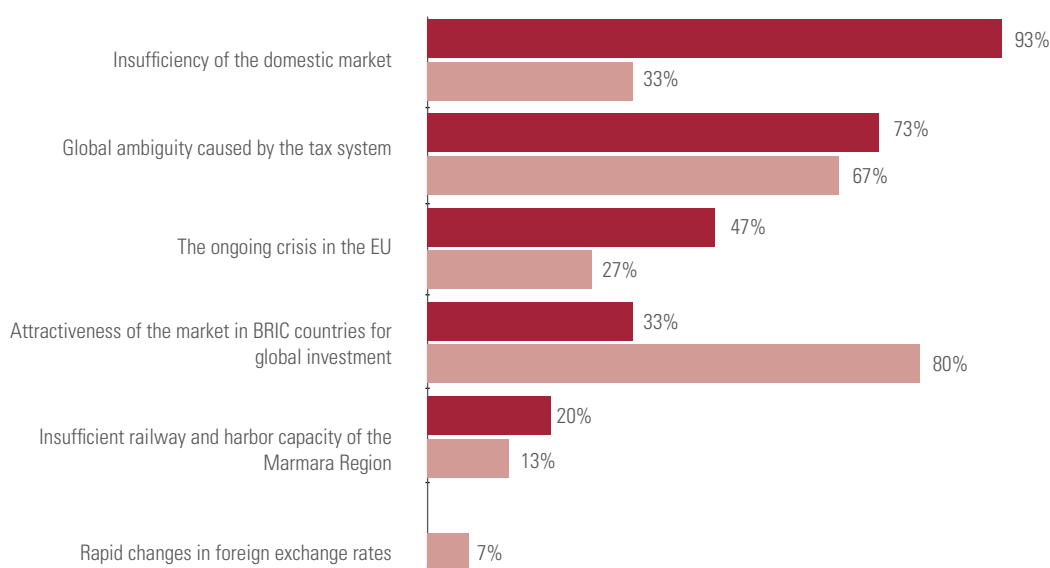
There has been an important change in this year's results and the size of the domestic market ranked the first by far.

The most important obstacle was the power of major competitor countries last year but this year, the insufficiency of the domestic market ranked the first by far with a significant increase. While 1 person out of 3 considered this issue important last year, almost all the participants (93%) seem to agree this year.

The uncertainties in the taxation system which makes sound forecasting difficult for investors still ranks the second but it is growing in importance. (73%) The crisis going on in the EU ranking the third with 47% seems conflicting with the answers in the General section of the survey. Of course there might be differences in the assessment since this question was answered by OSD members only rather than all automotive executives. It seems that the discussions in the recent months regarding whether the EU crisis has ended or it will increase again affected the answers here.

This year, the leading challenge for new investment into Turkey is the uneconomic size of the domestic market with a significant rise compared to last year.

Obstacles for New Investments in Turkey *



■ 2015
■ 2014

(*)The participants were allowed to select multiple options as answers.

Industry: OSD

Ensuring Sustainable Exports

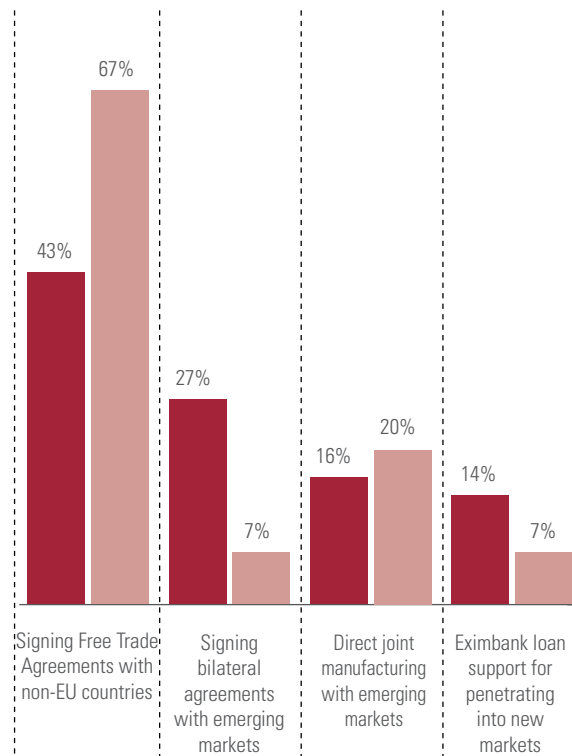
How can continuity of exports be ensured in the face of the market shrinkage in Western Europe?

The Western Europe has always been the primary export market for Turkey. However, considering the high growth targets of Turkey in the automotive sector and the limited growth potential of the EU, the alternatives become more important.

The fact that the Free Trade Agreements with non-EU markets ranked the first again among the primary issues for expanding the export market shows that this issue is still very important. However, there is a drift from this issue to "Bilateral agreements with the countries in emerging markets" when compared to the previous year. And this indicates to the increase in the importance of the emerging markets.

Bilateral agreements with emerging markets are becoming more important.

Actions to be taken to ensure sustainability in exports



■ 2015
■ 2014

Industry: OSD

Precautions that must be taken by the main and the supplier industry

What are the precautions that must be jointly taken by the main and the supplier industry in order to increase added value in Turkey's automotive industry?

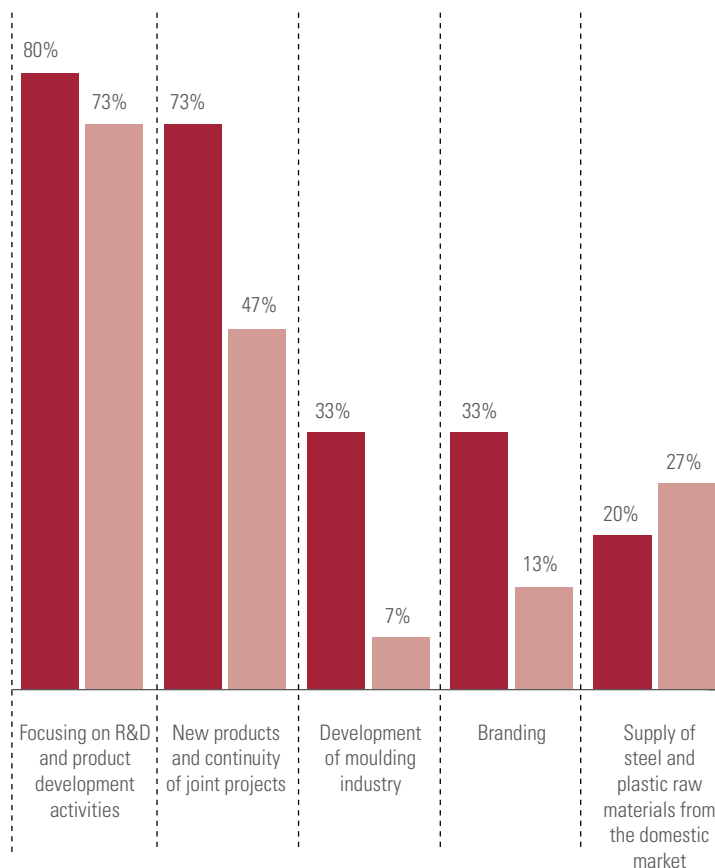
For this question, "R&D and product development activities" is among the issues where main and supplier industry can increase the added value together.

Continuity of new products and joint projects' is following this issue with a small difference. Cooperation fields such as system supply are should be increased for increasing the added value.

Another interesting point in the results is the significant increase in the importance of "Development of moulding industry". Currently, the automotive companies worldwide get their molds from China, Portugal, Italy, etc. However, the molds manufactured in Turkey have the same level of high quality and nearer to the productions in the Eastern Europe in terms of location. The Turkish automotive industry might gain importance by focusing on this issue.

Though R&D and product development activities were already considered very important, they grew in importance even more.

Precautions that must be taken by the main and the supplier industry*



■ 2015
■ 2014

(*)The participants were allowed to select multiple options as answers.

Industry: OSD

New Vehicle Projects

Supplier Industry

What should be done to increase involvement of the supplier industry in new vehicle projects of the main industry?

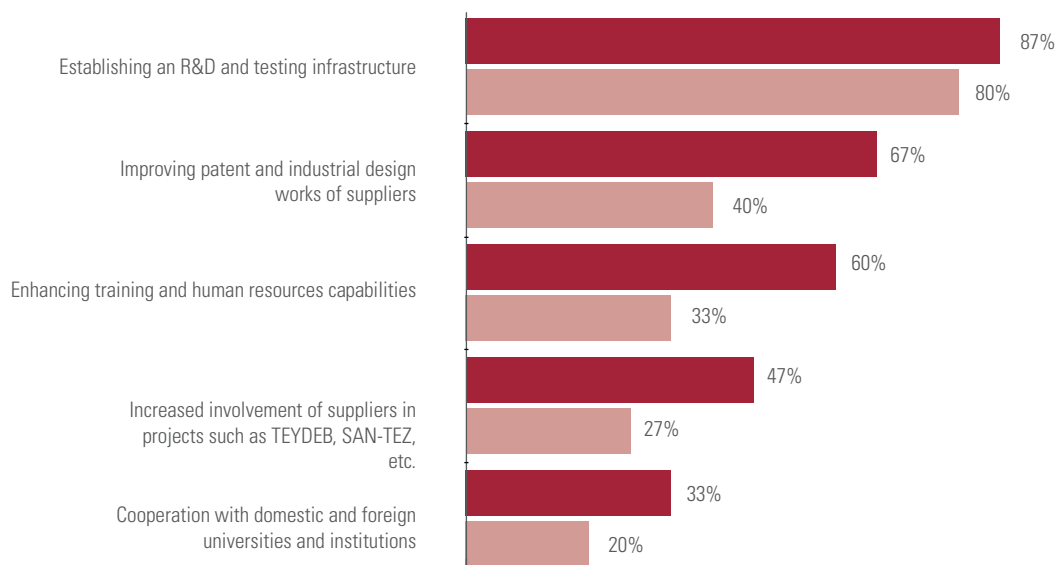
The most important issues, namely "Establishing an R&D and testing infrastructure" and "Improving patent and industrial design works of suppliers", show the need for improvement in the field of innovation management.

If the suppliers are involved in the new vehicle projects at earlier stages, they will be able to contribute more in the design and the products will reach the high quality at an earlier stage. And this will result in significant cost savings.

Other important issues include "Enhancing training and human resources capabilities", "Increased involvement of suppliers in projects such as TEYDEB (Technology and Innovation Funding Programs Directorate), SAN-TEZ (Industrial Thesis Projects Support Program) etc." and "Cooperation with domestic and foreign universities and institutions". At this point, it might be a good solution to cooperate with the universities for establishment of a common test center as in the USA and Europe since the establishment of the testing infrastructure is very costly. Thus, the tests are carried out free of charge in the common test center and the companies support the universities financially, which in turn allows the universities to train and employ qualified workforce.

Establishment of R&D and testing infrastructure, the most important matter for the supplier industry and common design in new vehicle projects, have become more important.

Actions to take to increase involvement of the supplier industry in new vehicle projects*



■ 2015
■ 2014

(*)The participants were allowed to select multiple options as answers.



Murat Palaoğlu

KPMG Turkey Head of Customs
and Foreign Trade, Partner

What Does Transatlantic Trade and Investment Partnership (TTIP) Mean?

The discussions regarding the free trade agreement between the European Union (EU) and the United States of America (USA) continue at full stream. The free trade agreement between the two continents is of as much interest for our country as the parties.

What is a Free Trade Agreement?

A Free Trade Agreement (FTA) is defined as the mutual facilities in the trade of some commodities and customs duty advantages between two countries. Therefore, the trade volume between the countries executing a free trade agreement increases.

Does the Free Trade Agreement Increase Trade?

