

Automotive Industry in Czech Republic

Desk Research Report 2017



Table of Contents

1 ■ General Evaluation of Automotive Industry in Czech Republic

2 ■ Investment Incentives in Automotive Sector

3 ■ Labor Costs in Automotive Sector

4 ■ Taxes on Automotive Sector

5 ■ Education/Training in Automotive Sector

6 ■ Conclusions

General Evaluation of Automotive Industry in Czech Republic



General Economic Situation in Czech Republic

For most of 2016, economic growth was accompanied by very low inflation. However, this changed in the last two months of the year. In December 2016, the YoY growth in consumer prices unexpectedly accelerated to 2.0% and inflation thus reached the CNB's inflation target. The acceleration of inflation was driven mainly by prices of food and fuel, which reflected the increasing prices of crude

oil. The anti-inflationary effect of the decrease in prices of imported goods has declined significantly.

This acceleration of growth of consumer prices leads to an increase in the forecast for the average inflation rate in 2017 from 1.2% to 2.0%. The inflation rate is expected to reach 1.6% in 2018.

		2012	2013	2014	2015	2016	2017	2018	2016	2017
		Current forecast							Previous forecast	
Gross domestic product	bill. CZK	4.060	4.098	4.314	4.555	4.719	4.885	5.082	4.703	4.864
Gross domestic product	growth in % const.pr.	-0,8	-0,5	2,7	4,5	2,5	2,6	2,4	2,4	2,5
Gross fixed capital formation	growth in % const.pr.	-3,1	-2,5	3,9	9,0	-2,4	3,8	3,0	-3,6	2,8
Net exports	contr. to real GDP growth, pp	1,3	0,1	-0,5	0,1	1,1	0,2	0,3	1,3	0,2
Change in inventories	contr. to real GDP growth, pp	-0,2	-0,7	1,1	0,3	0,4	0,0	0,0	0,4	0,0
GDP deflator	growth in %	1,5	1,4	2,5	1,0	1,1	0,9	1,6	0,8	0,9
Average inflation rate	%	3,3	1,4	0,4	0,3	0,7	2,0	1,6	0,5	1,2
Employment (LFS)	growth in %	0,4	1,0	0,8	1,4	1,8	0,3	0,3	1,6	0,3
Unemployment rate (LFS)	average in %	7,0	7,0	6,1	5,1	4,0	3,9	3,9	4,0	3,9
Exchange rate CZK/EUR		25,1	26,0	27,5	27,3	27,0	26,9	26,3	27,0	26,9
Long-term interest rates	% p.a.	2,8	2,1	1,6	0,6	0,4	0,6	1,1	0,4	0,6
Crude oil Brent	USD/barrel	112	109	99	52	44	57	57	44	51
GDP in Eurozone	growth in % const.pr.	-0,9	-0,3	1,2	2,0	1,6	1,4	1,6	1,4	1,1

Source: Ministry of Finance, July 2016

Labour Market

On the labour market, the economic growth is reflected in the dynamic development of all important indicators. Employment grew by strong 1.8% YoY in the third quarter. The seasonally adjusted unemployment rate decreased further to 3.7% in November 2016 and it has been the lowest in the whole EU since the beginning of 2016. Low unemployment and certain mismatches between the supply of and demand for labour are reflected in fast growth of real wages and unit labour costs.

The unemployment rate is probably already very close to its natural rate, and has therefore very limited room for further decline. For this reason, neither the estimate for the year 2016 (4.0%) nor the forecast for 2017 (3.9%) have changed. The forecast for 2018 is also 3.9%

International Memberships

The Czech Republic was the first country in Central and Eastern Europe to be admitted into the OECD. The country is a member of NATO and is fully integrated into other international organisations such as the WTO, IMF, EBRD and the World Intellectual Property Organisation. The Czech Republic joined the EU on 1 May 2004. The Czech Republic has been a part of the Schengen area since 21 December 2007

The most important sector: Automotive

The automotive is the largest industrial sector in the Czech Republic accounting for 20% of industrial output and export. Last year the industry grew by 4% mainly due to the growth of the automotive. The Czech automotive is strongly export-oriented: 85% of the production is exported mainly to the Western European markets.

Czech Republic is an attractive place for producers of car components since it is close to dozens of car plants in Central Europe and within a tolerable distance from big countries such as France, Italy, Spain and Britain. In the last several years, no new industrial field independent of cars was flourishing in the

country, the paper writes. Even investments in Czech glassmakers, textile factories, producers of electronics and other plants are more or less related to car production.

Vehicle Parc & Average Age

- Cars in the European Union are on average 9.73 years old.
- 7 million vehicles in Czech Republic roads. 5 million of the vehicle parc is cars.
- Car parc is much more older than EU average.

Vehicle category	Parc in units	Average age
Cars	5 060 360	14,73
Commercial Vehicles	707 993	12,92
Motorcycles	1 048 665	32,80
Buses	19 737	14,54
Agricultural tractors	168 241	31,40
TOTAL:	7 004 956	17,65

Source: Autosap

Number of cars per 1,000 people

The stock of passenger cars reached an estimated 479 per 1,000 people in 2016 and is forecast to reach a little over 523 per 1,000 by 2021. This is in line with car ownership rates in other central European countries, but about 15% below the norm in western Europe.

Nevertheless, the car market is now at record highs and at risk of becoming saturated as car stocks increase.

Consumer uncertainty is expected to remain significant and lending conditions will remain tighter than in the boom period leading up to 2008, owing in part to enduring weakness in the euro zone. Despite the appreciation of the koruna against the US dollar and the euro from 2017-18, the local currency will remain weak compared with the 2007-14 period. This means subdued demand for imported cars, which accounted for around 60% of the new-car market in 2016, according to SAP figures.

Passenger car registrations

	2012 ^a	2013 ^a	2014 ^a	2015 ^a	2016 ^a	2017 ^b	2018 ^b	2019 ^b	2020 ^b	2021 ^b
Passenger cars (stock per 1,000 people)	447.0	458.0	470.0	473.1 ^c	478.7 ^c	487.6	495.6	504.6	513.9	523.3
Passenger car registrations ('000)	174.0	164.7	192.3	230.9	259.7	246.5	242.5	256.4	260.9	264.8
Passenger car registration growth (%)	0.2	-5.3	16.7	20.0	12.5	-5.1	-1.6	5.7	1.8	1.5

^a Actual. ^b Economist Intelligence Unit forecasts. ^c Economist Intelligence Unit estimates.

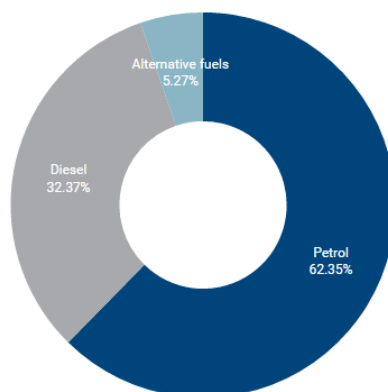
Sources: European Automobile Manufacturers' Association (ACEA); The Economist Intelligence Unit.

Petrol Leads The Way

Diesel engine's popularity was fading in EU with the number of registered cars fitted with diesel units down by 1.4PP vs previous year. Petrol engine car shares is increasing in car sales in 2015 in EU.

Hybrid electric vehicles remained the most important segment of alternative fuel vehicles (growing from 1.7% to 2.1%), while electrically chargeable vehicles took over second place in the segment from cars running on LPG, natural gas or E85.

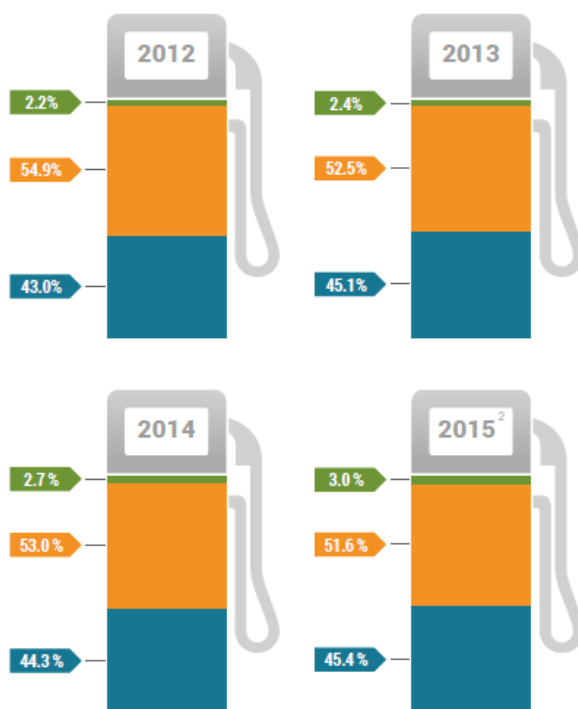
Diesel engines are a popular choice amongst consumers in Western Europe, with over half now opting for this type of powertrain. Overall in 2016 49.5% of all new passenger cars registered in Western Europe ran on diesel and 45.8% on petrol, while hybrid electric vehicles (HEV) accounted for 2.1% of new cars, electrically chargeable vehicles (ECV) for 1.5% and other alternative fuels (such as LPG, natural gas and E85) for 1.2%.



Source: Emisia SA

EU average for Petron engine cars 54,1%. Petrol engine vehicle ratio is much higher than EU average.

● Petrol ● Diesel ● Alternative fuels¹



1. Includes pure electric, liquefied petroleum gas vehicles (LPG), natural gas vehicles, ethanol (E85), biodiesel and plug-in hybrid vehicles

2. Provisional data

Source: EEA

Motor Vehicle Sales in Czech Republic

After a disappointing year in 2013, the Czech passenger-car market has recovered strongly, with new-car registrations rising by 12.5% in 2016, following stronger growth of 16.7% in 2014 and 20% in 2015.

The slowdown in commercial vehicle (CV) registrations has been more marked, with growth down from 26.6% in 2015 to 4.4% in 2016. The deceleration in growth was owing to a decline in sales of heavy CVs and a slower rate of sales growth in light CVs. It is expected to have a 6.9% fall in 2017 before modest growth resumes, such that growth in total CV registrations stands at an annual average of around 4.4% in 2018.

In 2016, almost 260,000 units were registered in the Czech Republic.

There were 259,693 new passenger cars (+12.4%) registered in the Czech Republic in 2016, of which 64,368 cars (+11.9%) were registered by individuals, representing a share of 24.8% (2015: 24.9%) of the total registrations. A total of 68.2% accounted for legal entities (177,277 cars, +14.9%) and 7% for other operators (18,107 cars, -6.1%), as results from the statistics of the Ministry of Transport of the Czech Republic, developed by the Czech analyst firm Medea Research (Medea Group).

Category	New Vehicles		Used Vehicles		Total	
	Pcs	Share	Pcs	Share	Pcs	Share
Cars	259 693	74,23%	164 422	82,92%	424 115	77,37%
Light Commercial Vehicles	19 239	5,50%	9 978	5,03%	29 217	5,33%
Buses	1 013	0,29%	412	0,21%	1 425	0,26%
Trucks	11 063	3,16%	3 346	1,69%	14 409	2,63%
Motorcycles	17 867	5,11%	14 462	7,29%	32 329	5,90%
Trailers and Semitrailers	36 192	10,34%	4 267	2,15%	40 459	7,38%
Agricultural Tractors	2 619	0,75%	816	0,41%	3 435	0,63%
Others	2 158	0,62%	561	0,28%	2 719	0,50%
Uncategorized	15	0,00%	19	0,01%	34	0,01%
Total Vehicles	349 859	100,00%	198 283	100,00%	548 142	100,00%

Source: Autosap

Registrations of used cars totalled 164,422 units in 2015, according to SAP. This compares with total sales of 259,693 units for new cars.

The Czech market is very interesting for sales of new cars. New car sales in the Czech Republic post a third straight record year in 2016, even reaching an all-time high volume.

Over the year, the best-selling cars were the mid-sized Octavia, followed by the smaller Fabia and the mid-sized Rapid (all Skoda).

Sales by Segment can be seen in below table:

	2016	% in Total	2015	% in Total	Change
A-seg	6.970	2,7%	7.569	3,3%	-7,9%
B-seg	64.298	24,8%	60.416	26,1%	6,4%
C-seg	67.481	26,0%	60.510	26,2%	11,5%
D-seg	24.241	9,3%	17.719	7,7%	36,8%
MPV-B	9.547	3,7%	11.535	5,0%	-17,2%
MPV-C	13.009	5,0%	11.029	4,8%	18,0%
MPV-D	1.578	0,6%	1.082	0,5%	45,8%
MPV - CDV	4.940	1,9%	4.127	1,8%	19,7%
E-seg	3.407	1,3%	2.802	1,2%	21,6%
F-seg	743	0,3%	665	0,3%	11,7%
SUV-B	22.091	8,5%	18.233	7,9%	21,2%
SUV-C	17.826	6,9%	15.232	6,6%	17,0%
SUV-D	7.083	2,7%	6.047	2,6%	17,1%
SUV-E	6.265	2,4%	5.332	2,3%	17,5%
Sport	2.235	0,9%	1.442	0,6%	55,0%
MPV VAN	4.881	1,9%	4.965	2,1%	-1,7%
Unclassified	3.157	1,2%	2.397	1,0%	31,7%
Total	259.693	100,0%	231.102	100,0%	12,4%

Source: Autosap

Disposable income per head is expected to reach \$12,665 in 2021, registering an annual average increase of 6.5% during 2017-21. It is expected to have growing demand for larger cars, such as family cars and sports utility vehicles (SUVs) in coming years.

Motor Vehicle Sales in Czech Republic

Homegrown carmaker Skoda maintains its stranglehold on the Czech market but gains slightly less ground than the market (+11.3%) resulting in a decreasing share at 31.7%.

It distances Volkswagen at 10.3% (+11.4%), Hyundai at 8.1% (+6.6%) and Ford at 5.9% (-1.1%). Dacia (+17.6%) and Renault (+26.1%) both post stunning gains to rank 5th and 6th respectively.