FTA's affect the global trade from many aspects such as the joint trade policy, competition, market penetration and investments. The EU and the USA together constitute almost half of the global income and one third of the global trade and the mutual investments reach trillions of Dollars.

While the EU and the USA keep negotiating on The Transatlantic Trade and Investment Partnership-TTIP, which is anticipated to create a big change in the global trade and will create a new commercial formation, its possible results for the rest of the world and Turkey and its impacts on the trade volume is very important.

Which Areas is the Transatlantic Partnership Expected to Govern?

The issues that are expected to be addressed with priority under FTA are decreasing the customs tariffs, non-tariff impediments, trade of services, intellectual property rules, investments and public acquisitions.

While it is expected that the possible arrangements under TTIP will focus more on non-tariff impediments, it is intended to eliminate the different standards in products and production processes with joint arrangements.

At this point, it is expressed that focusing on decreasing the customs duties only to measure the impacts of the agreement would be misleading and the most important impact will result from non-tariff impediments, investment environment and other arrangements. It is observed that the tax-related impacts such as preferential tariff rather than public studies are in focus and the number of comprehensive studies to measure the impacts in areas such as standardization or non-tariff impediments is not sufficient.

TTIP also includes trade policy measures. The USA can impose restrictions in the import of some Turkish-origin commodities. It is expected that the possible FTA between the USA and the EU will decrease such restrictions between the two parties. If our country is not a party to this agreement, the non-tariff impediments in the exports to the USA are anticipated to affect our competitiveness and exports adversely.

What Can Be The Possible Impacts of TTIP on Turkey?

In accordance with the Customs Union between the EU and Turkey, the same taxation policies are supposed to be applied to Turkey as the EU for trade with the countries under the agreement. Therefore, Turkey becomes an open market for every country executing a FTA with the EU and this might lead to shrinkage in some sectors. The possible FTA between the USA and the EU is based on the origin and if Turkey is not a party to the agreement, the exports from Turkey to the USA are not covered by the agreement. So it is anticipated that the exports of Turkish- origin commodities to the USA will be adversely affected by this process.

In case Turkey is not a party to the agreement, the commodities from the USA might be imported to Turkey without customs duties through the EU with A.TR Circulation certificate but the commodities with Turkish origin will be subject to customs duties when exported to the USA directly. It is obvious that such a situation will affect the existing trade balance and cause adverse impacts on Turkey.

It is expected that the FTA between the EU and the USA will take the global trade to a new dimension. Because the trade volume between the two continents reaches up to 2.7 billion Dollars per day. According to a previous study, the table of comparison regarding the two scenarios (being a party to the agreement or not) for our country is provided below.

Considering the size of the American economy, the possible relative impacts for the American economy will be much less significant. It can be said that the economic loss arising from Turkey's not being a party to the agreement will be trivial for the USA. In order to avoid this problem in both this FTA and the possible processes of future FTA's, it might be a more effective method to develop a strategy through the EU.

What Can Be The Possible Impacts of TTIP on the Automotive Sector?

It is anticipated that the automotive sector, which is the dynamo of the exports of our country, will also be affected by the FTA between the USA and the EU. It is anticipated that the costs of the automotive products exported from the USA to the EU under the FTA will decrease by 25,5%. Considering the fact that a significant amount of the exports of the Turkish automotive sector is to the EU, it can be said that such an important advantage to the USA will be very important for the EU, which is the most important market.

It is anticipated that, if our country is not a party to the FTA between the EU and the USA, the biggest loss of exports will be in the motor vehicles and parts sector. According to the "Report on Evaluation of the EU-Turkey Customs Union" dated March 28, 2014 by the World Bank, in a scenario where a FTA is executed between the EU and the USA and Turkey is left out of this agreement, it is estimated that the motor vehicles and parts exports will incur a loss of about 132 million Dollars.

The results of the Automotive Executives Survey show a more pessimistic picture regarding the expectations for Market size and new investments. Increasing the foreign trade, execution of new trade agreements and improvement of the investment environment are the elements necessary for new investments. Being a party to TTIP will provide progress in this area. Another issue that is as important as these expectations and likely to affect the exports adversely is the possibility that being excluded from this league where the international balances are re-defined and arrangements regarding the investment environment, standards and other rules will be made will cause other significant damages.

Impacts of being excluded from the process on Turkey

Shock Applied	GDP (% Change)	Exports (% Change)
Elimination of the tariffs	- 0,132	- 0,114
Elimination of the tariffs and limited decrease of non-tariff impediments	- 0,359	- 0,268
Elimination of the tariffs and decrease of non-tariff impediments	- 0,561	- 0,450
Elimination of the tariffs, decrease of non-tariff impediments and direct spillover effects	- 0,191	0.129

Source: Calculation of writers on the basis of GTAP database and overall balance model

Impacts of being included in the process on Turkey

Shock Applied	GDP (% Change)	Exports (% Change)
Elimination of the tariffs	0.460	1.303
Elimination of the tariffs and limited decrease of non-tariff impediments	2.046	3.809
Elimination of the tariffs and decrease of non-tariff impediments	4.001	6.974
Elimination of the tariffs, decrease of non-tariff impediments and direct spillover effects	3.793	6.846

Source: Calculation of writers on the basis of GTAP database and overall balance model

Industry: TAYSAD

Areas on which the supplier industry should focus

On which areas should the supplier industry focus most in medium term?

Among the areas that the supply industry in Turkey should focus on, R&D ranks the first just like the previous years. At this point, the importance of right human resources is obvious but institutionalization and strategic planning is also among the issues of importance.

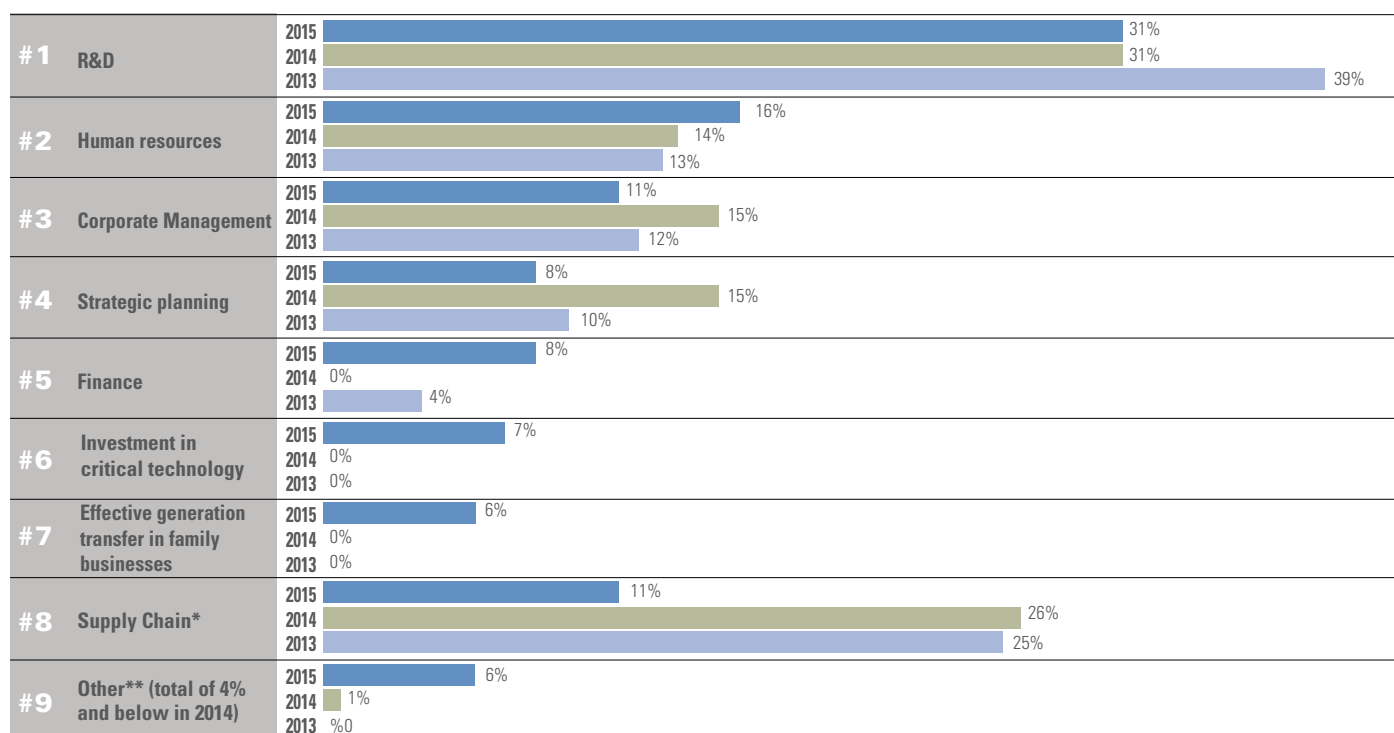
While the issues such as organizational management and strategic planning are still important, it seems to have lost some points with new issues such as investing in critical technology and effective generation transfer in family businesses.

The points given by TAYSAD members to Sales, Purchasing, Manufacturing, Quality, Logistics and Marketing, which are the elements of supply chain, dropped from 26% to 11% this year. In order for the suppliers in Turkey to be successful in the European markets, they need to supply the right product, at the right time, at the right place and at the quality expected. And a modern Supply Chain Management is essential for this.

We added a special KPMG Insight to highlight this issue.

R&D is once again a top priority for the supplier industry. However, interest in supply chain management seems to be decreasing.

Areas which the supplier industry should focus on



* Quality, manufacturing, marketing, logistics, sales, purchasing

** Brand (Turquality, etc.), efficiency, decreasing labor costs, being a global player

■ 2015 ■ 2014 ■ 2013



Alper Kanca

TAYSAD, Deputy Chairman

Training and Employment Policies to Increase Competent Human Resources Should be Established

The fact that the "investment environment" in our country isn't improving in the way we desire slows down both the domestic investors and the foreign investors we want to attract. It is possible to include many different factors into the concept of investment environment. For instance, the insufficiency in human resource should be considered as one of the reasons why the investment environment in Turkey cannot improve. We can notice a significant increase in the importance given to Human Resources by the executives answering the survey under "areas which the supplier industry should focus on" in 2014 during the period of 3 years.

Incentives in Global Investors' investing in our country is at the same level as the previous year but there is a significant increase in the priority given to increasing the cooperation for R&D. For the first time this year, we can see that "competent human resources" is given a great importance as much as 54% for attracting the Global Investors to our country.

Turkey is about to lose its competitive advantage with its young population and low labor costs against the Eastern and Southeastern European countries in the EU, which is the biggest market for Turkey. The only way to overcome this challenge is the training and employment policies to increase competent human resources.



**Kaveh Taghizadeh**

KPMG Turkey Head of
Management Consulting,
Partner

**Gençer Keser**

KPMG Turkey
Senior Manager,
Management Consulting

The transformation from Supply Chain Management to Supply Network – A must for the Turkish automotive industry.

The management of the total supply chain is for most global automotive organizations a very complex and long process. The systematic coordination of internal and external business functions is difficult and requires besides operational excellence also the concentration to finance, people and systems. Additionally it is very important to ensure full transparency of the supply chain, being flexible in uncertain operational and market situations and providing an excellent planning mechanism in order to react on time.

Especially the automotive industry is facing day by day more challenges. Global automotive trends e.g. scarcity of raw materials, globalization and the development of new technologies are pushing OEMs and their entire supply chain in the corner. Without effective and sustainable supply chain management organizations, companies will be always reactive rather than taking the proactive approach to avoid unnecessary situations and costs.

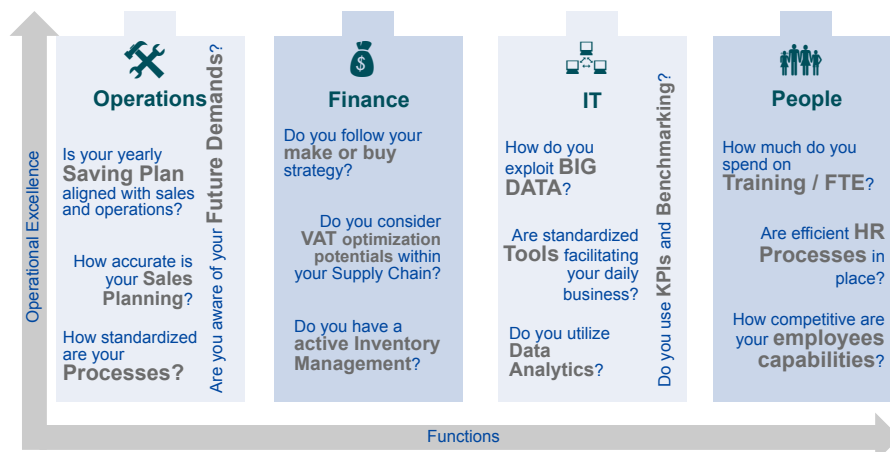
While European and North American automotive companies are increasing their investments in the supply chain management, KPMG Turkey 2015 Automotive Executives Survey has shown that executives of Turkish suppliers would rather put their focus on R&D, HR and Cooperate Governance.

Main areas of the supply chain management such as Sales, Procurement, Production, Logistics and Quality Control have not been seen as such important areas to invest.

To enter new global markets, achieve operational excellence, develop to an important market player and produce cost efficiently will require significant investments into supply chain management. Our long term experience in this business area underlines that there is no standard solution to optimize your supply chain management. However different aspects and influences will require a customized design, plan, execution and control in use of best in class methods, tools and expertise.

In other words: the creation of a customized visible system of your entire supply chain network will allow you to manage all planning, procurement, operational and logistical activities and processes. For example, a common shared platform which leverage the information of the total demand, production, supply and capacity information of the entire supply chain will support you to be informed with a real-time view.

The transformation of a traditional supply chain into an integrated multi-tier supply network will ensure the elimination of late delivery, unnecessary interfaces and improve your working capital. Additionally it will support you to reduce operating costs which will have a significant impact on your profitability and increase the customer service. We believe and emphasize that the optimization of your supply chain management in an effective and sustainable way across all functions and partners will be important and necessary for the future of the Turkish automotive industries.



Industry: TAYSAD

The new incentive system

Attracting which of the below specified strategic investments in Turkey within the scope of the new incentive system would yield most favorable impact on the automotive industry?

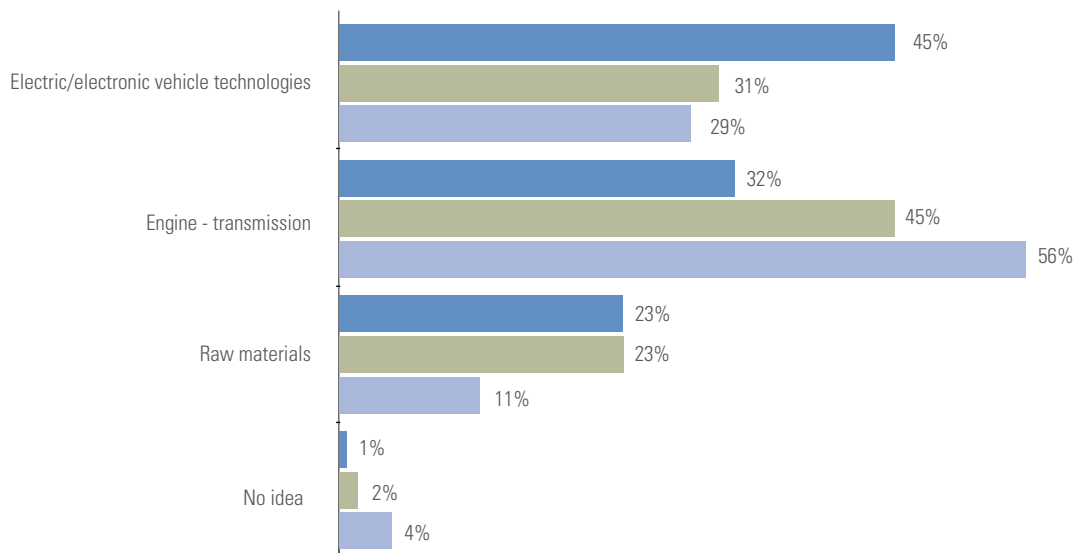
Although it ranks the first for the last two years, the engine-transmission option, which lost importance to some extent, also lost its position to electric/electronic vehicle technologies.

One of the global trends is the electric/electronic vehicles' becoming popular in the upcoming years. Although it doesn't proceed as fast as expected worldwide in the recent years, it is anticipated that this trend will become more important and Turkey will be significantly affected by it. The answers of TAYSAD members also confirm this trend.

The subject of raw materials is just as important as the previous year. Another element highlighting this fact is that the USA Dollar has gained value over Euro in the recent years.

**Electric/
electronic vehicle
technologies are
considered the
most positive
strategic
investment area
this year.**

Strategic investments which appear to be promising for the automotive industry





Emrah Akın
KPMG Turkey
Director, Tax

Can the Investors Benefit From the Discounted Tax Incentives on Time?

Considering the problem of "current deficit", which Turkey has been trying to overcome for many years now, the importance of the automotive investments planned is doubled. Let's make it concrete; our imports for "motor land vehicles" (tractors, bicycles, motorcycles and other land vehicles, including the components, parts and accessories of them) in 2014 were 15.7 billion Dollars and our exports for the same were slightly over 18 billion Dollars. Even though we don't have foreign trade deficit in the trade of motor land vehicles, we can say that our imports are very high.

It is often emphasized that the Investment Incentive System, shared with the public in 2012 with a decision of the Council of Ministers No 2012/3305 and revised significantly for the automotive sector in February 2013, offers important provisions for the automotive investors. Let's summarize the basic provisions of the system:

Minimum Investment Amounts Decreased: Decreasing the "minimum investment sizes" required for the incentive documents to be prepared for the automotive investments, it was intended to allow more investments to benefit from the incentive system. Accordingly, for the purpose of being included into the "large scale investments" group, the investment size required for "main industry investments" decreased from 250 million TL to 200 million TL and the investment size required for "supply industry investments" decreased from 100 million TL to 50 million TL. For the purpose of being included into the "regional incentive" group, the investment size required for "supply industry investments" decreased by 1 million TL for each investment region.

Some Automotive Investment was included in the "Priority Investment" group: In the incentive system, the priority investments are classified as investment eligible for the regional incentives applied in Region 5 regardless of where they were made. Accordingly, with the change made in February 2013, "main automotive industry investments" worth 300 million TL minimum, "engine investments" worth 75 million TL minimum and "investments for engine parts, drivetrain and their parts as well as automotive electronics" worth 20 million TL minimum can benefit from the incentives offered for "priority investments" under the incentive system.

The priority investments can benefit from VAT Exemption, Customs duty exemption, incentive for the employer's contribution to SGK (Social Security Institution) premiums for 7 years, tax discount of 80% with 40% rate of contribution to investment, interest support up to 700 thousand TL and incentive of allocation of investment location. It should be noted that the investors can utilize 50% of the investment contribution in the "investment period".

Undoubtedly, the "tax discount" incentive ranks the first among the most important incentives for the automotive investments under Decision No 2012/3305 and the practice regarding this issue is governed by Article 32/A of Corporate Tax Law. The practice of "discounted corporate tax" regulated under this article intends to allow the investors be subject to lower levels of taxes for the revenues arising from the investments granted an incentive certificate by the Ministry of Economy. It is possible to say that the current practice of discounted corporate tax affects the balance between the investors of **"expansion (expanding/renewing)"** investments and those of **"completely new"** investments seriously.

Let's make it more clear; Article 32/A of the Corporate Tax Law says "For expansion investments, if it is possible to detect the earnings by monitoring in separate accounts within the framework of the business integrity, the discounted rate shall be applied to these earnings. If it is not possible to detect the earnings separately, the earnings to which the discounted rate will be applied shall be calculated by proportion of the amount of the expansion investment made to the amount of the total fixed values registered to the assets of the business at the end of the relevant period." It can be said that the interpretation of the Revenue Administration regarding this provision, which has become an established practice, creates an undesired situation for the investors. Under the current practice, the concept of **"amount of total fixed values"** is taken into account as **"gross amount before amortization"** and the tax discount spreads into many years. Let's explain it. It is possible to foresee that, where the earnings from the expansion investment are determined by proportioning, taking into account the **"gross amount before amortization"** instead of **"net amount after amortization"** will decrease the effectiveness of the incentive system and cause the investors expanding their investments to utilize the tax discount advantages in 8-10 years or more.

It can be said that the current practice causes many problems for the investors who decided to make fixed capital investment in Turkey years ago having confidence in the economic, social and political conditions of our country and whose contributions to the national economy cannot be ignored. Ensuring that these investors expanding and/or renewing their investments benefit from the discounted corporate tax incentive to the same extent as a new automotive investor in the country would eliminate the inequality of opportunity and better motivate the existing investors for new investments.

Industry: TAYSAD

Attracting Global Investments to Turkey

Which actions must be taken to attract new global investments in Turkey?

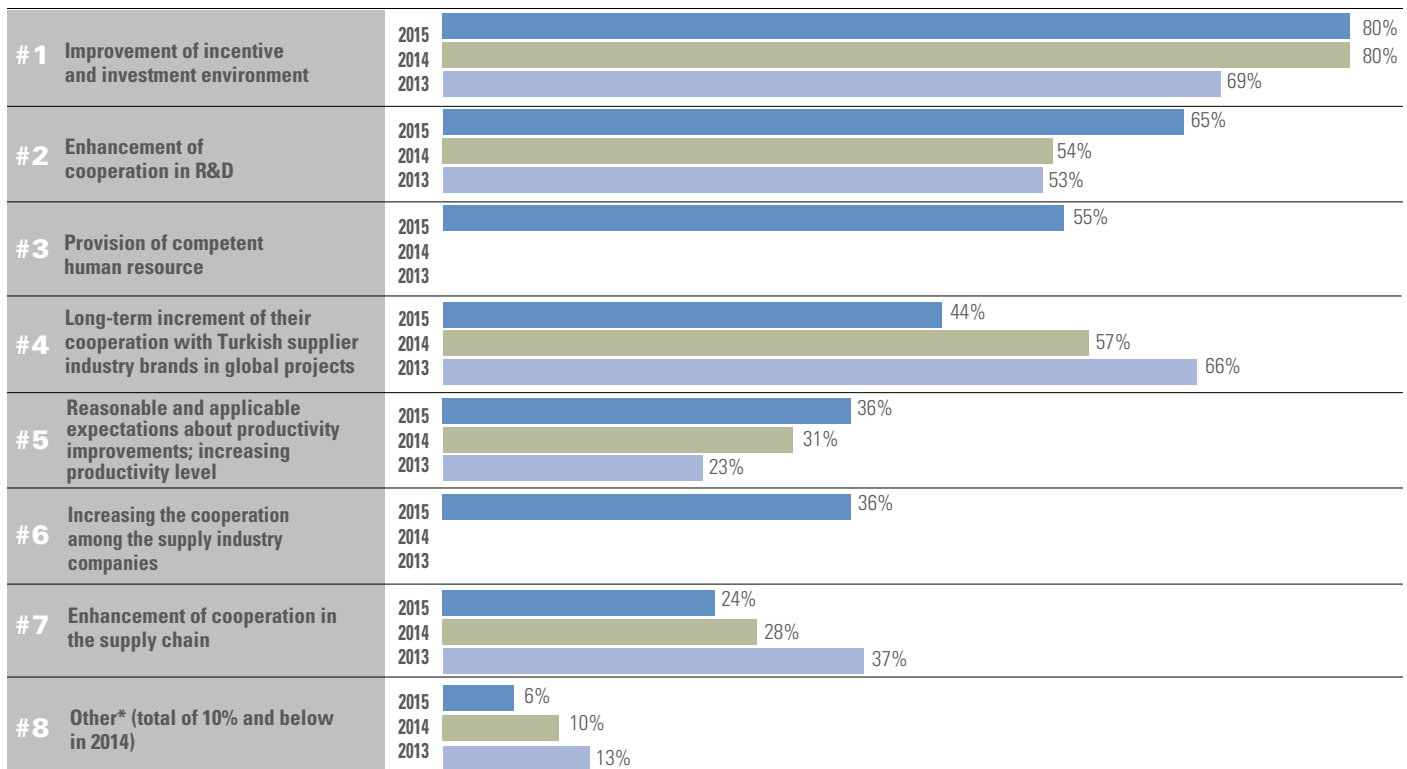
When asked which issues Turkey, with a strong supplier industry, considers to be important for the purpose of attracting more foreign investments in this field, respondents, once again, stated that the incentive and investment conditions must be improved at first.