But the most impressive manufacturer atop the ranking is Mercedes surging 53.6% to break into the annual Top 10 for the very first time at #10.

Notice also Audi up 26.7%, Toyota up 31.2%, Suzuki up 38.9%, Honda up 25.8%, Land Rover up 13.1%.

A growing middle class with higher disposable incomes will continue to drive demand for luxury brands. Mercedes-Benz (Germany) is the most popular brand in the luxury range at present, with a market share of 2.9%, according to the AutoSap, followed by German brands BMW (2.5%) and Audi (2.45%).

In 2016 registration by brand was realized as below;

	2016	% in Total	2015	% in Total	Change
ŠKODA	82.221	31,7%	73.886	32,0%	11,3%
VOLKSWAGEN	26.699	10,3%	23.960	10,4%	11,4%
HYUNDAI	20.985	8,1%	19.678	8,5%	6,6%
FORD	15.277	5,9%	15.451	6,7%	-1,1%
DACIA	12.356	4,8%	10.507	4,5%	17,6%
RENAULT	10.202	3,9%	8.088	3,5%	26,1%
KIA	8.932	3,4%	7.591	3,3%	17,7%
OPEL	8.465	3,3%	8.100	3,5%	4,5%
PEUGEOT	8.111	3,1%	7.154	3,1%	13,4%
MERCEDES-BENZ	7.542	2,9%	4.910	2,1%	53,6%
SEAT	7.399	2,8%	6.746	2,9%	9,7%
BMW	6.450	2,5%	5.879	2,5%	9,7%
AUDI	6.356	2,4%	5.015	2,2%	26,7%
TOYOTA	5.713	2,2%	4.356	1,9%	31,2%
CITROËN	5.284	2,0%	4.874	2,1%	8,4%
NISSAN	4.986	1,9%	5.001	2,2%	-0,3%
FIAT	3.420	1,3%	3.426	1,5%	-0,2%
SUZUKI	3.356	1,3%	2.416	1,0%	38,9%
MAZDA	3.105	1,2%	2.634	1,1%	17,9%
MITSUBISHI	2.615	1,0%	2.425	1,0%	7,8%
HONDA	2.258	0,9%	1.795	0,8%	25,8%
VOLVO	1.927	0,7%	1.723	0,7%	11,8%
JEEP	1.121	0,4%	1.036	0,4%	8,2%
SUBARU	991	0,4%	1.020	0,4%	-2,8%
LANDROVER	975	0,4%	862	0,4%	13,1%
Others	3.006	1,2%	2.569	1,1%	17,0%
Total	259.693	100,0%	231.102	100,0%	12,4%

Source: Autosap

In top 4 selling models, all models belong to Skoda. Detailed sales of the top 25 models in car segment can be seen from the below table:

In the models ranking, the Skoda Octavia signs an 8th consecutive year in pole position thanks to deliveries outpacing the market at +16.7% to 28.494 units, widening the gap with the Skoda Fabia (+6.7%) and Rapid (-3%).

The Skoda Superb, boosted up 84.3% by its new generation, makes the Top 4 best-sellers 100% Skoda for the first time in history. This was the Superb's best annual ranking at home

since 2012, with its personal best being #3 in 2010 and 2011. With the arrival of the its first big sport utility vehicle, Kodiaq (#12 in December), Skoda may be able to monopolies the annual Top 5 in 2017.

The Skoda Superb, boosted up 84.3% by its new generation, makes the Top 4 best-sellers 100% Skoda for the first time in history. This was the Superb's

The locally-produced Hyundai i30 is the most popular foreign nameplate in the Czech Republic, up 12.7% when the VW Golf is down 4.2%.

	2016	% in Total	2015	% in Total	Change
ŠKODA OCTAVIA	28.494	11,0%	24.421	10,6%	16,7%
ŠKODA FABIA	21.893	8,4%	20.526	8,9%	6,7%
ŠKODA RAPID	11.356	4,4%	11.713	5,1%	-3,0%
ŠKODA SUPERB	11.108	4,3%	6.027	2,6%	84,3%
HYUNDAI I30	7.895	3,0%	7.008	3,0%	12,7%
VOLKSWAGEN GOLF	6.467	2,5%	6.749	2,9%	-4,2%
ŠKODA YETI	5.518	2,1%	5.851	2,5%	-5,7%
FORD FIESTA	5.231	2,0%	5.498	2,4%	-4,9%
VOLKSWAGEN PASSAT	4.560	1,8%	3.719	1,6%	22,6%
DACIA DUSTER	4.519	1,7%	3.750	1,6%	20,5%
HYUNDAI IX20	4.383	1,7%	4.751	2,1%	-7,7%
SEAT LEON	3.745	1,4%	3.557	1,5%	5,3%
VOLKSWAGEN POLO	3.677	1,4%	3.125	1,4%	17,7%
KIA CEE'D	3.518	1,4%	3.310	1,4%	6,3%
HYUNDAI TUCSON	3.386	1,3%	939	0,4%	260,6%
FORD FOCUS	3.355	1,3%	3.798	1,6%	-11,7%
ŠKODA CITIGO	3.180	1,2%	3.561	1,5%	-10,7%
OPEL ASTRA	2.984	1,1%	2.318	1,0%	28,7%
NISSAN QASHQAI	2.829	1,1%	2.629	1,1%	7,6%
RENAULT CLIO	2.775	1,1%	2.143	0,9%	29,5%
SEAT IBIZA	2.646	1,0%	2.298	1,0%	15,1%
DACIA SANDERO	2.593	1,0%	2.261	1,0%	14,7%
KIA SPORTAGE	2.586	1,0%	1.677	0,7%	54,2%
HYUNDAI I20	2.398	0,9%	2.171	0,9%	10,5%
RENAULT MÉGANE	2.296	0,9%	1.710	0,7%	34,3%
Others	106.360	40,9%	95.592	41,4%	11,3%
Total	259.752	100,0%	231.102	100,0%	12,4%

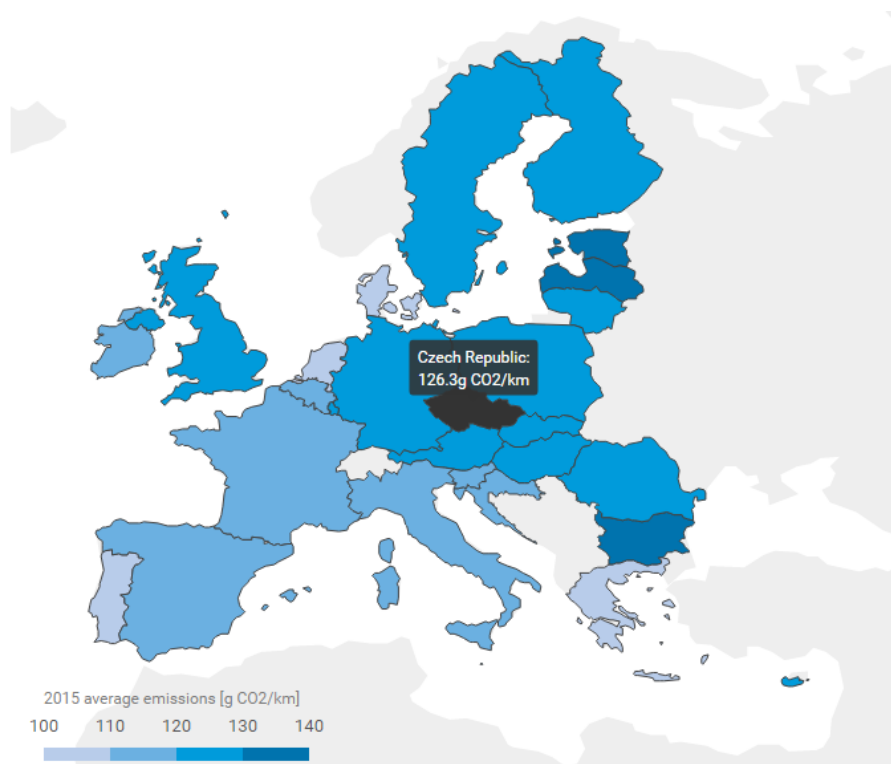
Source: Autosap

Emissions

In 2015, average new car emissions in the European Union were 119.6g CO₂/km.

Czech Republic's car fleet will be affected by the EU's evolving emissions standards for motor vehicles. According to ACEA, in 2015 the average emissions per new car in Czech market stood at 126.3 g/km of carbon dioxide (CO₂) and still high by EU standards.

Czech Republic, according to the SDA, reflecting its focus on small-car manufacture and eco-friendly vehicles. It is therefore helping to offset higher emissions for Volkswagen, Audi, Porsche and Bentley in the Volkswagen Group. Nevertheless, Skoda will need to invest to meet tighter emissions regulations, including the advent of real driving emissions tests, to be phased in across the EU in 2017-21.



Created with LocalFocus

Source: EEA

As a member of the EU, the Czech Republic is expected to meet EU goals on carbon dioxide (CO₂) output. The predominance of small cars, both in the domestic car stock and in the vehicles produced in the Czech Republic, means that it is likely to suffer much less than countries such as Germany from measures designed to restrict CO₂ emissions.

The European Commission's Competitive Automotive Regulatory System for the 21st Century (CARS 21) process called for fleet-average CO₂ emissions of 130 g/km from 2015, following a three-year phase-in period. In 2015 Skoda already reported average emissions of just 115 g/km on cars sold in the

In early 2014 the EU approved further regulations that will limit emissions to 95 g/km by 2021. The deadline was delayed by one year following representations from Germany, whose carmakers, notably Daimler and BMW, face difficulty meeting emissions targets because of their focus on powerful luxury cars. The rules also offer some flexibility via a system of super-credits that allow carmakers to gain extra credits for low-emission vehicles, such as electric cars. Additional proposals, announced in 2012, to set a limit of 68-78 g/km from 2025 are currently on hold.

Sales by Segment can be seen in below table:

	2016	% in Total	2015	% in Total	Change
Pick-up	1.785	9,3%	1.290	7,7%	38,4%
CDV	2.044	10,6%	2.202	13,1%	-7,2%
do 3 t.	3.731	19,4%	3.333	19,9%	11,9%
do 3,5 t.	10.975	57,0%	9.406	56,1%	16,7%
Others	704	3,7%	524	3,1%	34,4%
Total	19.239	100,0%	16.755	100,0%	14,8%

Source: Autosap

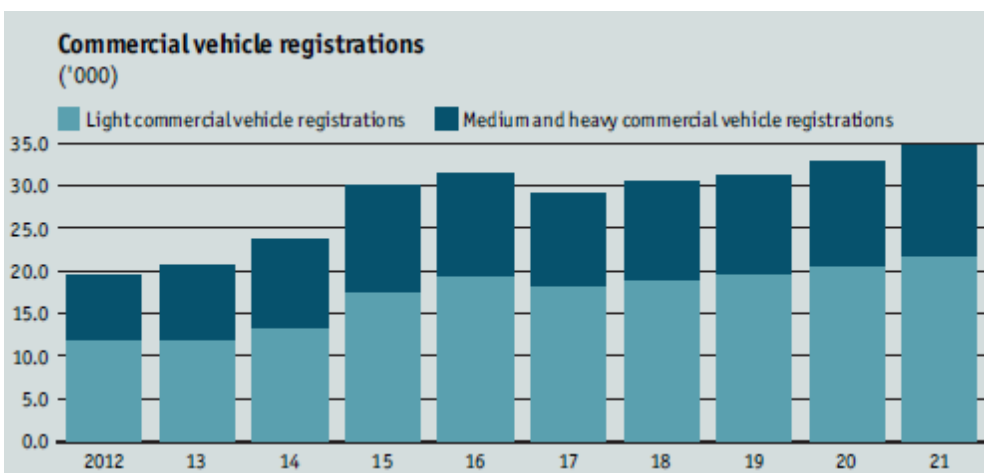
In 2016, top brand in LCV segment was Fiat with 2906 units and it was followed by Ford with 2884 units. Leader Fiat (Italy), with a 15.2% market share, is followed by Ford (15.1%), and then Peugeot (13.9%) and Volkswagen (10.1%). Fiat has seen its market leadership ease and Ford has gained ground.

Foreign manufacturers dominate the small local market for registrations of new medium and heavy CVs. Mercedes-Benz (Germany) leads the truck market, with a share of 22.1% in 2016. It is followed by DAF Trucks (Netherlands), with 15.7%, Volvo Trucks (Sweden), with a share of 15.6%, and MAN (Germany), with 15.3%.

After three years of strong growth, registrations for heavy and medium CVs (trucks) and buses fell in 2016 and are

expected to fall by another 7.4% in 2017 owing to high base effects. Growth will resume from 2018 and average 1.7% a year in 2017-21.

While the market conditions are expected to remain favourable for the time being, some downside risks could materialise in the course of 2017: a slowdown of eurozone growth, the negative consequences of Brexit for automotive exports to the UK, and an end of the Czech koruna cap imposed by the Central Bank (which currently prevents appreciation of the koruna). At the same time, increased pressure on prices from original equipment manufacturers like the VW Group (Škoda is part of the VW Group and many Czech suppliers deliver to other VW OEMs) could have a negative effect on Czech automotive businesses.



Source: The Economist Intelligence Unit.

Demand for alternative drives in Czech Rep shifting from gas to electricity

The market for alternative fuel vehicles (AFVs) in the Czech Republic is small. According to ACEA, sales of AFVs totalled 5,090 units in 2016, 4.6% lower on the previous year but about 50% higher than in 2014. In 2016, there were 1,541 hybrid electric drive vehicles (+50.5%) and 271 pure electric vehicles (-19.6%), including 62 Tesla cars (+8.8%) weighing up to 3,5 tons registered in the Czech market. Overall, demand for battery vehicles increased by 33.1% to 1,812 units.