On the other hand, TAYSAD members underline the need for cooperation in the supply industry to attract global investments in Turkey. Particularly, the cooperation in R&D and between the supply industry companies is highlighted.

The issue of increasing the cooperation for R&D, which ranked the third last year, gained importance this year and ranked the second while the provision of competent human resources, assessed for the first time this year, ranked the third. Considering the results of the survey in general, the importance of competent human resources is one of the results highlighted on both market and industry side.

Along with the improvement of incentive and investment environment, the need for R&D cooperation is also highlighted.

What actions must be taken to attract new foreign investments to Turkey?*



* Growth of the domestic market; creating alternative industrial cities in Black Sea, Central Anatolia and Mediterranean regions in addition to the big cities in Marmara and Aegean Regions; improvement of the tax environment, SCT discount; increasing cooperation between the industry and the university; showing ethical behavior regarding human resource transfer; increasing the vehicle sales.

■ 2015 ■ 2014 ■ 2013

(*)The participants were allowed to select multiple options as answers.

Industry: TAYSAD

Regions Where Cooperation of Suppliers is Expected to Increase

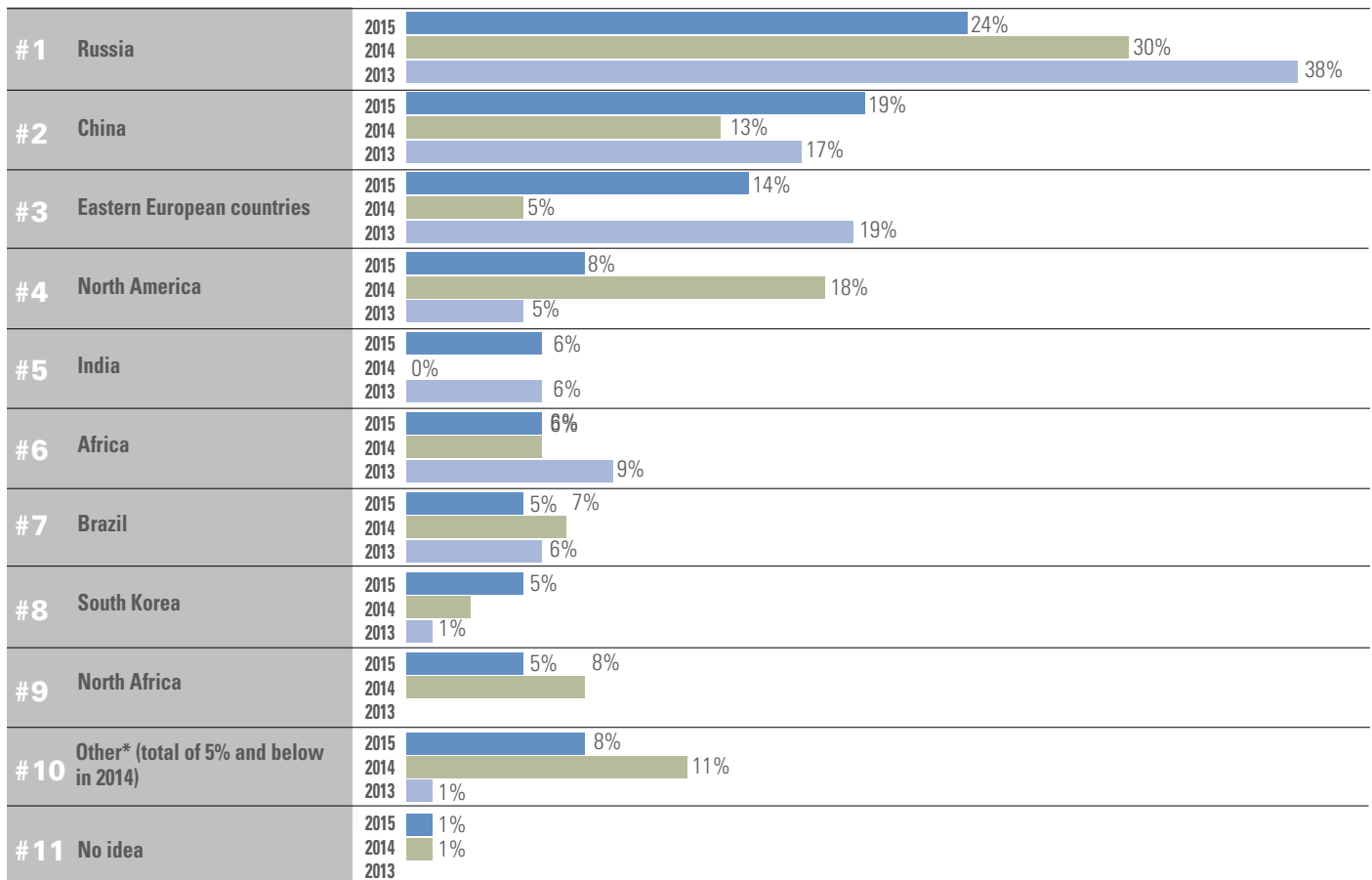
In which areas do you think our supplier industry will increase cooperation in the medium term?

We asked with which regions the supplier industry plans to increase the cooperation in the upcoming period and the results were interesting: Russia held the same position as last year but with a drop from 38% to 24%. While China ranked the third for Turkish supplier industry after Russia and Northern America last year, it ranked the second with a rate of 19% this year. While Northern America dropped from 18% to 8% and fell behind in the race, the countries in the Northern Europe had an increase of 9%.

The results can be interpreted as follows: The Turkish supplier industry is more cautious in investing in Russia due to the political developments and the European embargo in Russia recently. In addition, China and the Eastern European countries are gaining importance again. India, one of the BRIC countries, is another region of interest with a rate of 6% this year. It seems that the fact that Northern America has recovered from the economic crisis and gained stability decreased the interest of the suppliers in Turkey.

While Russia still ranks the first despite a decrease of 14%, China is catching up. Interest in the Eastern European countries is on the rise again.

Regions where cooperation with suppliers will increase the most in the medium term



* Mexico, South Africa, Western Europe, Iran, Middle East, Europe, EU Countries, No idea

Industry: TAYSAD

Countries where investments are planned to be realized

Which countries are you planning to make investments in for the medium and long term?

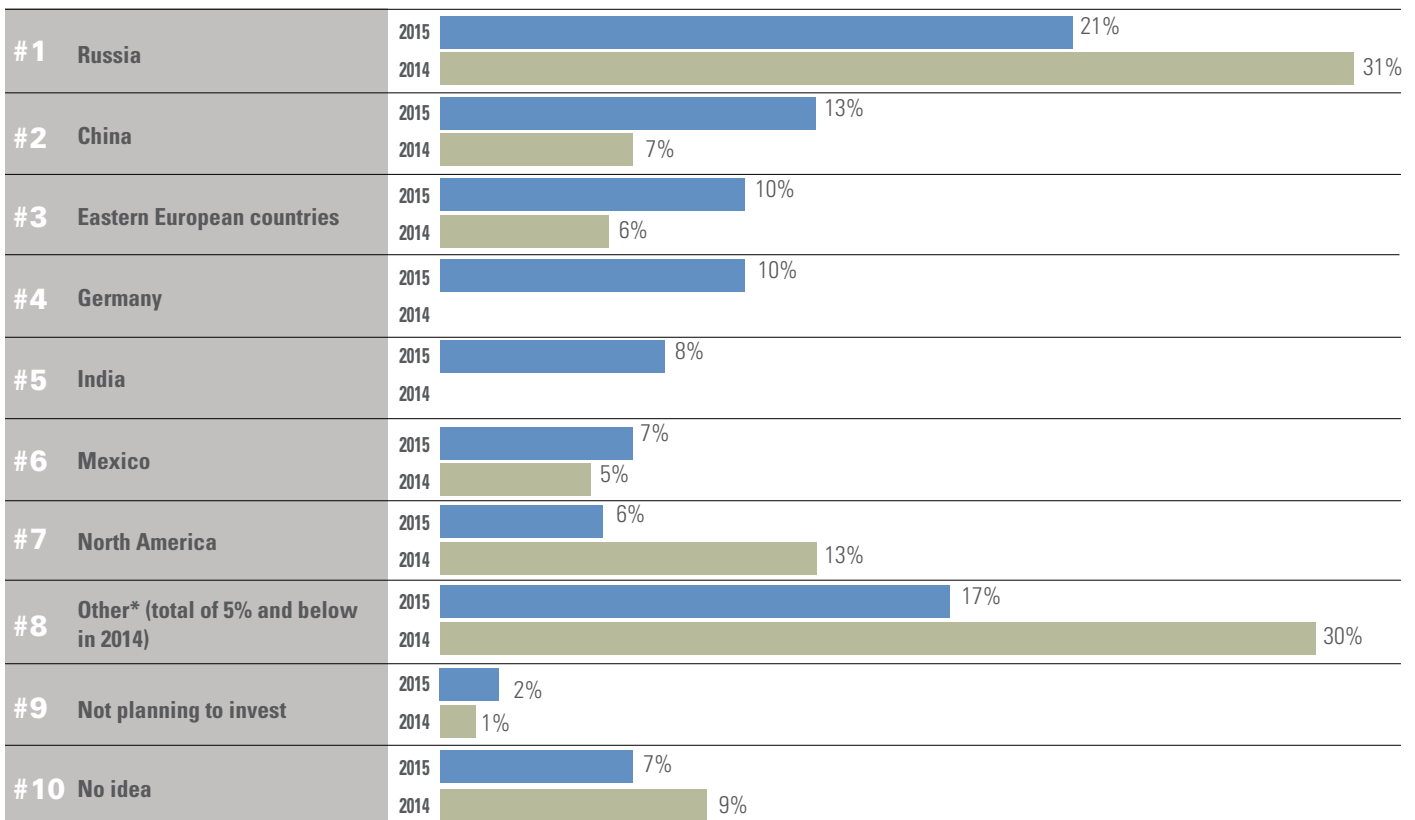
When we wanted to learn whether the supplier industry is in fact planning an investment in the countries of interest in terms of cooperation, we came across matching pictures.

Russia still ranks the first among the countries where they are planning to make investments but its priority decreased with the impacts of the crisis. On the other hand, China and Eastern European countries had a significant increase.

Another interesting result is that Germany and India joined the countries expecting investment. As is known, Germany is a country with advanced technology and high labor costs. The suppliers in Turkey might have plans to get closer with German OEM and Tier 1 companies. On the contrary, India is a rather new country with less advanced technology and industry and low labor costs. One of the BRIC countries expected to develop, India is considered as an attractive field of investment for the Turkish supplier industry.

Plans for investment in Russia are decreasing while China, Eastern Europe, Germany and India are gaining importance.

Countries where investments are planned to be realized



* Brazil, North Africa, Africa, France, Italy, South Africa, England, Morocco, Japan, Middle East, South Korea, Turkey



Hakan Aytekin

KPMG Turkey Head of Risk
Consulting, Partner

Brand Coaching Program - Turquality®

Turkey is a country with important manufacturers, particularly in the automotive supplier industry. When we look at the economic and geopolitical conjuncture, it is anticipated that Russia and China will not be able to grow as fast as before in the next 10 years. This indicates that the economies of these countries will be more competitive in the global platform and new opportunities will be available for countries like Turkey. However, the most important impediment for developing countries like Turkey is the lack of branded products commonly.

Maintaining competitiveness with cheap labor only is not sustainable in the long term. Aware of this fact, Turkey has developed a brand coaching and incentive program titled Turquality®. Turkish companies with a potential of becoming a global brand offering goods and

services both B2C and B2B are allowed to benefit from this program. We can see that many automotive supplier industry manufacturers can get included in this program recently.

The automotive companies included in this program can benefit from incentives in many areas such as organizational management, ERP software, rent for office/store/warehouse abroad, advertisement and marketing for periods varying between 4-10 years. Of course the Turkish government will not maintain this program forever. Therefore, every Turkish company operating in the automotive sector with a brand value and a strategy to further develop it should make applying for Turquality program an important part of its strategy.





Naciye Kurtuluş

KPMG Turkey
Director, Risk Consulting

Succession to the Next Generations in Family Businesses

The family businesses in Turkey account for 85% of the total employment. Unfortunately, the succession to the 3rd generation is below 10%.

Succession to the future generations is an issue which should be considered and planned as from the moment the next generation starts working full time in the company.

The issue of succession should be addressed by considering two goals: transfer of the ownership of the company and transfer of management. It is very important to plan both of the properly and manage the process correctly for the continuity of family businesses. The current generation is not willing to transfer the company they have founded under difficult conditions. Therefore, since transfer of management before ownership will provide an opportunity to work with the next generation and show that the company will be managed successfully by the next generation, it will allow an easier and smoother transfer of the ownership of the company.

The most important problem arising during the succession process is the difference in expectations of active and passive family members in the company. Therefore, an important issue to be addressed carefully in effective management of the transfer succession is proper communication within the family. Effective communication can be ensured with family business meetings

for the active family members in the company, family council meetings with attendance of the larger family members and a family constitution.

Then, the successors in the next generation should be determined and they should be prepared for their new positions. The rules about the family members working in the family business must have been defined clearly for fair and effective performance of this step. Then, the capabilities required by the relevant position should be identified, a roadmap should be prepared for the successors to gain those capabilities and their performances should be measured regularly. It should be remembered that the main purpose of defining the successors is the sustainability of the company and emotional behavior should be avoided. If there are certain members of the family who are not thought to be beneficial for the company, they should be removed from the company taking into account the interests of the company. The time when the management will be transferred to the next generation by the current generation should be defined exactly.

The critical point for the current generation is transferring the management at the end of the predefined time once the next generation has gained the competencies required for the relevant position and shown the necessary performance.





Özlem Karahan

KPMG Turkey
Director, Audit

International Financial Reporting Standards (IFRS) is changing Impacts of the New Revenue Standard “IFRS 15 Revenue from Contracts with Customers” on the Automotive Manufacturers

It is anticipated that the new standard will particularly affect the companies offering multiple goods and/or services to their customers simultaneously within a contract; and the transactions where the contracts change depending on the price or performance and the sales prices are variable.

In accordance with IFRS 15, the entity shall allocate the transaction price to the performance obligations identified in the contract on a “relative stand-alone selling price basis” of the good or service at contract inception. The relative stand-alone selling price is the price at which an entity would sell the promised good or service separately to a customer and the best indicator is the observable sales price when the entity sells that good or service separately in similar circumstances and to similar customers.

If the individual sales price is not directly observable, the entity shall estimate the stand-alone selling price. When estimating a stand-alone selling price, an entity shall consider all information that is reasonably available to the entity, maximize the use of observable inputs and apply estimation methods consistently in similar circumstances.

The automotive manufacturers may need to change their accounting for pre- and post-sale incentives and warranties

Material rights

Under the new standard, automotive original equipment manufacturers (OEM) will need to consider the accounting implications of offering free or discounted products or services, either explicitly or implicitly. These incentives may be considered a material right held by the customer (the dealer) or the dealer’s customer (the consumer) and may be a separate performance obligation of the OEM. If the free or discounted products or services are deemed a material right obtained by the dealer or the consumer, a portion of the transaction price will need to be allocated to the material rights and recognized when or as they are satisfied.

OEMs typically have a number of vehicles priced at significantly different amounts with a variety of available options. Because the transaction price will be allocated on a relative standalone selling price basis, the amount of the transaction price allocated to free products or services that are bundled with vehicles with lower prices may be greater than the amount allocated to identical free products or services bundled with higher priced vehicles. This may make it difficult to apply the allocation process across entire vehicle product lines.

Sales and marketing incentives

Currently, pre- and post-sales and marketing incentives, which are typically offered in the form of cash rebates, favorable financing terms, or free or discounted products or services, are recognized as reductions to revenue by OEMs.

Under the new standard, pre-sales incentives such as free or discounted products or services offered to the consumer (i.e., sales incentives when the OEM enters into the contract with the dealer) will often be treated as a separate performance obligation.

Conversely, these same incentives that are post-sales incentives offered to the consumer, (i.e., made available to the consumer after vehicles are sold to the dealer) will not be treated as separate performance obligations and likely will be recognized as a cost accrual, unless the dealer has a valid expectation that such incentives will be offered (the OEM has a customary business practice of offering incentives), in which case it is an implied performance obligation.

Warranties

Consistent with existing practice, assurance-type basic warranties will continue to be accounted for under a cost-accrual method. However, an OEM will need to evaluate whether its warranties provide consumers with a service in addition to the assurance that the vehicle complies with agreed-upon specifications. If the OEM is providing an incremental service by extending the warranty period or providing coverage beyond fixing defects that existed at the time of sale, the service-type component of the warranty will be treated as a performance obligation separate from the vehicle whether or not it is separately-priced. This means a portion of the transaction price will be allocated to the obligation to perform under the extended service warranty and recognized as revenue as the service is provided.

Currently, revenue from separately priced warranty contracts is deferred at the stated contract amount and recognized in income on a straight-line basis over the contract term unless historical experience supports another recognition method. Under the new standard, revenue will be allocated to an optional extended warranty and any product maintenance or service-type component of the warranty on a relative standalone selling price basis, which may be different than the contract amount.

Residual value guarantees

Currently, automotive manufacturers are precluded from recognizing the sale of a vehicle if they guarantee its resale value. Under the new standard, if an automotive manufacturer pays the customer the difference between the sales proceeds and the guaranteed minimum resale value, it will account for the vehicle sale under the new standard.

Next steps

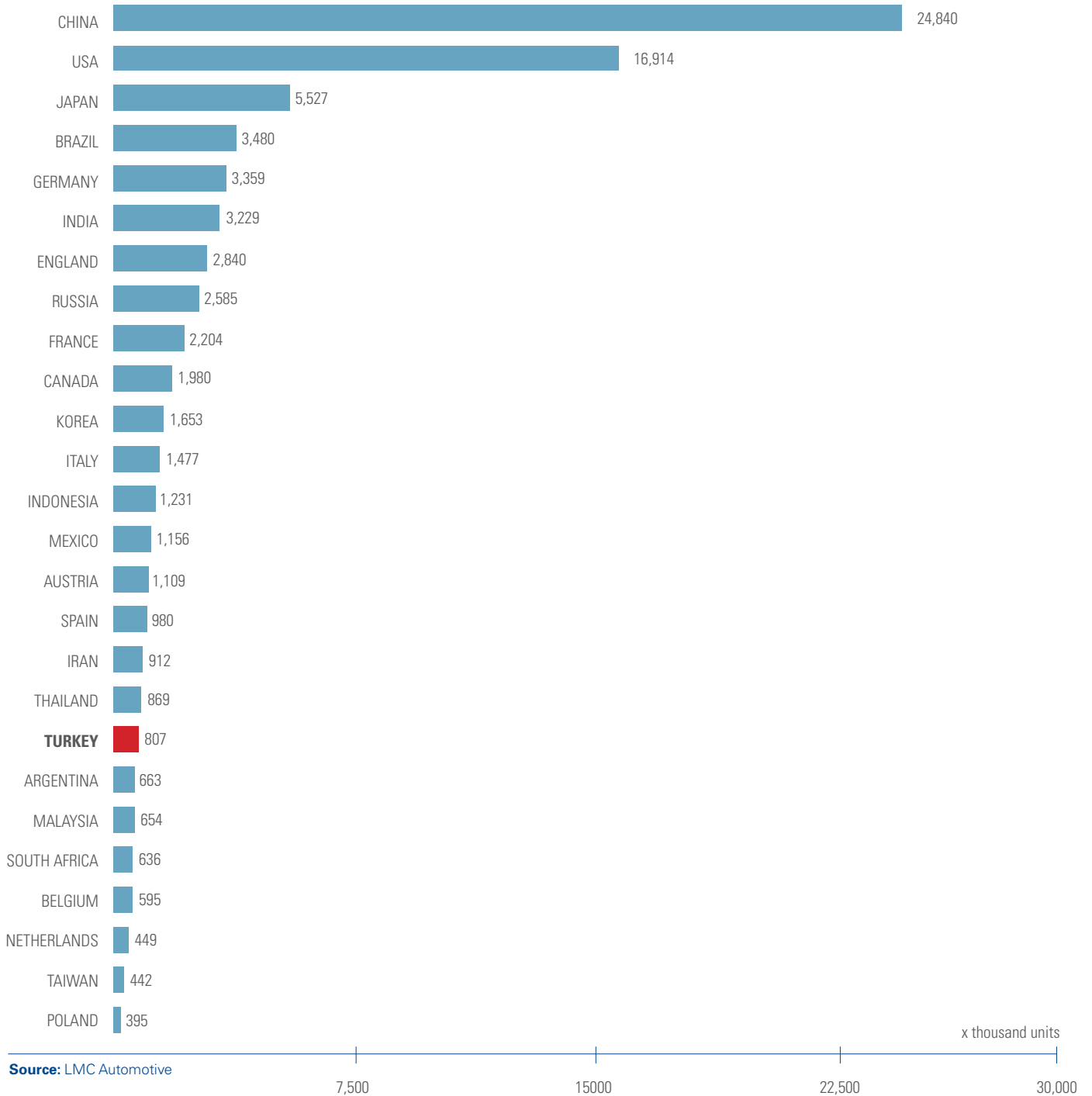
The entities operating in the automotive sector should perform a preliminary assessment regarding the impacts of IFRS 15 and plan how to implement the new standard. While the impacts of the new standard will differ among companies, it might introduce important changes to the accounting of revenue. IFRS 15 is effective for annual periods beginning on or after 1 January 2017. During the preparation period for the transition, it might be necessary for companies to make organizational changes to prepare the data required both from the information systems and the business processes.