Market leaders with electric vehicles in 2016 were BMW (87 vehicles, -7.4%), Nissan (72 vehicles, +5.9%), Tesla (62 vehicles, +8.8%) and Volkswagen (37 vehicles, - 59.3%), followed by Kia (6 vehicles, -4 units), Peugeot (4 vehicles, +2 units), Mercedes-Benz (2 vehicles, -5 units) and Hyundai (1 vehicle, +1 unit).

In 2016, there were 3,231 vehicles powered by CNG (-0.3%) and 612 vehicles powered by LPG (-55.7%) weighing up to 3.5 tonnes registered in the Czech market.

CNG market leader in 2016 was Volkswagen Group: Skoda (2,211 vehicles, +15.8%), VW (480 vehicles, -1.8%), Seat (83 vehicles, -15.3%), Audi (41 vehicles, -66.4%). They were followed by Fiat (313 vehicles, 32%), Mercedes-Benz (52 vehicles, -23.5%), Iveco (31 vehicles, -43.6%) and Opel (20 vehicles, -48.7%).

In terms of support infrastructure, CEZ, the state-controlled power utility company, is investing in a power-charging network for EVs. The company announced plans to build 42 fast-charging stations by 2018, with investments worth €2.3m. As at the end of February 2016, CEZ had around 70 charging stations in the country, of which 25 were fast-charging ones. Some shopping centres, such as

a leading Swedish retailer, IKEA, have opened EV charging stations. Tesla opened its first charging station in the country in July last year.

Nevertheless demand for AFVs is expected to remain subdued unless fuel costs rise significantly or purchase costs fall sharply. This will build on rising demand for electric or eco-smart cars (those running on compressed natural gas), but the uptake of these vehicles is expected to remain subdued in the short term.

Motor Vehicle Production in Czech Republic

Czech Republic is the fifth-biggest vehicle-producing country in the EU. With 1.34 million Cars + LCVs vehicles produced in 2016, it is also among the fifteen largest global passenger-car producers by volume and the largest one in Central and Eastern Europe.

2016 PRODUCTION STATISTICS

Country	Cars	Commercial vehicles	Total	% change
China	24,420,744	3,698,050	28,118,794	14.5%
USA	3,934,357	8,263,780	12,198,137	0.8%
Japan	7,873,886	1,330,704	9,204,590	-0.8%
Germany	5,746,808	315,754	6,062,562	0.5%
India	3,677,605	811,360	4,488,965	7.9%
South Korea	3,859,991	368,518	4,228,509	-7.2%
Mexico	1,993,168	1,604,294	3,597,462	0.9%
Spain	2,354,117	531,805	2,885,922	5.6%
Canada	802,057	1,568,214	2,370,271	3.8%
Brazil	1,778,464	377,892	2,156,356	-11.2%
France	1,626,000	456,000	2,082,000	5.6%
Thailand	805,033	1,139,384	1,944,417	1.8%
UK	1,722,698	93,924	1,816,622	8.0%
Turkey	950,888	535,039	1,485,927	9.4%
Czech Rep.	1,344,182	5,714	1,349,896	8.3%
Russia	1,124,774	179,215	1,303,989	-5.4%
Indonesia	968,101	209,288	1,177,389	7.2%
Iran	1,074,000	90,710	1,164,710	18.6%
Italy	713,182	390,334	1,103,516	8.8%

Detailed data for production & sales by Producer:

CZECH REPUBLIC	2016			2015		
MAKE (Producer)	PRODUCTION	SALES LOCAL	EXPORTS	PRODUCTION	SALES LOCAL	EXPORTS
Cars + LCVs						
ŠKODA (ŠKODA Auto a.s.)	765.171	88.016	1.039.684	679.907	85.005	970.496
TOYOTA, PEUGEOT, CITRÖEN (TPCA Czech s.r.o.)	220.611	450	220.161	219.054	516	218.538
HYUNDAI (HMMC-Hyundai Motor Manuf. Czech s.r.o.)	358.400	15.697	342.703	342.200	14.738	327.462
ZEBRA (ZEBRA Group s.r.o.)	0	0	0	5	5	0
KAIPAN (Kaipan s.r.o.)	0	0	0	0	0	0
TOTAL	1.344.182	104.163	1.602.548	1.241.166	100.264	1.516.496
CVs						
AVIA (Avia Ashok Leyland Motors, s.r.o.)	0	0	0	0	0	0
TATRA (Tatra Trucks a.s.)	1.326	387	925	850	303	555
TOTAL	1.326	387	925	850	303	555
Buses						
IVECO BUS (Iveco Czech Republic, a.s.)	3.885	269	3.991	3.728	304	3.901
SOR (SOR Libchavy spol. s r.o.)	454	215	239	742	441	301
..... *4/ (KH motor CENTRUM Opava)	49	49	0	47	47	0
TOTAL	4.388	533	4.230	4.517	792	4.202
Motorcycles under 50 ccm						
JAWA (JAWA Moto spol. s r.o.)	9	6	3	16	12	4
Motorcycles over 50 ccm						
JAWA (JAWA Moto spol. s r.o.)	1.219	73	1.146	1.711	75	1.636
Motorcycles Total	1.228	79	1.149	1.727	87	1.640

Source: AutoSAP

Motor Vehicles Production & Sales of Producers

CZECH REPUBLIC	2016			Increase (- decrease) 2016 / 2015		
	Production	Local Sales	Exports	Production	Local Sales	Exports
MOTOR VEHICLES	1.351.124	105.162	1.608.852	8,24%	3,66%	5,64%
	TOTAL			Change in categories		
Cars + LCVs	1.344.182	104.163	1.602.548	103.016	3.899	86.052
share	99,49%	99,05%	99,61%	8,30%	3,89%	5,67%
CVs	1.326	387	925	476	84	370
share	0,10%	0,37%	0,06%	56,00%	27,72%	66,67%
Buses	4.388	533	4.230	-129	-259	28
share	0,32%	0,51%	0,26%	-2,86%	-32,70%	0,67%
Motorcycles	1.228	79	1.149	-499	-8	-491
share	0,09%	0,08%	0,07%	-28,89%	-9,20%	-29,94%
Total	100,00%	100,00%	100,00%	102.864	3.716	85.959

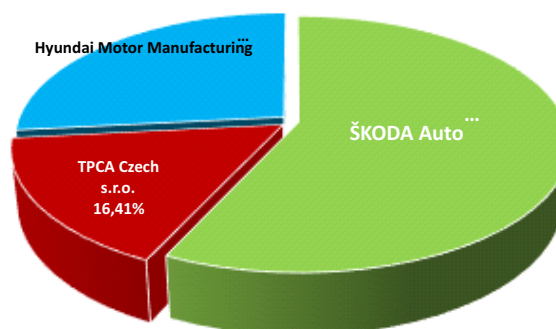
Source: AutoSAP

Motor vehicle production in the Czech Republic grew by 8.3%

All the carmakers are growing

The largest carmaker is Škoda Auto that produced 765,171 passenger cars (55.6%). The second biggest car producer is Hyundai Motor (358,400 units; 26%) followed by Toyota Peugeot Citroën Automobile (220,611 units; 16%). All these carmakers boost their production: Škoda Auto 12.5%, Hyundai 5% and TPCA 1%. Moreover, the only Czech truck producer - TATRA - grew by 56% to 1,326 units.

Production - Manufacturers share 2016
Cars + LCVs



Source: AutoSAP

Passenger Car Manufacturers

Škoda Auto:

120 Years of Automotive History

Škoda Auto operates 13 plants in six countries in Europe and Asia and exports passenger cars to more than 100 markets around the world.

In 1895, Václav Klement and Václav Laurin founded their business in Mladá Boleslav. This makes ŠKODA one of the oldest automobile brands in the world. In 1991 ŠKODA AUTO became Volkswagen Group's fourth brand after VW, Audi and Seat. Management, marketing, product development and production processes underwent fundamental modernisation.

In 2001 the brand's first plant outside Europe was built in Aurangabad, India. Production of ŠKODA models was launched at the Volkswagen Group's plant in Shanghai, China in 2005. ŠKODA AUTO is continuing to successfully implement its growth strategy. In 2014 the Czech carmaker achieved the best sales year in its history, delivering 1,037,200 vehicles. In 2014, the comprehensive model campaign, which had been initiated four years previously, was once again the top priority for the Czech manufacturer. In March, the pioneering "ŠKODA VisionC" concept was the first highlight of last year's ŠKODA model premieres. The Octavia G-TEC, Octavia Scout, three special Monte Carlo editions for the Citigo and Yeti and Rapid Spaceback were introduced over the course of 2014. In November the new ŠKODA Fabia provided the grand finale of last year's model roll-outs.

The Octavia is the heart of the brand. The third generation Octavia is proving to be a massive hit, with worldwide. The ŠKODA Rapid performed extremely well and became the second best-selling model.

As part of its model and design campaign, the company is further strengthening its marketing activities on both the European and international markets. To support the plan, ŠKODA is continuously investing in the expansion of its Czech production plants in Mladá Boleslav and Kvasiny. In addition to

strengthening the company's solid position in Western Europe (+11.8% in 2014), the Czechs are also focusing on the growth market of China.

The company produced 765,171 cars locally in 2016, up by 12.5% from the previous year. Skoda plans to boost production to 1.5m units, thereby doubling its sales, by 2018, and to expand its range of SUVs and MPVs. It may also start producing vans. Skoda has an ongoing investment totalling Kc4bn (US\$160m) in its smallest plant in the Czech Republic, located in Vrchlabi in the north, which produces gearboxes for Skoda and other brands of the Volkswagen Group.

Skoda aims to increase the share of electric vehicles (EVs) and hybrids to 25% of total production by 2025, according to plans announced in February 2017.

Hyundai Motor Manufacturing Czech

The Most Modern Carmaker in Europe

Another success story began with the announcement of a EUR 1 billion investment in Nošovice, Moravian-Silesian Region, in 2006. At that time, the Korean car manufacturer Hyundai Motor Company decided to build here its very first production facility in Europe, which according to expert opinion is currently the most modern car factory in Europe. By building this factory, Hyundai Motor Company expanded its global production network, which includes other manufacturing facilities in Korea, China, India, the United States, Russia, Brazil and Turkey.

Hyundai Motor Manufacturing Czech (HMMC) produces three passenger-car models - ix20, ix35 and i30. The manufacturing facilities consist of a stamping shop, a welding shop, a paint shop, a final assembly shop and two transmission shops. The transmission shops are of particular importance as they produce transmissions not only for HMMC but also for its sister company Kia Motors Slovakia in Žilina. Conversely, Kia's Slovak plant provides HMMC

with motors, thus creating a unique complex of mutually cooperating units.

The importance of Hyundai's huge investment, one of the biggest in the Czech Republic to date, was also based on the fact that Hyundai came to the Moravian-Silesian Region in the nick of time, so to speak, as the region suffered from high unemployment resulting from painful restructuring processes in its traditional industries. The Czech government and the Moravian-Silesian Region followed up this investment by spending billions of Czech crowns on infrastructure, particularly roads and railways. Hyundai has been making more expensive and better equipped cars in its plant in Nosovice, north Moravia.

In 2008, manufacturing capacity was set at 200,000 cars per year, a figure that was reached after only two years of production. Upon initiation of three-shift operation in autumn 2011, the maximum capacity of Hyundai Motor Manufacturing Czech has risen to 300,000 cars per year. Because the production plans were exceeded in 2013 and 2014, HMMC produced 358,400 cars in 2016.

Toyota Peugeot Citroën Automobile

Green Factory in the Centre of Europe

Toyota and PSA Peugeot Citroën launched production of cars at the TPCA (Toyota Peugeot Citroën Automobile) plant in the Czech Republic in early 2005. Four years after the carmakers unveiled their joint-venture project and three years after they chose a site near the Czech town of Kolín, the first cars rolled off the production line - one each of the new Toyota, Peugeot and Citroën models. TPCA have produced totally more than 2.5 million of cars till nowadays. The facility was designed primarily by Toyota, the partner that took most of the responsibility for manufacturing. PSA Peugeot Citroën is responsible for the supplier network of TPCA.

TPCA has been constructed as one of the greenest factory in Europe. From the beginning, TPCA pays attention for the investments into the most environment-friendly production technologies and promotes environment-friendly thinking of

employees. Its results of energy and water efficiency highly above the industry average confirm the success of this effort as well as the results of waste management system with low production of waste and high ratio of recycling. At around EUR 750 million, the state-of-the-art plant located about 60 kilometres east of Prague is one of the biggest foreign investments in Central Europe to date.

The capacity of the plant is 300,000 vehicles produced in one year. Currently TPCA produces new generation of models Toyota Aygo, Peugeot 108 and Citroën C1, small city cars with low fuel consumption and emissions. In 2016 TPCA saw production levels rise by 0.7% year on year, to 220,606 units.

Roughly 80 percent of supplies come from the Czech Republic. More than 99% of the cars are exported to European markets, mainly France, Italy, the United Kingdom, the Netherlands and Germany. TPCA has roughly 3,000 employees.

Buses and Commercial Vehicles Manufacturers

SOR Libchavy

SOR Libchavy, the leading Czech bus and coach producer, was established in 1991 and its first bus was on the road only two years later. The company currently produces 550 buses of its own design in all categories annually. Compared with the competition, the main benefit of SOR's buses is their low weight, which on average is up to two tonnes lower than comparable buses from other manufacturers. Due to this lower curb weight, fuel consumption is 14.5% less than that of other types of buses in the market.

SOR Libchavy produces buses in city, intercity, tourist and low-floor city versions. These buses have been equipped with IVECO Euro VI engines as standard since 2014.

Another innovation in the pipeline is the production of two more fully low-floor city buses. For the intercity bus segment, SOR offers three mid-floor models as well as a low-entry version. The company also produces electric buses, trolleybuses and CNG buses. SOR obtained ISO 9001 certification in 2001. Exports account for around 50% of total output, and increased production is aimed at foreign markets like Slovakia, the Baltic states, Serbia, Moldova, Russia, Ukraine, Denmark, Belgium, Holland, Germany, Croatia and Bulgaria.