APPENDIX: **Facts and Figures**

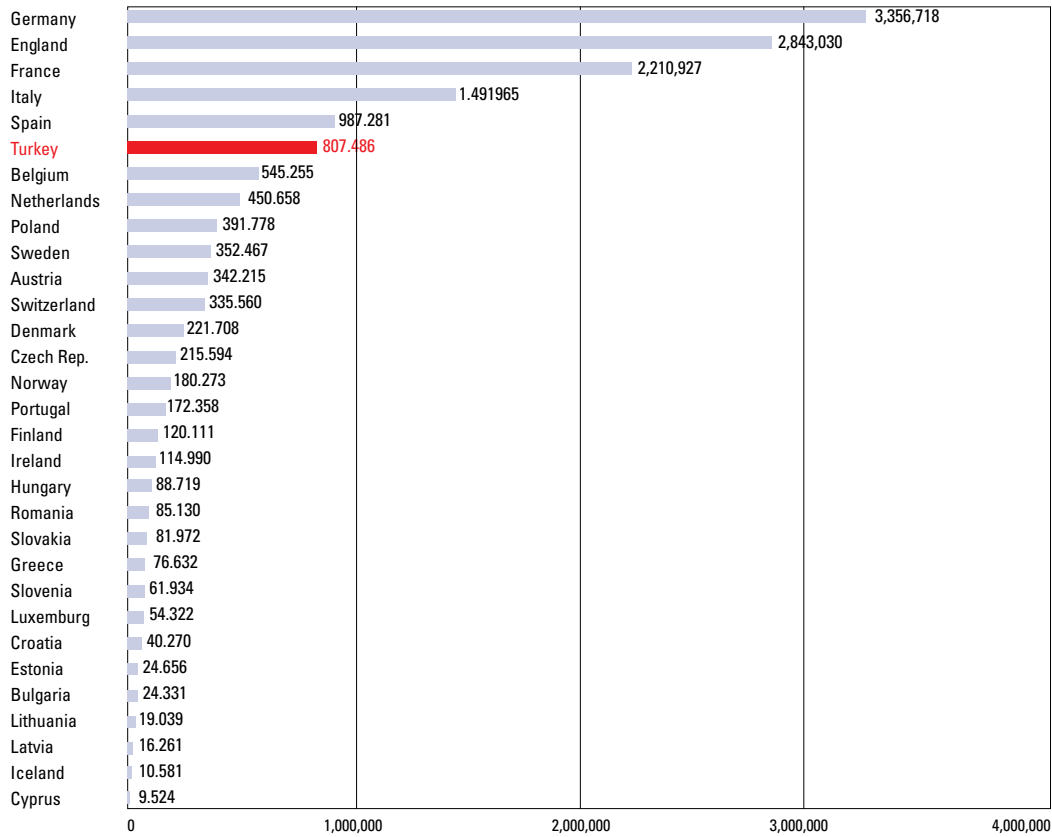


Market

Vehicles Sales in World, 2014

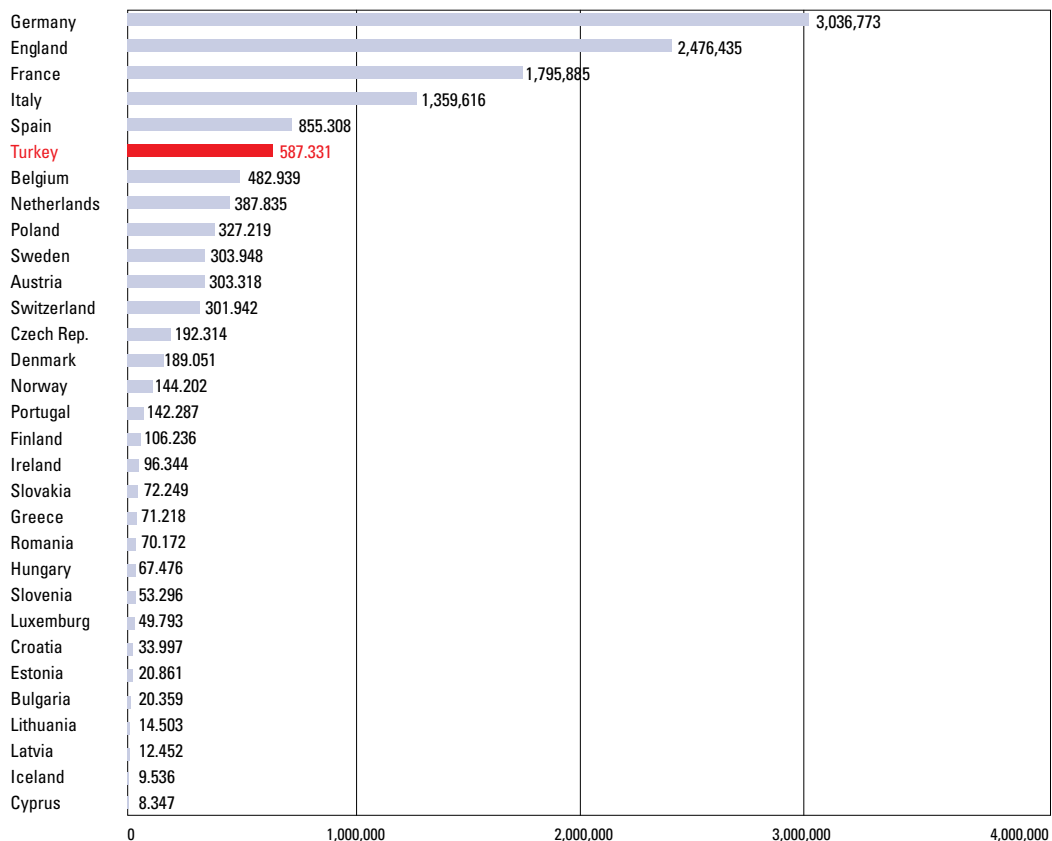


European Automotive Market January-December 2014



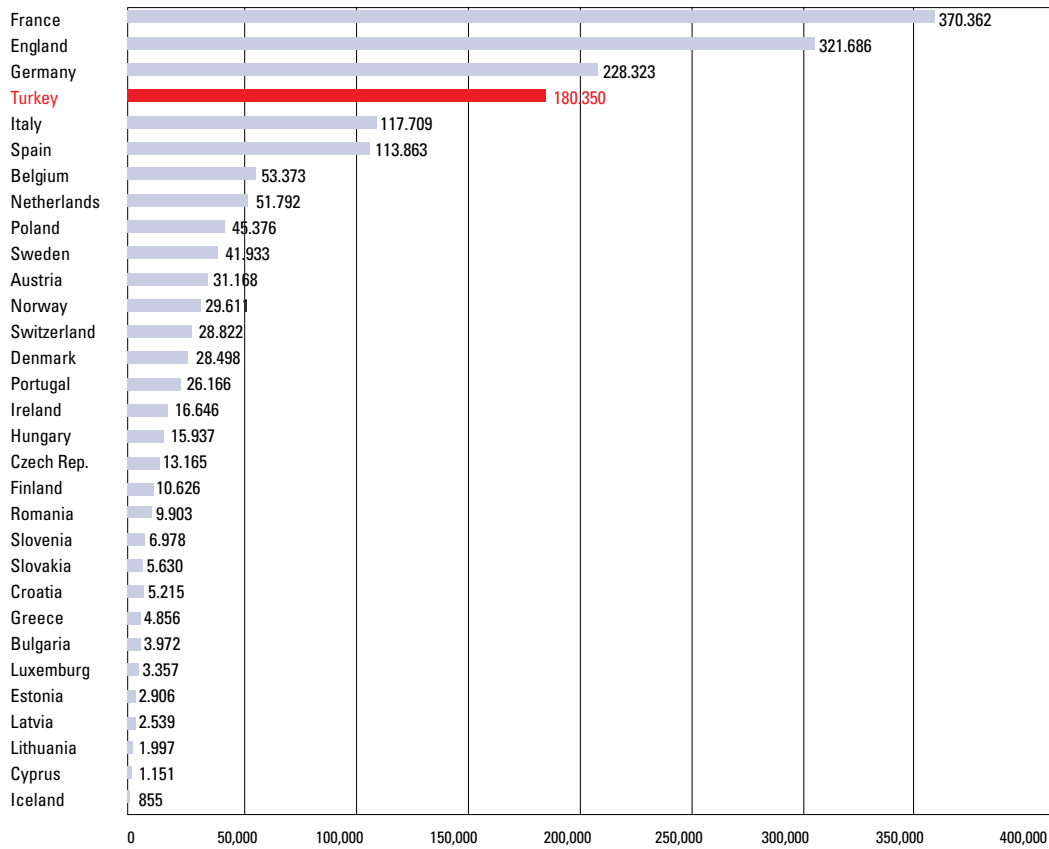
Source: ODD

European Automobile Market January-December 2014



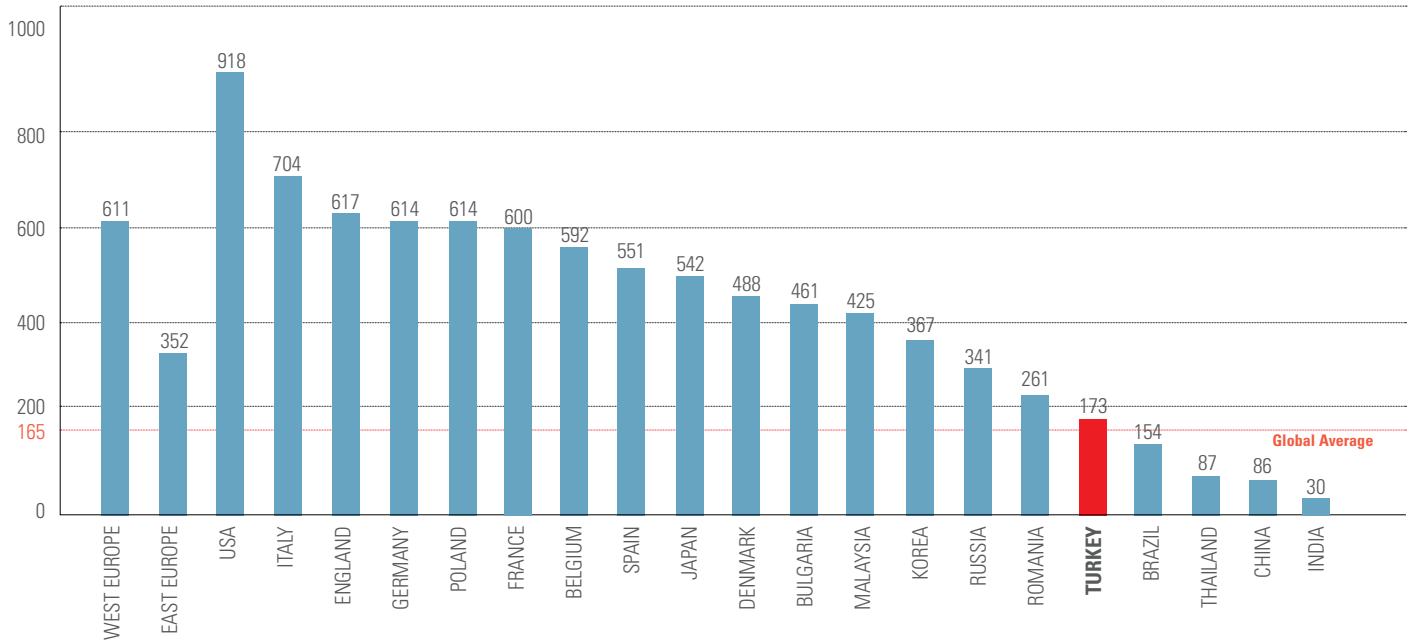
Source: ODD

European Light Commercial Vehicles Market January-December 2014



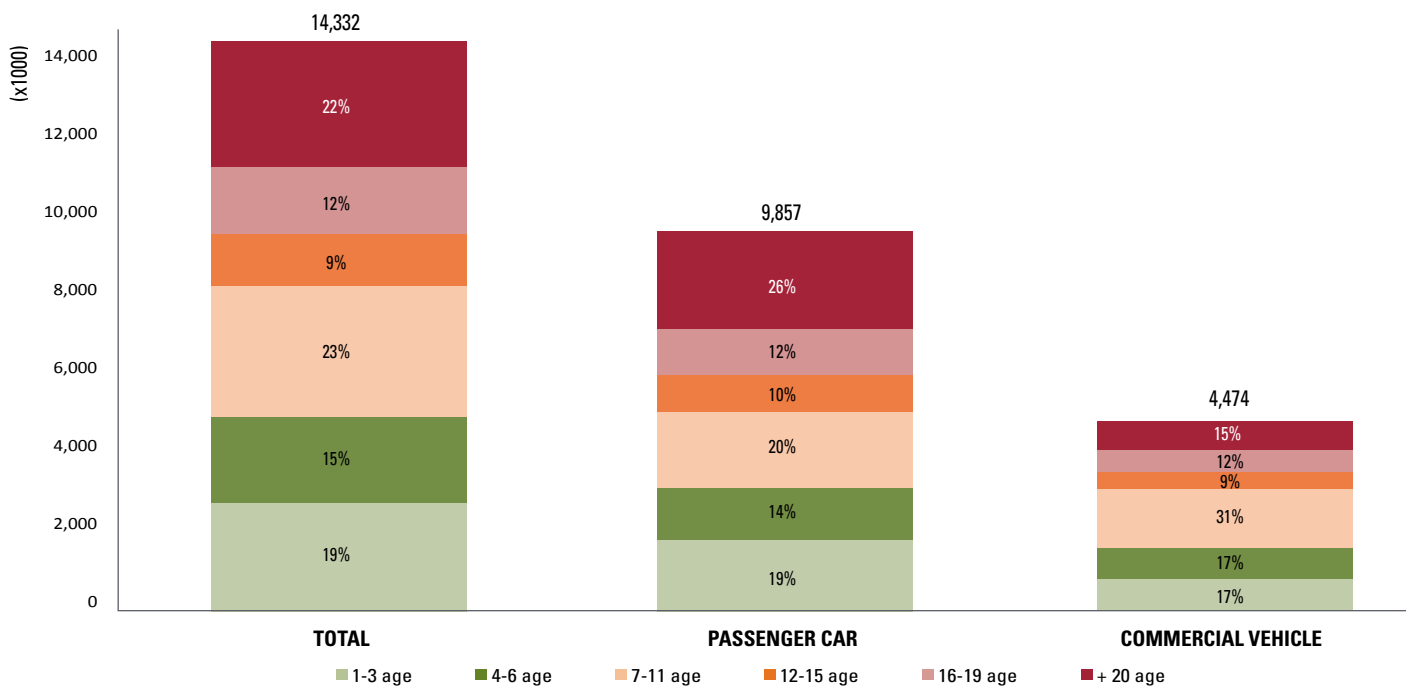
Source: ODD

Automobile Ownership per 1000 People (2014)



Source: LMC Automotive, 2014 4th Quarter Results

Age Distribution in Vehicle Park in Turkey (2014 End of Year)

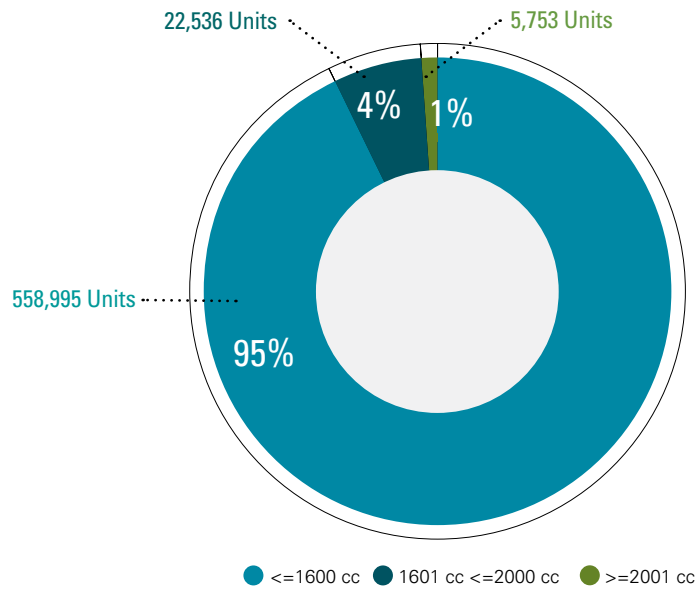


Source: TSI, Motor Land Vehicles, 2014

Automobile and Light Commercial Vehicle Sales in Turkey (Development of Brand Shares)

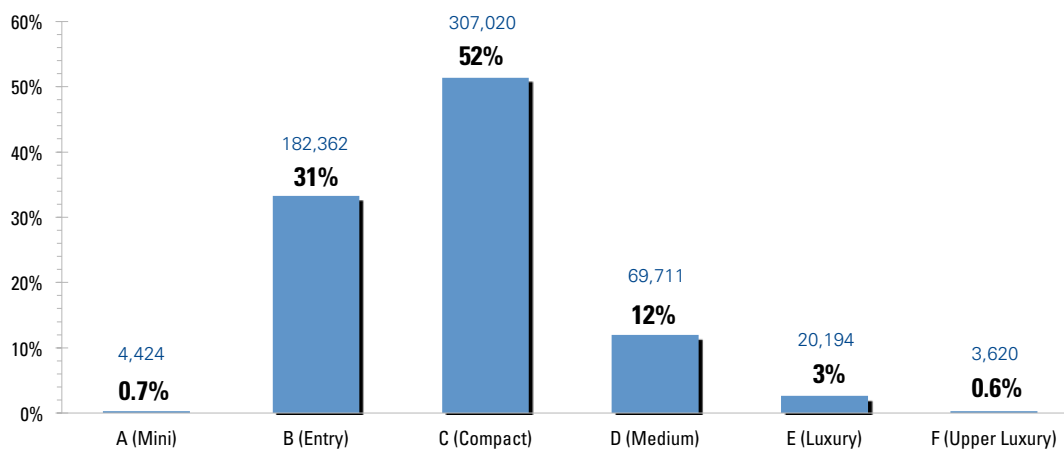
Brand	2013 Cumulative		2014 Cumulative		Change Cumulative
	Ea	%	Ea	%	
VOLKSWAGEN	112,056	13.1	108,647	14.2	-3.04
RENAULT	108,311	12.7	98,743	12.9	-8.83
FIAT	97,593	11.4	89,128	11.6	-8.67
FORD	108,155	12.7	86,833	11.3	-19.71
HYUNDAI	49,602	5.8	46,475	6.1	-6.30
OPEL	55,993	6.6	39,255	5.1	-29.89
TOYOTA	38,443	4.5	35,991	4.7	-6.38
DACIA	36,395	4.3	34,469	4.5	-5.29
MERCEDES-BENZ	30,444	3.6	31,128	4.1	2.25