SOR Libchavy

Iveco Czech Republic, with its headquarters in Vysoké Mýto, is the largest factory of the Iveco Group, the second largest bus manufacturer in Europe. The company focuses mainly on production of intercity buses, though starting in 2011 the production programme newly includes Citelis 10.5 m and 12 m city buses with diesel and CNG engines, as well as bodies for trolleybus versions.

Iveco Czech Republic also offers the widest range of products of the entire Iveco Group, including minibuses, tourist coaches and city, suburban, long-distance and intercity buses. Fundamental diversification over the last three years has resulted not only in new designs, improved passenger comfort and outstanding consideration for the environment, but also great value for money, thanks to the quality, life service and low operating costs of the buses. In addition, a focus on environmental friendliness has brought about a significant expansion of the range of buses on offer that use alternative fuels.

In the area of city transport, Iveco Bus is maintaining its current position as the European leader in terms of environmental protection, reduced emissions and expansion of the range of buses powered by alternative fuels. The line of very popular low-floor Citelis city buses has been expanded with the addition of the low-entry city /suburban /long-distance Crossway LE, which has become a sought-after model and is offered in a three-door version. The traditionally very strong position of Iveco Bus in the segment of long-distance coaches continues to be supported by the Arway and Crossway models.

ŠKODA ELECTRIC

Is a leading global manufacturer of electric drive units and traction motors for trolleybuses, tramways, locomotives, underground trains, etc. and is continuing the long tradition of production at the Škoda Works in Plzeň, which began at the company's Electrical Engineering Works in 1901.

ŠKODA ELECTRIC offers its customers modern 12m, 15m and 18m low-floor trolleybuses. Every Škoda trolleybus features all necessary electrical equipment housed in a container on the vehicle's roof. For travel outside of trolley lines, the buses can be equipped with an auxiliary diesel generator that complies with the EURO VI standard or with a battery unit including a microprocessor-controlled voltage inverter

with the possibility of recuperation. Škoda is a global leader in supplying trolleybuses to the whole world. In 2013 Škoda concluded a record-setting order for 125 modern trolleybuses for Riga, Latvia, and also carried out major orders for buses delivered to, for example, the Bulgarian cities of Sofia, Burgas, Pleven and Stará Zagora, as well as the Slovak capital, Bratislava.

Thanks to the company's extensive experience and successes in the area of development and production of trolleybuses, it has incorporated into its portfolio a range of vehicles with ecological alternative drive systems: the hydrogen-powered TriHyBus, series-produced Hybrid H12 and the Battery bus. One of the company's key products in the area of e-mobility is its fully battery-powered bus called the ŠKODA PERUN (Pure Electric RUNner), which is a twelve-metre low-floor electric bus with a ŠKODA asynchronous traction motor and maintenance-free Li-Pol traction batteries. For the purpose of charging the vehicle within a period of only eight minutes, Škoda Electric also possesses a concept of automated charging infrastructure, which fulfils the COMBO II global charging standard and is thus compatible with the infrastructure developed for the automotive sector.

TATRA

TATRA TRUCKS a.s. is one of the oldest vehicle manufacturers in the world. It has always been situated in Kopřivnice, a town in the eastern part of the Czech Republic, the Moravia-Silesia region.

TATRA TRUCKS a.s. has two subsidiaries - Taforge a.s. and Tafonco a.s. Its core production programme includes heavy-duty off-road trucks and vehicles for combined off-road and on-road transport which have been continuously improved due to increasing customer requirements. One important advantage of TATRA, a. s., not only in the field of development but also production capacities, is the high level of human potential.

The TATRA brand trucks are based on the TATRA vehicle design which has not yet been successfully copied by anybody. Heavy trucks from Kopřivnice are famous for their passability through the most difficult terrains in extreme climatic conditions, high reliability and excellent utility characteristics. TATRAS can adjust to bitter frosts as well as abnormally high desert temperatures.

While other heavy truck manufacturers that originated in the historical territory of the Czech state either did not exist for very long or were swallowed up by more successful ones, the TATRA brand is still alive. It is the only one to keep the flag of the Czech design school hoisted in its segment.

Automotive Suppliers in the Czech Republic

CzechInvest's database of automotive suppliers offers comprehensive information about automotive component manufacturers in the Czech Republic. The database contains nearly 900 companies and its scope covers the Czech Republic's entire automotive supplier base, making it an exceptional tool for mapping the possibilities of this sector in a given region. Other unique aspects are the division of suppliers into Tiers 1, 2 and 3 and useful display of customers for each component produced by a given supplier. These manufacturers include all global brands such as VW, Daimler, Toyota, BMW, Ford, Volvo, Porsche, Audi.

OEMs and Selected Tier-1 Suppliers in the Czech Republic



Green Mobility

In the automotive industry, local manufacturers are offering different fuel technologies in different segments, the most outstanding of which is probably the bus segment. Several OEMs produce both CNG and electric vehicles that are competitive with Western bus makers. At the same time, young Czech engineers are able to build extraordinary electric sports cars and motorbikes.

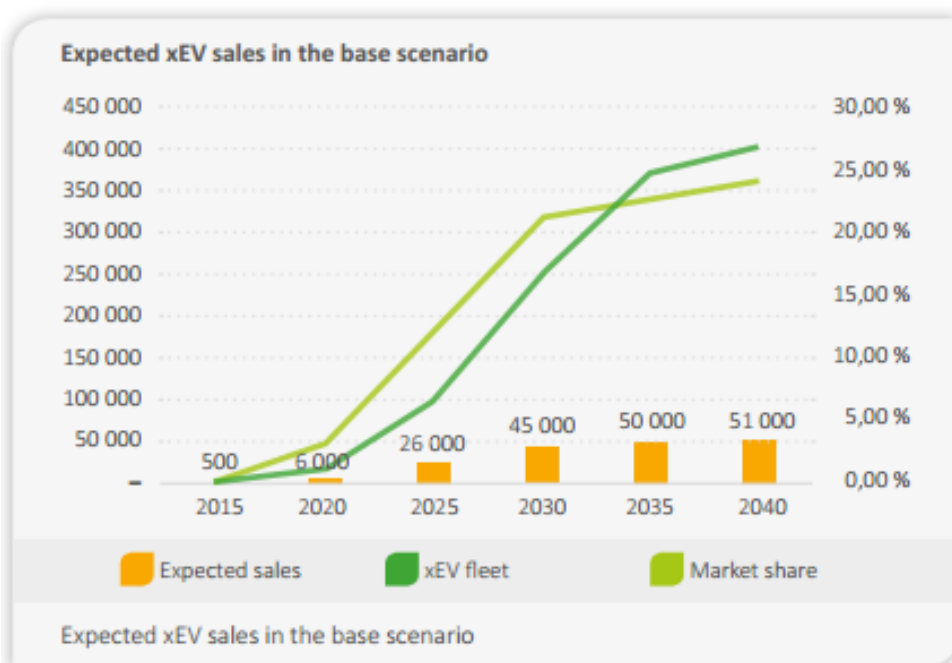
Green mobility is a very attractive and rapidly developing sector in the Czech Republic and worldwide. Whether this involves electric vehicles, hybrids, CNG, LPG, biofuels or hydrogen fuel cells, vehicle manufacturers and providers of charging infrastructure and alternative fuels are experiencing growth. CzechInvest is contributing to the development of this sector in the Czech Republic by providing information support and financial aid within available programmes, as well as through the public and private spheres.

There are different fuels that are considered to be alternatives to gasoline and diesel used to power internal-combustion engines. In the Czech Republic, the most promising of these are electricity and CNG. Due to stricter CO2

regulations, we expect growth in both segments. CNG is a strong alternative mainly to diesel engines in the mid-sized and LCV segments. On the other hand, premium segments will be covered by diesel and gasoline hybrids (HEVs).

The minimum number of electric charging stations throughout the country is estimated at up to 1,300. According to the plan, the total number of electric vehicles in operation should reach 250,000 by 2030. With respect to CNG technology, the goal is to achieve a 10% share in fuel consumption and 200,000 vehicles in operation by 2030.

Growth will be even more significant after 2025, when strict CO2 targets come into force. The market share of electric vehicles should reach approximately 30% of newly registered cars.



Source: ASEP 2016

OEMs and Selected Tier-1 Suppliers
in the Czech Republic

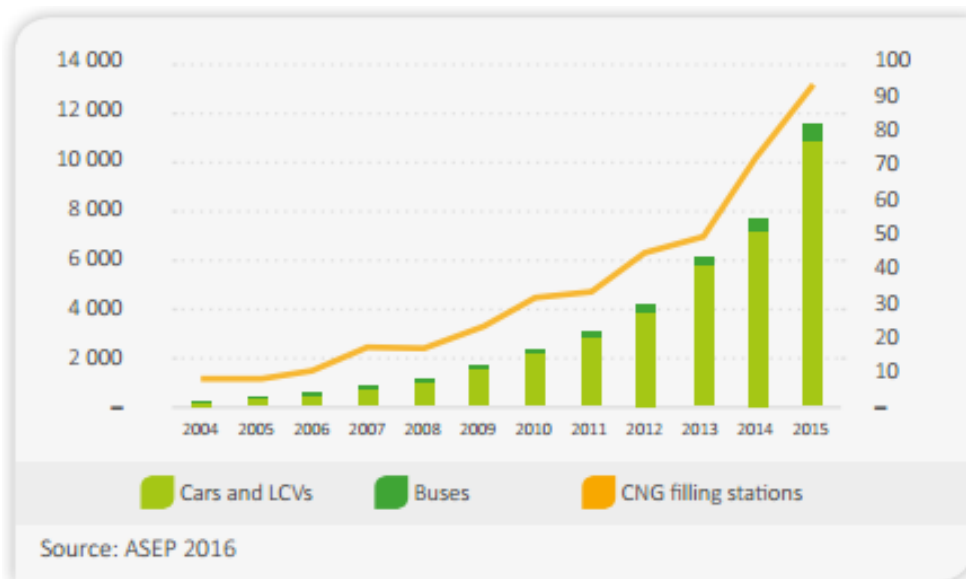
Volkswagen (e-Golf, e-UP)	154
Nissan (Leaf I, Leaf II)	120
BMW (i3, i8)	105
Tesla (S)	104
Peugeot (iOn, Partner)	91
Citroën (C-Zero, Berlingo)	40
Smart (EV)	15
rKia (Soul EV)	12
Renault (Fluence, Zoe, Kangoo)	10
Others	12

With the preparation of investments in the Czech infrastructure by ČEZ, E.ON, PRE and RWE, the structure of charging stands and stations is also taking shape. Suppliers are beginning to specialise for various customers. Charging stations are being offered to filling-station networks, thus allowing full integration with filling stations' existing payment and information systems provided by the company PhGIA. For many filling stations, the main source of income is no longer fuel sales, but rather sales of goods and restaurant services. Therefore, it is advantageous to sell cheap electricity, thus enticing the customer to spend more time and money at the station. Customers on the road are willing to pay significantly more per kWh than via their own connection. Shopping centres, restaurants, museums and parking lots are being offered universal stations which either provide charging free (at paid parking lots or supermarkets) or accept coins, cards or contactless RFID/MIFARE chip cards which energy companies will issue to electric-vehicle users. Various companies including Rittal, Elnico, Molaris, Micos, Proautoma, TILI and Ensto are offering such stations in the Czech Republic.

CNG

Compressed natural gas (CNG) has become a fully-fledged and accessible alternative to oil-based fuels and is currently the most promising alternative motor fuel in environmental, economic and safety terms. Furthermore, it is a technically well-developed solution that is easy and quick to implement in practice. In transport, compressed natural gas has huge potential, which should be exploited to the full in an effort to achieve savings of liquid fuels and a significant reduction in harmful emissions. The programme for CNG use in transport is a major project, which is being carried out in the Czech Republic in line with the EU's strategy. Under COM (2001) 370 (EU's white paper on transport policy), the target is to achieve an at least 10% share of natural gas in overall consumption of transport fuels by 2020.

By the end of 2016, there were almost 16,500 CNG vehicles in operation in the Czech Republic. CNG is very popular among public transport companies and state-controlled organisation like the Czech Postal Service and the Ministry of Interior. Around 45 cities and towns operate more than 800 CNG buses. The introduction of eco-friendly buses is heavily subsidised by the state. CNG vehicles are also present in the fleets of private companies such as taxi services, driving schools and food delivery firms.



Source: ASEP 2016

LNG technology is basically used only by long-haul heavy trucks. However, its use is expected to expand in Europe after 2020. In the Czech Republic, the first LNG filling station should be built in 2017 and the total number of such stations could rise to 14 by 2030. At the same time, there should be around 1,500 LNG vehicles in operation.

Liquefied Petroleum Gas

LPG, also known as autogas or auto propane, has a long tradition in the Czech Republic. Introduced in the 1940s, the use of LPG has been rising significantly since the 1990s and plays a key role in the Czech alternative fuels market. Of the Czech Republic's 6,500 fuel stations, 850 offer LPG refuelling and related services. There more than 300,000 motor vehicles (especially passenger cars) in the Czech Republic that use this economical and environmentally friendly fuel and that number is rising every year. While the use of CNG is backed by the Czech Gas Association, a member of NGVA Europe, LPG is supported by the Czech LPG Association and by the LPG Club. Various carmakers, such as Fiat, Hyundai, Mercedes-Benz, Opel, Škoda Auto, VW and others, have recently announced their intention to produce LPG or CNG models, thus acknowledging the importance of the gas segment.

Petrol Prices

In February 2017 the pump price of unleaded petrol was Kc30/litre (US\$1.19/litre), which is low by historical standards. Petrol prices will remain subdued in the near term, owing to lower global oil prices and the domestic market remaining comfortably supplied.