BMW	20,705	2.4	26,174	3.4	26.41
PEUGEOT	34,034	4.0	24,122	3.1	-29.12
CITROEN	30,003	3.5	22,414	2.9	-25.29
NISSAN	19,295	2.3	19,697	2.6	2.08
AUDI	14,987	1.8	17,809	2.3	18.83
SKODA	12,833	1.5	14,537	1.9	13.28
HONDA	15,415	1.8	13,790	1.8	-10.54
KIA	13,648	1.6	13,074	1.7	-4.21
SEAT	11,065	1.3	12,697	1.7	14.75
VOLVO	5,021	0.6	6,060	0.8	20.69
MITSUBISHI	5,240	0.6	5,538	0.7	5.69
ISUZU	2,838	0.3	4,009	0.5	41.26
IVECO	2,204	0.3	2,524	0.3	14.52
JEEP	973	0.1	1,960	0.3	101.44
SUBARU	1,101	0.1	1,402	0.2	27.34
KARSAN	1,631	0.2	1,381	0.2	-15.33
MAZDA	1,380	0.2	1,300	0.2	-5.80
LAND ROVER	1,323	0.2	1,207	0.2	-8.77
SSANGYONG	1,831	0.2	1,157	0.2	-36.81
MINI	1,557	0.2	1,071	0.1	-31.21
ALFA ROMEO	1,030	0.1	967	0.1	-6.12
SUZUKI	1,623	0.2	958	0.1	-40.97
PROTON	715	0.1	707	0.1	-1.12
PORSCHE	517	0.1	588	0.1	13.73
CHEVROLET	12,506	1.5	572	0.1	-95.43
TATA	642	0.1	416	0.1	-35.20
CHERY	492	0.1	325	0.0	-33.94
LANCIA	782	0.1	210	0.0	-73.15
GEELY	623	0.1	95	0.0	-84.75
MASERATI	40	0.0	83	0.0	107.50
SMART	110	0.0	76	0.0	-30.91
JAGUAR	97	0.0	52	0.0	-46.39
BENTLEY	21	0.0	21	0.0	0.00
FERRARI	23	0.0	11	0.0	-52.17
INFINITI	37	0.0	6	0.0	-83.78
LAMBORGHINI	4	0.0	2	0.0	-50.00
DFM	39	0.0	0	0.0	-100.00
ASTON MARTIN	1	0.0	0	0.0	-100.00
TOTAL	853,378	100	767,681	100	-10.04