World oil prices have plummeted since late 2014, with crude oil prices falling from a mid-

2014 peak of US\$112/barrel to an average of US\$44/b in full-year 2016. The outlook remains subdued, given robust supply growth and sluggish world demand, implying relatively cheaper fuel for consumers. We expect the price to recover to an average of US\$56/b in 2017 and to continue increasing, to US\$60/b in 2018.

Oil price and petrol consumption

	2012 ^a	2013 ^a	2014 ^a	2015 ^a	2016 ^b	2017 ^c	2018 ^c	2019 ^c	2020 ^c	2021 ^c
Petrol consumption ('000 tonnes)	1,673	1,540	1,540	1,583	1,624	1,636	1,650	1,667	1,681	1,692
Oil prices (Brent; US\$/b)	112.0	108.9	98.9	52.4	44.0 ^a	56.0	60.0	59.9	61.3	64.0

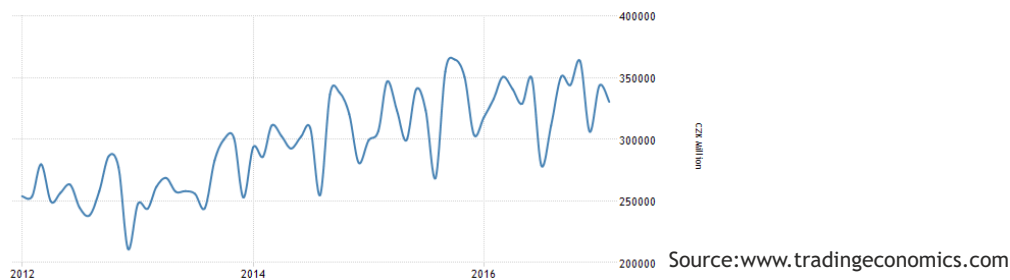
^a Actual. ^b Economist Intelligence Unit estimates. ^c Economist Intelligence Unit forecasts.

Sources: International Energy Agency; The Economist Intelligence Unit.

Exports

Exports in Czech Republic increased to 343255 CZK Million in January from 306059 CZK Million in December of 2016. Exports in Czech Republic averaged 147723.62 CZK Million from

1991 until 2017, reaching an all time high of 364893.33 CZK Million in October of 2015 and a record low of 9838 CZK Million in January of 1991.



Czech Republic Exports By Country (2016)

Germany 26%	Poland 8.2%	Austria	United Kingdom	Netherlands	South Korea	Hungary
China 13%	Slovakia	2.9%	2.7%	2.6%	2.5%	2.3%
	Italy	United...	Belgium	Romania	Turkey	Ireland
	France	2.3%	1.7%	1.3%	0.99%	0.99%
		Russia	Thailand		Vietnam	Ukraine
		2.0%	0.84%	0.57%	0.55%	India
		Spain	Sweden	Slovenia		
		1.9%	0.78%			
		Japan	Europe Ex. Mex	Other...	Serbia	
		1.7%	0.77%			
			Malaysia	Mexico		
			Other Asia	Singapore		
				Portugal		

Source: www.tradingeconomics.com

Exports

Exports in Czech Republic increased to 343255 CZK Million in January from 306059 CZK Million in December of 2016. Exports in Czech Republic averaged 147723.62 CZK Million from

1991 until 2017, reaching an all time high of 364893.33 CZK Million in October of 2015 and a record low of 9838 CZK Million in January of 1991.

Czech Republic Exports By Category (2016)

	Value
Vehicles other than railway, tramway	\$34.15B
Machinery, nuclear reactors, boilers	\$29.84B
Electrical, electronic equipment	\$27.63B
Articles of iron or steel	\$6.06B
Plastics	\$5.43B
Furniture, lighting signs, prefabricated buildings	\$4.62B
Rubbers	\$3.57B
Toys, games, sports requisites	\$3.28B
Iron and steel	\$3.11B
Mineral fuels, oils, distillation products	\$3.03B

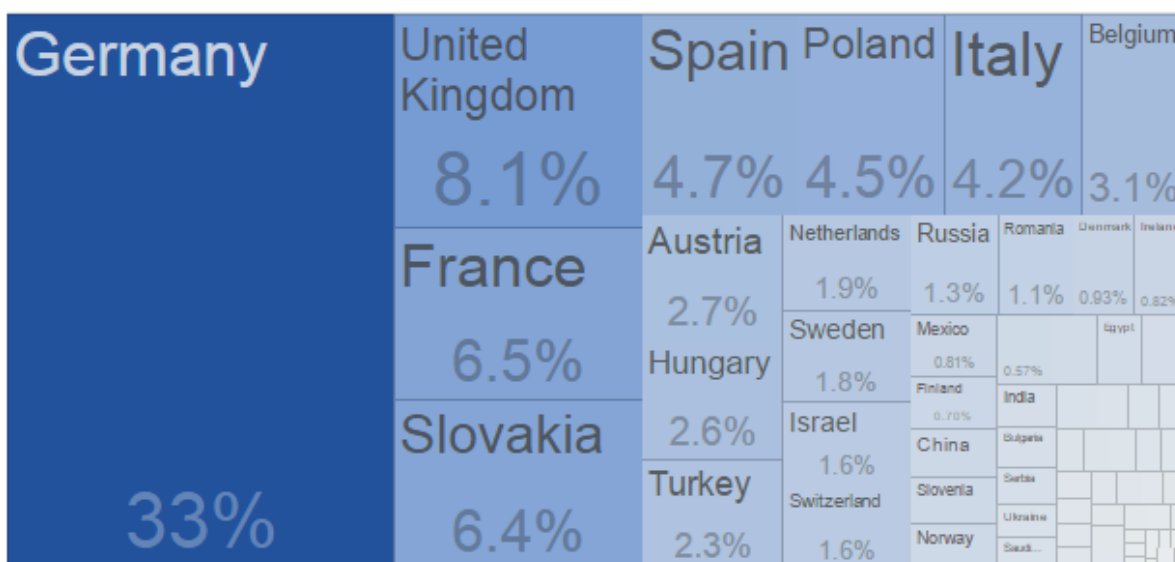
Source:www.tradingeconomics.com

Role of the automotive sector in the Czech exports

Vehicles other than railway, tramway is the top category in Czech export with \$34.15B value.

Czech automotive manufacturers currently

export the bulk of their production to the EU, where the economic recovery is continuing. In Germany, a major market for Czech cars, car sales rose by 6% in 2016, up from 5.6% growth in 2015. Combined with the current levels of investment committed to expanding production lines, this will help to drive continued recovery in Czech output levels throughout the forecast period.



Source:www.tradingeconomics.com

Role of the automotive sector in the Czech exports

Vehicles other than railway, tramway is the top category in Czech export with \$34.15B value.

Czech automotive manufacturers currently export the bulk of their production to the EU, where the economic recovery is continuing. In Germany, a major market for Czech cars, car sales rose by 6% in 2016, up from 5.6% growth in 2015. Combined with the current levels of investment committed to expanding production lines, this will help to drive continued recovery in Czech output levels throughout the forecast period

Czech export prices are expected to remain highly competitive in the short term, owing to the artificial weakening of the koruna. We forecast that the currency will average Kc25.3:US\$1 in 2017, up slightly from 2016 but weaker than the Kc24.6:US\$1 recorded in 2015 or the Kc20.76:US\$1 seen in 2014. This should help to boost car exports.

The potential for expanding exports to Russia will be constrained by the continued impact of international sanctions on the Russian economy. The strong depreciation of the rouble will also create significant headwinds there.

Germany	United Kingdom	Spain Poland		Italy	Belgium		
	8.1%	4.7%	4.5%	4.2%	3.1%		
	France	Austria	Netherlands	Russia	Romania	Denmark	Ireland
		2.7%	1.9%	1.3%	1.1%	0.93%	0.82%
6.5%	Hungary	Sweden	Mexico	Egypt			
Slovakia	2.6%	1.8%	0.81%	0.57%			
	Turkey	Israel	Finland	India			
		1.6%	1.6%	0.70%	Bulgaria		
33%	6.4%	Switzerland	China	Serbia			
		2.3%	1.6%	Slovenia	Ukraine		
			Norway	Saudi...			

Imports

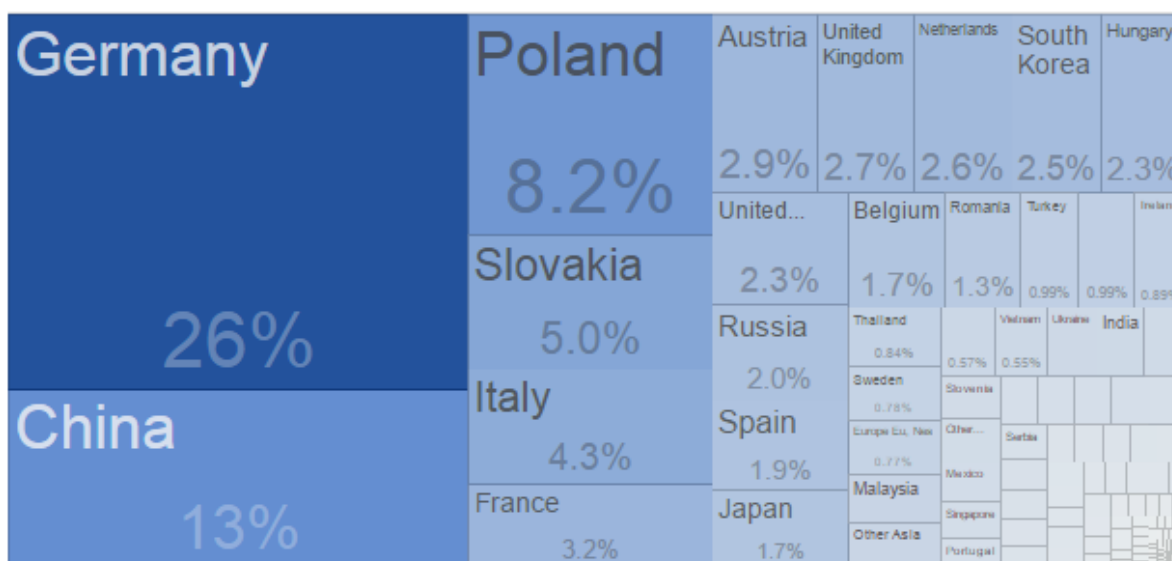
Imports in Czech Republic increased to 294797 CZK Million in January from 286277 CZK Million in December of 2016. Imports in Czech Republic averaged 142154.03 CZK Million from

1991 until 2017, reaching an all time high of 325888 CZK Million in November of 2016 and a record low of 14204 CZK Million in January of 1992.



Source:www.tradingeconomics.com

Czech Republic Imports By Country (2016)



Source:www.tradingeconomics.com

Czech Republic Imports By Category (2016)

Category	Value
Electrical, electronic equipment	\$25.07B
Machinery, nuclear reactors, boilers	\$24.68B
Vehicles other than railway, tramway	\$15.13B
Plastics	\$8.10B
Mineral fuels, oils, distillation products	\$6.40B
Iron and steel	\$4.63B
Pharmaceutical products	\$4.15B
Articles of iron or steel	\$4.08B
Optical, photo, technical, medical apparatus	\$3.16B

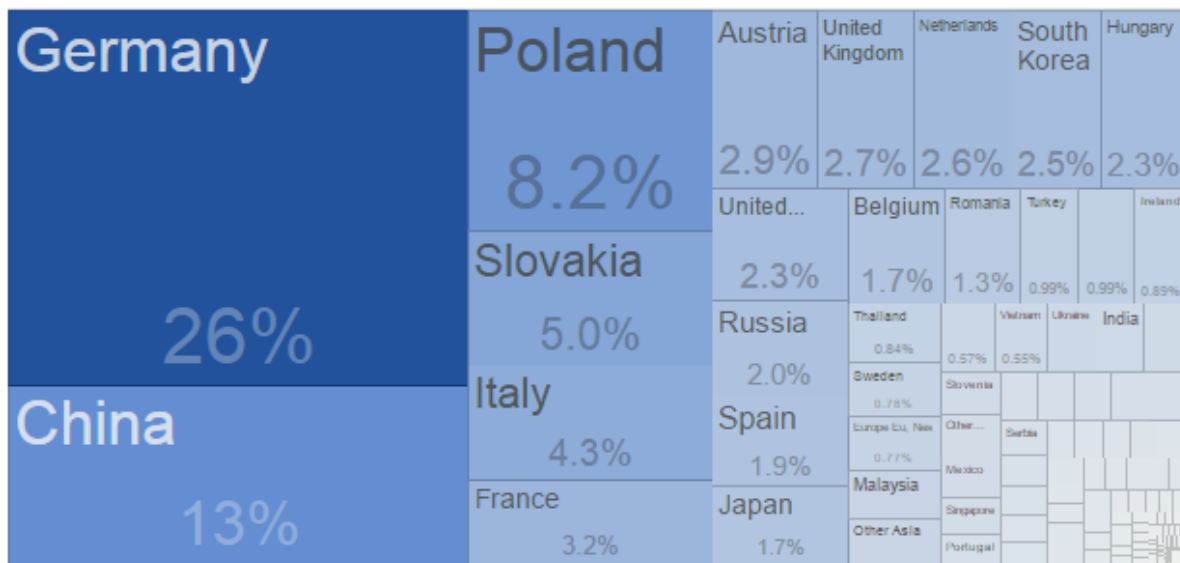
Source:www.tradingeconomics.com

Role of the automotive sector in the Czech imports

Czech Republic Imports of Vehicles other than railway, tramway was US\$15.13 Billion during 2016, according to the United Nations COMTRADE database on international trade.

Czech automotive manufacturers currently import from the EU. Germany, a major market for imports of vehicles other than railway, tramway.