2014 End of Year Sales Distribution by Engine Volume



Source: ODD

2014 End of Year Segment Distribution in Automobile Market

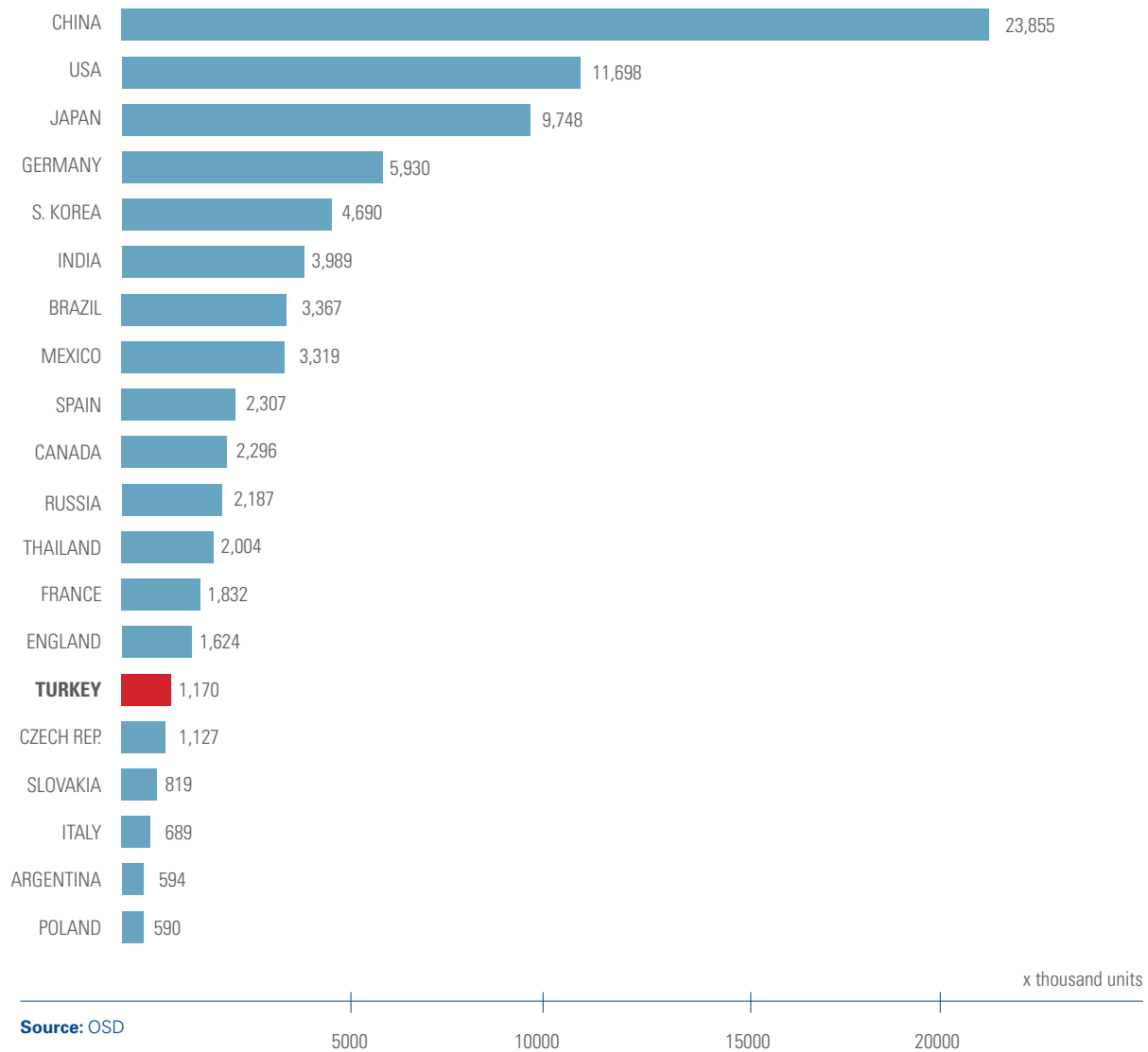


Source: ODD



Industry

Total Manufacturing Ranking across the World in 2014



Manufacturing of Automotive Industry Companies in 2014

COMPANY	AUTOMO- BILE	%	LOR- RY-SMALL	%	LORRY-BIG	%	VAN	%	BUS	%	MINIBUS	%	MIDIBUS	%	TOTAL
A.I.O.S.	0	0	3,073	90	0	0	2,692		151	2	0	0	1,764	33	7,680
FORD OTOSAN	9,790	1	0		7,955	30	193,073		0	0	33,864	96	0	0	244,682
HONDA TÜRKİYE	11,633	2	0	0	0	0	0		0	0	0	0	0	0	11,633
HYUNDAI ASSAN	203,157	28	0	0	0	0	0		0	0	0	0	0	0	203,157
KARSAN	0	0	0		3	0	25		43	1	1,544	4	99	2	1,714
M. BENZ TÜRK	0	0	0		18,519	70	0		3,686	57	0	0	0	0	22,205
MAN TÜRKİYE	0	0	0	0	0	0	0		1,051	16	0	0	0	0	1,051
OTOKAR	0	0	359	10	0	0	423		406	6	12	0	2,066	39	3,266
OYAK RENAULT	318,246	43	0	0	0	0	0		0	0	0	0	0	0	318,246
TEMSA GLOBAL	0	0	0	0	0	0	0		1,105	17	0	0	1,395	26	2,500
TOFAŞ	59,109	8	0	0	0	0	163,698		0	0	0	0	0	0	222,807
TOYOTA	131,504	18	0	0	0	0	0		0	0	0	0	0	0	131,504
TOTAL	733,439	100	3,432	100	26,477	100	359,911		6,442	100	35,420	100	5,324	100	1,170,445

Source: OSD

Exports of Automotive Industry Companies in 2014

COMPANY	AUTOMO- BILE	%	LORRY	%	VAN	%	BUS	%	MINIBUS	%	MIDIBUS	%	TRACTOR	%	TOTAL
A.I.O.S.	0	0	0	0	-	0	-	0	-	0	748	79	0	0	748
FORD OTOSAN	8,111	1	788	62	152,823	57	-	0	26,421	100	-	0	0	0	188,143
HONDA TÜRKİYE	1,560	0	-	0	-	0	-	0	-	0	-	0	-	0	1,560
HYUNDAI ASSAN	179,452	31	-	0	-	0	-	0	-	0	-	0	-	0	179,452
KARSAN	-	0	7	1	6	0	3	0	21	0	-	0	-	0	37
M. BENZ TÜRK	-	0	484	38	-	0	2,954	66	-	0	-	0	-	0	3,438
MAN TÜRKİYE	-	0	-	0	-	0	911	20	-	0	-	0	-	0	911
OTOKAR	-	0	-	0	181	0	191	4	11	0	197	21	-	0	580
OYAK RENAULT	257,992	44	-	0	-	0	-	0	0	0	-	0	-	0	257,992
TEMSA GLOBAL	-	0	0	0	-	0	422	9	0	0	1	0	-	0	423
TOFAŞ	25,020	4	0	0	117,214	43	0	0	0	0	0	0	-	0	142,234
TOYOTA	109,517	19	0	0	0	0	0	0	0	0	0	0	-	0	109,517
TOTAL	581,652	100	1,279	100	270,224	100	4,481	100	26,453	100	946	100	0	100	885,035

Source: OSD

EXPORT OF AUTOMOTIVE MAIN AND SUPPLY INDUSTRY (USD \$)

Product Group	2011	2012	2013	2014	2013-2014 Change (%)
TOTAL SUPPLY INDUSTRY	8,307,826,870	8,215,954,295	9,065,017,539	9,508,032,776	5
TUBE AND OUTER TYRE	1,373,205,546	1,199,572,093.47	1,130,005,892	1,126,947,745	0
SAFETY GLASS	120,041,467	120,641,763.30	135,230,310	143,231,168	6
ENGINE	273,896,369	272,085,582.31	319,294,885	171,893,752	-46
ACCUMULATOR	232,611,079	250,104,807.27	306,451,449	289,150,764	-6
OTHER COMPONENTS AND SECTIONS	6,308,072,409	6,373,550,048.17	7,174,035,002	7,776,809,346	8
TOTAL MAIN INDUSTRY	11,915,473,888	10,785,016,868	12,156,128,091	12,847,238,923	6
AUTOMOBILE	6,541,969,418	6,068,045,119.19	6,855,475,590	7,270,836,596	6
LORRY- VAN	4,034,772,621	3,433,310,998.81	3,918,798,755	4,201,921,030	7
BUS	929,372,870	855,424,303.62	937,790,963	985,983,007	5
TOW TRUCK	116,912,332	71,336,634.88	218,385,732	252,416,256	16
MIDIBUS - MINIBUS	145,199,034	161,806,275.12	147,769,644	97,685,509	-34
TRAILER AND SEMITRAILER	147,247,613	195,093,536.78	77,907,407	38,396,525	-51
TOTAL	20,223,300,758	19,000,971,163	21,221,145,630	22,355,271,699	5

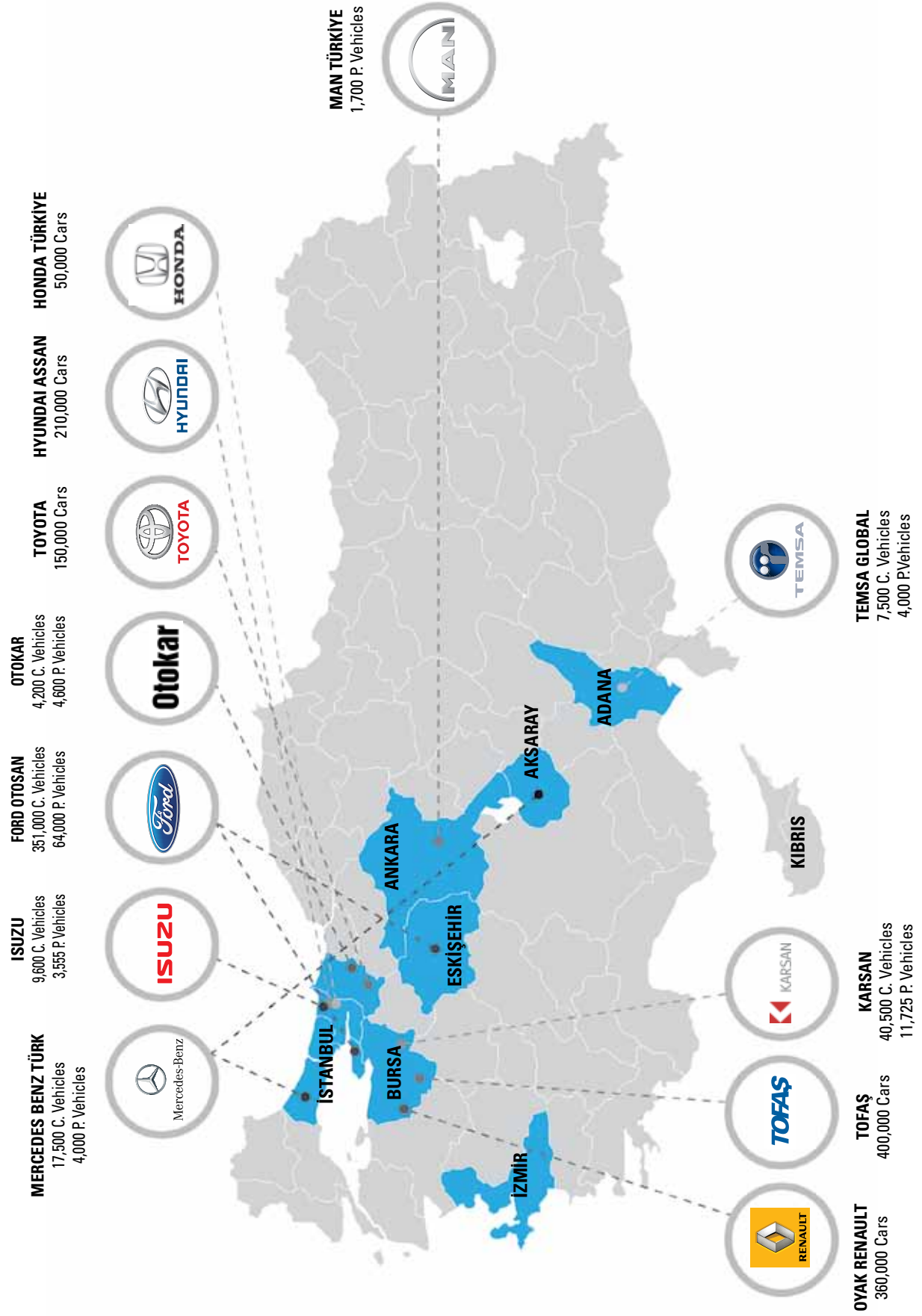
Source: T.R. Ministry of Economy, UIB Automotive Industry Exporters Union

AUTOMOBILE MANUFACTURING AND CAPACITY - 2014

	MANUFACTUR- ING	CAPACITY	CAPACITY UTILIZATION RATE (%)
Light Vehicles*	1,033,264	1,502,916	69
Lorry	29,129	62,196	47
Bus	6,427	11,100	58
Midibus	4,158	6,732	62
Total	1,072,978	1,582,944	68

*Light vehicles include automobiles, vans and minibuses

Source: OSD



Acknowledgements

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Special Thanks To:

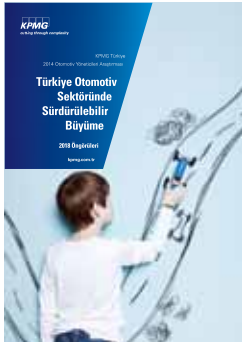
We would like to thank to Prof. Dr. Ercan Tezer, former Secretary General of OSD, who made valuable contributions with his opinions from the start of KPMG Turkey Automotive Executives Survey project and retired this year.

We strictly believe that his valuable contributions to the Turkish automotive sector during his term of 23 years as the Secretary General of OSD. We wish the best for him in his future life.

(Names are in alphabetical order.)

Publications

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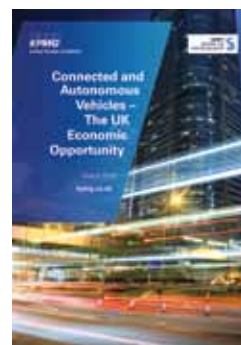
Sustainable Growth in Turkish Automotive Sector



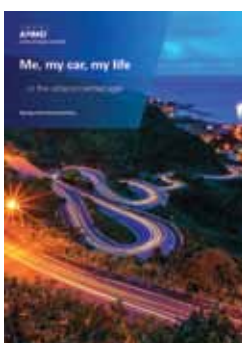
Reaction magazine – Issue 16



KPMG Global Automotive Executive Survey 2015



Connected and Autonomous Vehicles



Me, My Car, My Life



High Growth Markets



Automotive Now - December 2014 Issue



Industrial Manufacturing Megatrends

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