Czech Republic Imports By Country (2016)



Source: www.tradingeconomics.com

Tire market

According to Czech Republic Tyre Market Forecast and Opportunities 2020, report tyre market in Czech Republic is forecast to grow at a CAGR of around 6.5% during 2015 - 2020. The country's tyre market is dominated by the OEM segment, which accounted for a share of more than 60% in 2014. Major factors driving growth in OEM tyre sales in the country include increasing passenger car production and growing export demand. OEM segment is expected to retain its dominance in the market over the forecast period. In 2014, tyre market in the country was dominated by Continental, followed by Michelin, Goodyear and Bridgestone.

Based on the Worlds Top Exports data, below are the 15 countries that exported the highest dollar value worth of new rubber tires during

2015. Czech Republic is ranked 11th in the list.

1. China: US\$13.8 billion (19.3% of total rubber tires exports)
2. Germany: \$5.4 billion (7.5%)
3. Japan: \$5.4 billion (7.5%)
4. United States: \$5.1 billion (7.1%)
5. Thailand: \$3.4 billion (4.7%)
6. South Korea: \$3.4 billion (4.7%)
7. France: \$2.8 billion (4%)
8. Netherlands: \$2.2 billion (3.1%)
9. Spain: \$2.1 billion (3%)
10. Poland: \$2 billion (2.8%)
11. Czech Republic: \$2 billion (2.8%)
12. Slovakia: \$1.8 billion (2.5%)
13. Canada: \$1.8 billion (2.5%)
14. Indonesia: \$1.6 billion (2.2%)
15. Hungary: \$1.4 billion (2%)

FDI

The change in the structure of foreign direct investment indicates a new trend in the Czech Republic. The number of demanding projects in the fields of research, development and business support services is rapidly increasing. New investors as well as those companies that formerly only came to the country with a production programme are now transferring their higher-value-added development activities (technology centres and business support services centres) to the Czech Republic.

Selected Investors

Sector	Investor	Country of origin
Aerospace	GE Aviation	USA
	Honeywell Aerospace	USA
	Latecoere	France
	Textron	USA
	UGMK	Russia
Automotive	Hyundai	South Korea
	Johnson Controls	USA
	Robert Bosch	Germany
	Toyota/PCA	Japan/France
	Volkswagen	Germany
Business support services	Accenture	USA
	DHL	Germany
	IBM	USA
	Infosys	India
	SAP	Germany
Electrical engineering & electr	ABB	Switzerland
	Bang & Olufsen	Denmark
	Foxconn	Taiwan
	On Semiconductor	USA
	Panasonic	Japan
Energy & environment	Bilfinger	Germany
	Doosan	South Korea
	Mavel	USA
	Solar Turbines	USA
	Vyncke	Belgium
Advanced engineering	Bombardier	Canada
	Daikin	Japan
	Edwards	United Kingdom

Source: CzechInvest, 2016

FDI Target Sectors

- 01 Aerospace
- 02 Automotive
- 03 Electrical Engineering and Electronics
- 04 Business Support Services
- 05 Business Support Services
- 06 Advanced Engineering
- 07 Information and Communication Technologies
- 08 Life Sciences
- 09 Nanotechnologies and Advanced Materials

Automotive accounted for 30% of FDIs in the Czech Republic

Domestic and foreign investors plan to invest more than CZK 64 billion in the Czech Republic based on deals concluded with CzechInvest in 2016.

Last year's total is CZK 20 billion more than in 2015. In 84 out of 100 cases, the investments involve expansions of companies that are already operating in the Czech Republic, while 16 projects are completely new investments. Every fourth investment is a high-tech project, i.e. a project with higher value added. 80% of the investment projects intend to use investment incentives.

Companies most frequently want to invest in the vehicle-manufacturing sector, which attracted 22 investment projects in the aggregate value of CZK 19.2 billion, followed by metallurgy/metalworking (16 projects in the value of CZK 4.7 billion) and plastics (nine in the value of CZK 3.4 billion).

The largest number of firms plan to invest in the Ústí and Moravia-Silesia regions, each of which received 13 investment projects. The investments will bring CZK 24.1 billion and 1,949 new jobs to the Ústí region and CZK 4.6 billion and 1,688 new jobs to Moravia-Silesia. Ten companies plan to invest CZK 4.3 billion and create 1,117 jobs in the Plzeň region, which ranks third in terms of the number of investments arranged by CzechInvest.

The biggest investment arranged by CzechInvest in 2016 is the expansion of Karsit Automotive, s.r.o. in Trutnov. The company is investing CZK 2.7 billion in the expansion of its production of components for the automotive industry and plans to thus create 230 jobs. This is followed by the expansion of Benteler International Aktiengesellschaft in the industrial zone in Klášterec nad Ohří, where the company is investing CZK 2.5 billion in the production of steel and aluminium automobile body components and plans to create 576 jobs. The third-biggest investment is the business support services

centre of the originally Czech company Kiwi.com, previously a start-up known as Skypicker, which will create 700 jobs through its investment in the amount of CZK 1.5 billion. Among other things, this project is the result of CzechInvest's long-term support for Czech start-ups.

As a result of its long industrial tradition and ability to compete on the global level, the Czech Republic has achieved one of the highest concentrations of automotive manufacturing, design and R&D activity in the world. With passenger car production at 123 vehicles per 1,000 persons in 2015, the Czech Republic has maintained its supreme position among world automotive leaders in terms of per-capita output. After all, the presence of more than half of the world's top 100 tier-one suppliers underscores the local automotive sector's long-term focus on excellence.

Future Expectations & Trends

In 2019, the Czech automotive manufacturing industry is forecast to have a value of \$18.6 billion, an increase of 31.9% since 2014. The compound annual growth rate of the industry in the period 2014-19 is predicted to be 5.7%.

in the long term, which has been proved in the latest global economic crisis. If hard times come, both companies and families simply postpone the purchases of new cars.

Green mobility is a very attractive and rapidly developing sector in the Czech Republic and worldwide.

Electric cars are growing in popularity in Europe, and in 2014 to date, battery-powered

Czech Republic automotive manufacturing industry value forecast: \$ billion, 2014–19

Year	\$ billion	CZK billion	€ billion	% Growth
2014	14.1	293.1	10.7	11.6%
2015	14.8	306.1	11.1	4.4%
2016	15.6	324.6	11.8	6.0%
2017	16.7	346.0	12.6	6.6%
2018	17.7	366.9	13.3	6.0%
2019	18.6	386.3	14.0	5.3%
CAGR: 2014–19		Source: Marketline		5.7%

In 2019, the Czech automotive manufacturing industry is forecast to have a volume of 1,579.6 thousand units, an increase of 26.1% since 2014. The compound annual growth rate of the industry in the period 2014-19 is predicted to be 4.8%.

cars, have accounted for 13% of new car sales, far ahead of the rest of the world.

However, the market is heavily dependent on government subsidies and in Czech there has been little backing from the government. Cars may be valid for a road tax exemption.

Czech Republic automotive manufacturing industry volume forecast: thousand units, 2014–19

Year	thousand units	% Growth
2014	1,252.3	10.4%
2015	1,298.9	3.7%
2016	1,372.7	5.7%
2017	1,444.3	5.2%
2018	1,513.3	4.8%
2019	1,579.6	4.4%
CAGR: 2014–19		Source: Marketline
		4.8%

The Czech economy becomes more and more dependent on car production, although the government has been trying to find an alternative to the car industry and make the country less reliant on it. The car industry and especially car exports to other European countries are the basis of the current economic prosperity of the Czech Republic. Without new car factories, which were often built also thanks to investment incentives, economic growth would be slower. But reliance on car production may be dangerous

In the medium-term, CNG technology will gain market share due to its more highly developed infrastructure, wider range of vehicle models on the market, higher customer acceptance, lower prices and TCO (total cost of operation) parity with other types of internal-combustion engines.

In the long term, when electric vehicles have a longer driving range, widespread infrastructure, lower battery costs and a broader portfolio of models, the market share of electric cars could reach 20% of new vehicle registrations.



Investment Incentives ■ in Automotive Sector



Investment Incentives in Automotive Sector

FDI Target Sectors

- ✓ Safe investment environment
- ✓ Skilled and well-educated workforce
- ✓ Favourable labour costs and price stability
- ✓ Central location in Europe
- ✓ Dense and high-quality infrastructure
- ✓ Transparent system of investment incentives
- ✓ Strong focus on R&D
- ✓ Stable social and political system
- ✓ EU membership
- ✓ Mentality, culture and attitudes similar to those of western countries
- ✓ High quality of life

Why to Invest in Automotive Industry in the Czech Republic?

- ✓ Strategic location in Central Europe; direct access to the EU market of 500 million consumers; time and logistics advantages
- ✓ Highly integrated into the European automotive value chain
- ✓ Well-developed transport and telecommunications infrastructure
- ✓ Robust supplier base
- ✓ Highly educated workforce, good access to university graduates with technical education
- ✓ Strong innovation potential for R&D projects
- ✓ Positive approach of the Czech government, investment support covering up to 25% of eligible costs through a transparent system of investment incentives
- ✓ First-class support from CzechInvest

An important aspect influencing the growth in demand for industrial properties is the Czech Republic's eleventh-place ranking in Ernst & Young's European Attractiveness Survey 2015 placing the country in the same league with such powerhouses as Great Britain, France and Germany.

The development of industrial zones has been supported by the state since 1998 through various programmes and aid from the state budget. The main priorities in the preparation of industrial zones are a clear asset structure of land plots in the given zone and the presence of transport and technical infrastructure on such land plots.

Global Best to Invest Award

Czech Republic is at the head of both the absolute league table and the list based on per capita foreign direct investment for the Eastern European.

The eighth annual Global Best to Invest Awards are based in part on capital investment into facilities in each country, (total projects and per capita projects), as compiled by the Conway Projects Database. Qualifying projects are corporate investments that contribute to the well-being of the areas in which they are made by meeting at least one of the following three criteria:

- Represent a minimum investment of US\$1 million
- Create a minimum of 20 new jobs
- Involve at least 20,000 sq. ft. (1,900 sq. m.) of new space

The following five data sets are also used to compile these proprietary rankings:

1. World Bank Doing Business 2015, which gauges a nation's ease of doing business;
2. Overall ranking in The Global Competitiveness Report 2014-2015 from the World Economic Forum;
3. The Human Development Index from the United Nations Development Programme, which focuses on people and their capabilities as indicators of national development;
4. GDP growth;
5. The Global Competitiveness Index Historical Dataset

GLOBAL BEST TO INVEST	
total projects	<ol style="list-style-type: none"> 1. <u>Czech Republic</u> 2. <u>Hungary</u> 3. <u>Poland</u> 4. <u>Slovakia</u> 5. <u>Romania</u> 6. <u>Turkey</u> 7. <u>Macedonia</u> 8. <u>Greece</u> 9. <u>Bulgaria</u> 10. <u>Serbia</u>
per capita	<ol style="list-style-type: none"> 1. <u>Czech Republic</u> 2. <u>Hungary</u> 3. <u>Macedonia</u> 4. <u>Slovakia</u> 5. <u>Poland</u> 6. <u>Latvia</u> 7. <u>Bulgaria</u> 8. <u>Greece</u> 9. <u>Serbia</u> 10. <u>Romania</u>



Investment Protection

The Czech Republic is a member of the Multilateral Investment Guarantee Agency (MIGA), an international organisation for protection of investments, which is part of the World Bank-IMF group. The country has signed a number of bilateral treaties which support and protect foreign investments, for example with the United States, Germany, the United Kingdom, France, Austria, Switzerland, Italy, Belgium, Luxembourg, the Netherlands, Finland, Norway, Denmark and China. The Czech Republic has also concluded agreements for the avoidance of double taxation.

Setting up a Business

Foreign legal entities are allowed to conduct trade activities, including the acquisition of real estate, under the same conditions and to the same extent as Czech entrepreneurs. They may become founders or co-founders of a company, or may join an existing Czech company.

Taxation

The system of taxation described below is derived from the Czech tax legislation effective on 1 January 2016 and may be modified by a particular Double Taxation Treaty.

The current tax system was introduced in January 1993. The legislation is subject to frequent amendments and changes due to rapid developments in the economy.

Taxpayers in the Czech Republic are subject to the following taxes in 2016:

Tax	Tax rate
Corporate income tax	19% standard corporate income tax rate; 5% corporate income tax rate applies to basic investments funds; 0% corporate income tax rate applies to pension funds Withholding tax rates are 5%, 15%, 35%
Personal income tax	Flat tax rate of 15% for calendar year 2016, the solidarity contribution of 7% applies to high-earning individuals
Value added tax (VAT)	10 % (certain books, infant food, certain pharmaceuticals), 15% (food, certain books, certain pharmaceuticals, special healthcare products) and 21% (most goods and services)
Excise tax	Levied on petrol and petrol derivatives, alcohol (beer, wine and spirits) and tobacco
Road tax	CZK 1,200 – CZK 4,200 (cars), CZK 1,800 – CZK 50,400 (trucks) when used for business purposes
Real estate tax	According to type, location and purpose of use of the real estate
Real estate acquisition tax	Flat tax rate of 4%
Inheritance tax and gift tax – abolished	From 1 January 2014 is income from inheritance and/or donations is subject to income tax
Energy tax	Levied on supplies of electricity, natural and other gases, and solid fuels with effect from 1 January 2008

Corporate Income Tax

Taxation of non-resident legal entities – Permanent establishment

A permanent establishment is not a legal entity; however, it is a taxable presence of a foreign entity and therefore its existence triggers taxation of income of the foreign entity in the Czech Republic.

Rendering of services in the Czech Republic

A permanent establishment of a foreign company can be created when the company's employee(s) is (are) rendering services in the Czech Republic for more than six months in any 12 consecutive calendar months. Each single employee counts as presence of the foreign company. Particular Double Taxation Treaties can modify the conditions for creation of a permanent establishment.

Development of Corporate Income Tax

Year	%
2005	26
2006	24
2007	24
2008	21
2009	20
2010 – 2016	19

Source: CzechInvest, 2016

The standard rate of corporate income tax is 19%. For basic investment funds special 5% corporate income tax rate applies; for pension funds 0% corporate income tax rate applies.

A permanent establishment can also be created when a foreign entity sets up a fixed place of business (e.g., an office, workshop, production facility, sales outlet or other business facility) in the Czech Republic. Relevant Double Taxation Treaty can modify the conditions for creation of a permanent establishment of a foreign entity in the Czech Republic. It especially may eliminate the creation of permanent establishment when the activities performed through the fixed place of business located in the Czech Republic are of preparatory or auxiliary

nature.

Dependent agent

A permanent establishment can also be created in the case that the foreign entity operates its business in the Czech Republic via a dependent agent, i.e. person having and exercising an authority to conclude contract binding on the foreign entity.

Personal Income Tax

Generally, income from dependent activities paid by a foreign employer to a Czech tax non-resident is tax exempt if the time spent on such activities performed in the Czech Republic does not exceed 183 days in any 12 consecutive calendar months. This tax exemption shall not apply to income from an activity performed via a permanent establishment located in the Czech Republic.

Taxation of expatriates

Taxable income includes earnings from dependent activities including benefits in-kind (e.g., housing allowances, use of a company car for private purposes, etc.), income from business activities, and income from capital, rent and other sources. In general, taxable income consists of all income regardless of whether it is monetary or non-monetary.

Generally, income is declared and taxed through a personal income-tax return that should be filed with the relevant Tax Office within three months after the end of the tax period (or within six months if a power of attorney for filing the tax return is submitted by a certified tax advisor).

An expatriate who is employed directly by a local (Czech) company or by a branch of a foreign company is subject to tax on his/her income from the dependent activity from the first day of his/her employment. The local company or branch of a foreign company withholds monthly tax pre-payments from his/her salary towards his/her annual tax liability. Generally, if the expatriate only has

income derived from such an employment contract, the employer can prepare a year-end tax settlement that is a substitute for the expatriate's tax return.

If a foreign company transfers an expatriate to a Czech company under a service agreement, he/she should be registered as an individual taxpayer with the relevant Tax Office. His/her income is taxed via the annual personal income tax return. Additionally, an expatriate makes semi-annual or quarterly advance payments for his/her personal tax liability in the course of the year. These advance payments are based on the previous year's tax liability. There is a flat personal income-tax rate of 15% in 2016. The gross employment income must be increased by Czech actual or hypothetical social security and health insurance contributions (paid by the employer) and the tax liability is calculated from such increased employment tax base (i.e. super-gross tax base). Therefore the effective tax rate is higher than the nominal 15%.

A solidarity contribution was introduced in 2013. It applies only on employment income and self-employment tax base. The solidarity contribution represents a contribution amounting to 7 % of the employment income / self-employment tax base over the annual social security cap (CZK 1,296,288). Individuals paying the 7% solidarity contribution also have an obligation to file a personal income tax return for 2016.

Social security and health insurance contributions

An employee's social security and health insurance contributions are calculated as 11% of gross salary. Employers must pay an additional 34% of all employees' gross salaries to the Czech social security and health insurance authorities in 2016.

The income of an employee is subject to the Czech mandatory social security and health insurance contributions (both employee and employers parts) unless otherwise exempt according to EU regulations or bilateral social security treaties (e.g. granting of an A1 certificate/certificate of coverage).

The annual base for social security contributions is capped. For 2016 the cap amounts to 48 times the average monthly salary (i.e. CZK 1,296,288). There is no cap for health insurance contributions.

Contributions	Employer (%)	Employee (%)
Health care insurance	9.0	4.5
Pensions	21.5	6.5
Unemployment	1.2	0.0
Sickness and other benefits	2.3	0.0
Total	34.0	11.0

Value Added Tax

The Czech VAT Act is based on EU Directives relating to VAT. VAT is generally imposed on:

- supplies of goods and provision of services in the Czech Republic
- goods imported to the Czech Republic or acquired in the Czech Republic from other EU member states

Businesses are generally entitled to reclaim input VAT. Certain supplies are VAT exempt without entitlement to reclaim input VAT (e.g. healthcare, education, financial services, insurance services and long-term rent of immovable property).

Export of goods and supplies of goods to EU are VAT exempt with a right to recover input VAT. Generally, services provided to businesses established abroad are not taxable in the Czech Republic. On the other hand, businesses are, in general, obliged to account for VAT in terms of the reverse-charge principle once they acquire a service from a foreign provider.

There are three VAT rates:

- 21% for most goods and services;
- 15% for some selected goods and services (e.g. food products, certain books, certain pharmaceuticals and special healthcare products);
- 10% for some selected goods (e.g. certain books, infant food, certain pharmaceuticals)

Businesses seated in the Czech Republic whose turnover exceeds CZK 1,000,000 (approx. USD 40,284) in any consecutive 12-month period must register as a VAT payer with the tax authorities. For non-resident businesses, there is no registration threshold, but they must register as a VAT payer if they:

- make any supply subject to Czech VAT (unless the liability to declare and pay VAT is shifted to the recipient of the supply), or
- supply goods from the Czech Republic to another EU member state.

Under certain circumstances, businesses not registered for VAT to whom VAT liability arises due to acquired goods or services become persons identified for VAT. A person identified for VAT only pays VAT from received supplies

without being entitled to recover related input VAT. The basic taxable/reporting period is a calendar month. A VAT payer can opt for a quarterly taxable/reporting period provided that certain conditions are met (e.g. his turnover in the previous calendar year did not exceed CZK 10 million).

Excise Tax

This tax applies to hydrocarbon fuels and lubricants, spirits and distilled liquors, beer, wine and tobacco products (hereinafter referred to collectively as “excise products”) that are produced in or imported to the Czech Republic. The tax is calculated as a fixed amount per unit of the product concerned and is levied on the producer (importer). Tax levied on cigarettes is calculated as a combination of a fixed amount and a percentage of the selling price. Excise products can be produced, transported or stored under duty suspension arrangement, i.e. tax liability is deferred until these products are released for free tax circulation.

Energy Tax

Energy taxes are levied on supplies of electricity, natural and other gases, and solid fuels (hereinafter referred to collectively as “energy”). The payers of energy tax are either suppliers of energy selling energy in the Czech Republic to end-users, or operators of distribution or transmission systems. Subject to energy tax are also entities that use taxexempt energy for purposes other than those that are exempt or that use untaxed energy.

The tax on electricity is levied at the rate of CZK 28.30 per MWh. The tax on gas is levied at rates varying from CZK 30.60 per MWh to CZK 264.80 per MWh, depending on the type of gas, the purpose of its use and the date when the tax liability arises. The tax on solid fuels is levied at the rate of CZK 8.50 per GJ of caloric value. End-users can utilise tax exemptions when the energy products are used for specific purposes.

Road Tax

Road tax is payable on road vehicles and their trailers, registered and operated for business purposes in the Czech Republic. The tax is calculated according to the engine size for passenger cars or weight and number of axles for other commercial vehicles. The rates range from CZK 1,200 (cars with engines up to 800 cm³) up to CZK 4,200 (cars with engines over 3000 cm³) and from CZK 1,800 up to CZK 50,400 (on trucks over 36 tonnes). The tax period is a calendar year. Freight vehicles weighing up to 12 tonnes with an electric or hybrid engine, or running on LPG (liquefied petroleum gas), CNG (compressed natural gas), or E85 are exempt from the road tax. Taxpayers are required to submit their tax return for the tax period (calendar year) by 31 January of the following year.

Real Estate Tax

Real estate tax comprises a tax on land (land tax) and a tax on structures and units (building and unit tax) based on the situation as of 1 January of the relevant tax year. Real estate tax is generally payable on an annual basis by the owner, although in specific cases the user or the lessee is the taxpayer. All property owners must file tax returns for the respective calendar year with the relevant Tax Office by 31 January of that calendar year. The tax return generally does not have to be filed if conditions relevant for the tax assessment have not changed from the previous tax return.

Land tax is imposed on plots of land entered in the Land Registry and is payable by the owner or, in special cases, by the lessee or user. The rate is CZK 2 per square meter for building plots (multiplied by indices based on the municipality where the land is located) and CZK 0.2 per square meter for the other types of land. Agricultural land is taxed based on its value. Paved areas (generally, land covered by a flat structure) used for business are subject to tax rate of CZK 1 per square meter (agriculture) or CZK 5 per square meter (other business activities). This applies to e.g. parking lots, platforms, certain roads, etc. Building and unit tax is calculated according to the registered built area. The tax rate ranges from CZK 2 to CZK 10 per square meter in the case of business premises and from CZK 2 to CZK 8 per square meter for residential

premises and garages. The tax rate may be increased by CZK 0.75 per square meter for each additional floor exceeding 1/3 of the building built-up area. Tax rates are multiplied by coefficients according to the location of the real estate (determined by the municipalities).

Real Estate Acquisition Tax

Real estate acquisition tax is charged at a flat rate of 4% of the higher of:

- sale price of a property or
- 75% of the comparative tax value (usual market price determined by a statutory expert or calculated based on guidelines, taking into account the location, size and type of real estate).

The tax is generally payable by the seller (the buyer is the guarantor). However, upon sale or exchange of real estate, the contracting parties may contractually agree that the buyer will be the taxpayer. Certain transactions (e.g. mergers and demergers) are not subject to real estate acquisition tax.

Inheritance and Gift Taxes, Exempt Income

As of 1 January 2014, the Inheritance and Gift Taxes are abolished and the relevant types of income are subject to income tax. Inheritance is generally tax exempt, gifts are exempt if donated between certain family members.

As of 1 January 2015, the taxpayer is obliged to report any exempt income that exceeds CZK 5,000,000 (approx. USD 201,418) per one individual income. Taxpayers must file the notification within three months after the end of the tax period (or within six months if a power of attorney for filing the tax return is submitted by a certified tax advisor).

Local Taxes

No local taxes have been introduced in the Czech Republic to date. Some local fees are levied on the waste produced by companies and also with respect to certain business activities such as those related to spas, accommodation, and use of televisions and radios.

Tax-deductible Allowances

Research and development cost allowance

Up to 100/110% of the costs associated with the projects of research and development and incurred in a given tax year or period for which a tax return is filed can be deducted from the tax base as a special tax allowance (this means that these costs are in fact deducted twice for tax purposes - once as a normal tax-deductible cost and then as a special tax allowance).

The following costs can be included in the tax allowance:

- Direct costs (e.g. personnel costs of research and development engineers, consumed material, etc.)
- Tax depreciation of fixed assets used for R&D activities
- Other operating costs directly related to realisation of R&D activities (telecommunications fees, electricity, water, gas, etc.)

Eligible costs must be incurred in the course of generating, assuring and maintaining the taxable income (i.e. tax-deductible costs), and must be recorded separately from the taxpayer's other costs. This allowance does not apply to the costs of purchased services and intangible results of research and development acquired from other entities (e.g. licenses), except for services purchased from listed R&D institutions. The costs supported from public sources cannot also be deemed eligible for this tax allowance.

The non-utilised allowance (e.g., due to tax loss in current year) can be carried forward for three subsequent years.

The taxpayer can apply the local competent Tax Office for a binding ruling in respect of research and development costs in the event that the taxpayer is not sure if particular research and development costs can be regarded as costs eligible for the allowance.

Accumulated tax losses carried forward from previous years

Losses incurred in the tax period can be carried forward for five subsequent tax periods and it is up to the taxpayer when such losses are actually utilised against taxable

profits within this five-year period. Companies that have received investment incentives in the form of tax relief must utilize all previous losses against declared profits before they may claim the tax relief.

There are additional restrictions for utilisation of accumulated tax losses if the company's ownership structure changes by more than 25% or the company is merged or subject to another type of restructuring. In such case, the "same business" test applies which compares the activities causing the tax loss before the change of control or the merger and the activities generating the tax profit (which should be reduced by the tax losses) after the change of control or the merger. In case of doubts, the taxpayer may apply the Tax Office for a binding ruling whether the tax loss may be utilised in given year.

Transfer Pricing Rules

Prices charged between related entities (i.e., one company directly or indirectly participates in another company/companies through at least 25% of the capital or voting rights of such company/companies, or where the same persons participate in management or control of the respective companies, etc.) may not differ from prices that would be agreed between unrelated entities under comparable circumstances. If the prices differ, the relevant Tax Office may adjust the tax base of the relevant entity by this difference.

If the prices differ and the relevant company is entitled to claim investment incentives in the form of tax relief, the right to claim tax relief does not cease but the company is required to submit additional tax returns for all taxable periods in which tax relief was claimed and adjust the tax base by this difference.

A taxpayer can apply the respective Tax Office for a binding advance pricing agreement (APA). The Tax Office issues a binding decision based on the submitted documentation if the prices in a business relationship are at arm's length.

Czech Ministry of Finance has issued non-binding guidelines regulating the eligible

transfer pricing policies and documentation of the applied transfer pricing policies which may be used by the Czech taxpayers. The Ministry's guidelines follow the OECD Transfer Pricing Guidelines. The Czech tax legislation does not prescribe any obligation to maintain any transfer pricing documentation. Nevertheless, as such documentation is very likely to be required by the Czech Tax Authorities during a potential tax audit, it is highly recommended that such documentation is prepared in advance, as the deadline is usually very short.

The Czech legal entities which participate in transactions with related parties have new reporting obligation effective 1 January 2014. The taxpayers are obliged to file a separate disclosure form on "Overview of Transactions with Related Parties" together with the corporate income tax return.

Tax Administration

Generally, taxpayers must file tax returns within three months following the end of the tax period. Czech legal entities that are required to prepare audited financial statements or whose tax return is signed by a registered tax advisor must file their tax returns within six months following the end of the tax period. In certain cases (e.g., a merger), the statutory period for submission of the tax return is reduced.

Corporate income-tax liability (i.e., the difference between the sum of the advance tax payments paid during the relevant tax period and the total tax liability) is payable by the deadline for submission of the tax return. If the reported tax liability exceeds the statutory threshold, the taxpayer is obliged to pay advance tax payments on a quarterly (if the last known corporate income tax liability exceeded CZK 150,000) or half-yearly basis (if the last known corporate income tax liability was between CZK 30,000 and CZK 150,000). If the last known corporate income tax liability is less than CZK 30,000, no advance payments are required.

If the tax return is not filed or not filed on time, the tax authorities levy against the taxpayer a penalty of 0.05% of due tax per each day of such delay, up to 5% of the tax liability. In case of tax loss, the tax

authorities levy a penalty of 0.01% per each day of such delay, up to 5% of the tax loss. The penalty cannot exceed CZK 300,000. The penalty does not apply in the first 5 days following the deadline.

If the tax is not reported and paid correctly and the Tax Office discloses such incorrectness then the Tax Office assess additional due tax (or lower tax loss) and levy a penalty (fine) and a late-payment interest on the taxpayer. The penalty is calculated as 20% of the additionally assessed tax or 1% of a reduced tax loss, and the late-payment interest is calculated as the repo rate of the Czech National Bank effective as of the first day of each half year increased by 14 percentage points.

Investment Incentives

Investment incentives are available not only to investors launching or expanding production, but also to technology centres and business support services centres. Thanks to the amendment to the Investment Incentives Act that came into force on 1 May 2015, investors can now apply for more types of investment incentives.

Supported Areas

Industry

- Introduction or expansion of production in sectors of the manufacturing industry

Technology centres

- Construction or expansion of research and development centres

Business support services centres

- Launch or expansion of the activities of:
 - Shared-services centres
 - Software-development centres
 - High-tech repair centres
 - Data centres
 - Customer support centres (call centres)

The national investment scheme

Tax incentive	Corporate income-tax relief for up to ten years for new companies Partial corporate income-tax relief for up to ten years for existing companies
Job-creation grants	Financial support for creation of new jobs
Training and retraining grants	Financial support for training and retraining of new employees
Cash grant for capital investment	Financial support in the case of strategic investments in manufacturing or in technology centres
Property tax incentive	Property tax exemption for up to five years

Source: CzechInvest

Tax incentive

The tax incentive has two forms. If a new company (legal entity) is established for the investment project, the new company is eligible for corporate income-tax relief for up to ten years. If the investment takes the form of an expansion project within an existing Czech company (legal entity), the company is eligible for partial corporate income-tax relief for up to ten years. The tax relief is terminated when the company has reached the maximum permissible state-aid intensity (see the map).

Job-creation and training and retraining grants

Job creation and training and retraining grants are provided only in districts with unemployment that is at least 25% higher than the national average and in special industrial zones. Job creation grants are offered at three levels:

- CZK 300,000 per new job in special industrial zones
- CZK 200,000 per new job in regions with an unemployment rate that is at least 50% higher than the national average
- CZK 100,000 per new job in regions with an unemployment rate that is between 25% and 50% higher than the national average

Training and retraining grants are offered in the amount of up to 25% or 50% of eligible training costs depending on the region.

Cash grant for capital investment

A cash grant for capital investment is available only to strategic investment projects. For capital investments in projects in this category, the level of financial support may be up to 10% of eligible investment costs. This support is available for projects in the manufacturing industry and technology

centres. Decisions concerning support for eligible projects will be made by the Government of the Czech Republic.

Property tax incentive

A property tax exemption for up to five years can be offered in special industrial zones. Special industrial zones are zones designated as such by the Government of the Czech Republic.

Eligibility Criteria

For all types of activities, it applies that the recipient of incentives shall not start work on the project (i.e. shall not acquire any assets including orders of machines and equipment and shall not commence construction works) prior to submission of the application to CzechInvest and that the recipient shall retain the required assets and created jobs throughout the entire period of utilising state aid (at least for a period of five years).

Eligibility criteria for the manufacturing industry

- The investor must invest at least CZK 100 million (approx. \$4 million) within three years. This limit is reduced to CZK 50 million in regions with special state aid and in special industrial zones.
- At least CZK 50 million (CZK 25 million) must be invested in new machinery.
- The investor must create at least 20 new jobs.

Strategic investment

- The investor must invest at least CZK 500 million (approx. \$20 million) within three years.
- At least CZK 250 million must be invested in new machinery.
- The investor must create at least 500 new jobs.

Eligibility criteria for technology centres

- The investor must invest at least CZK 10 million (approx. \$0.4 million) within three years.
- At least CZK 5 million must be invested in new machinery.
- The investor must create at least 20 new jobs.

Strategic investment

- The investor must invest at least CZK 200 million (approx. \$8 million) within three years.
- At least CZK 100 million must be invested in new machinery.
- The investor must create at least 100 new jobs.

Eligibility criteria for business support service centres

- Creation of at least 20 new jobs at software-development centres and data centres.
- Creation of at least 70 new jobs at shared-services centres and high-tech repair centres.
- Creation of at least 500 new jobs at customer support centres (call centres).

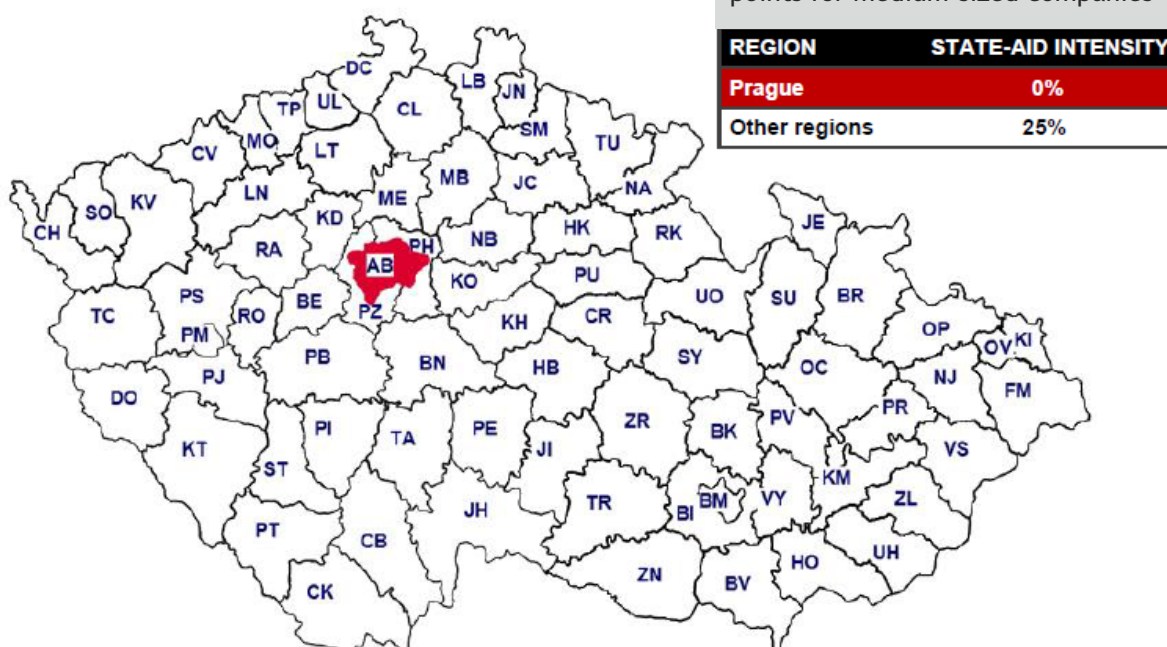
State Aid

The maximum permissible state-aid intensity in the Czech Republic is 25% of total eligible cost for large enterprises. The maximum state-aid intensity for data centres is 6.25%. State aid is understood to be tax incentives, job creation grants, property tax exemption and cash grants for capital investment. Training and retraining grants are not counted towards the maximum state aid intensity, as they are provided as extra cash.

Eligible Costs

Either fixed assets, when the value of machinery comprises at least half of the value of acquired assets, or two years' gross wages for newly created jobs can serve as eligible costs from which the maximum state-aid intensity is calculated.

Maximum Permissible State-aid Intensity (2014-2020)

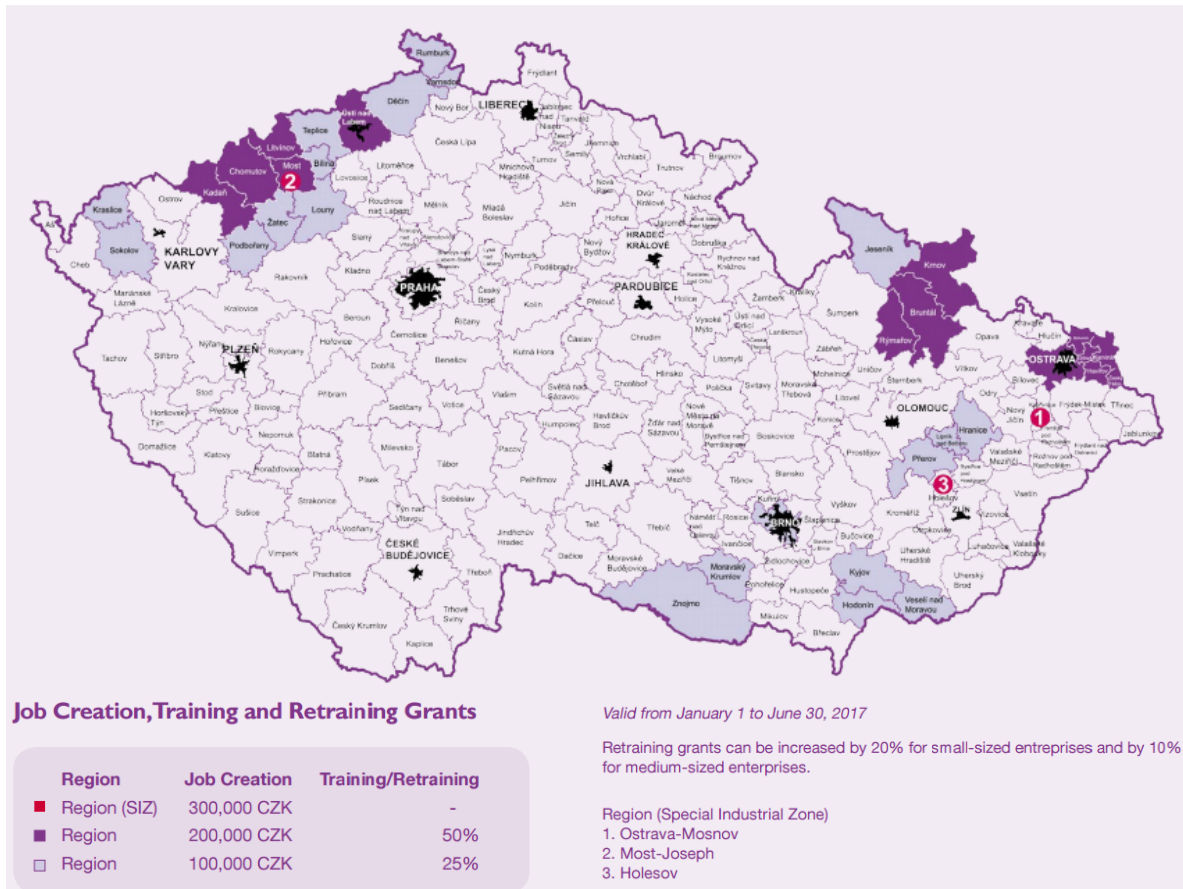


Source: Czechinvest

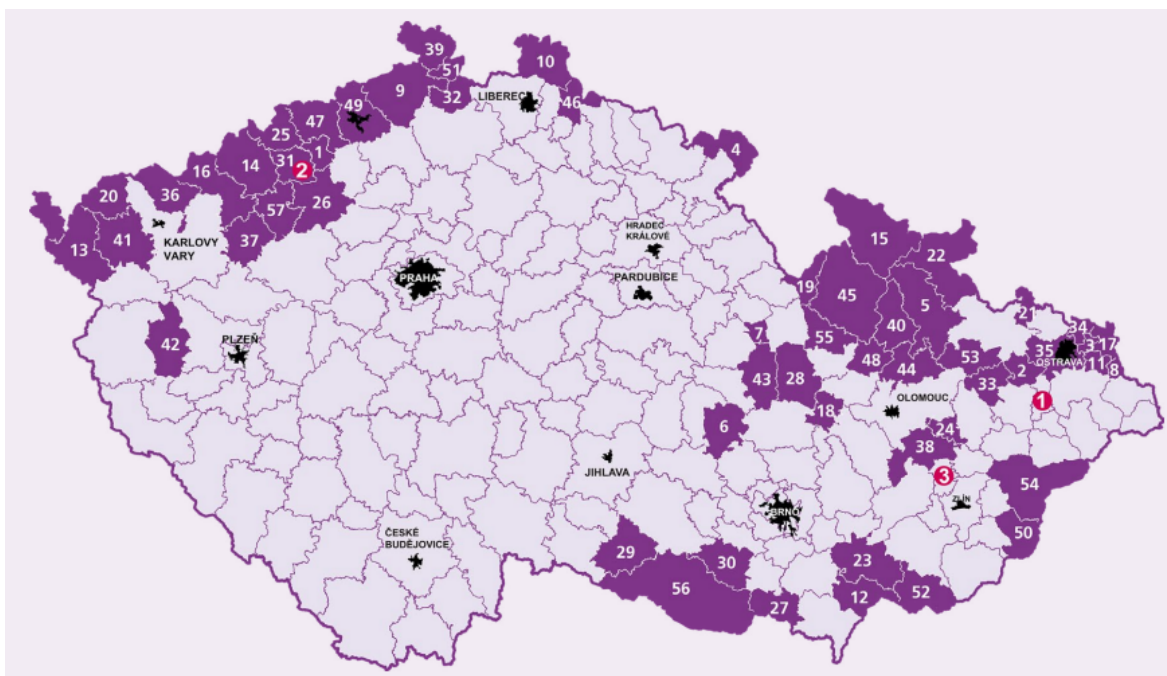
The amendment to the Act on Investment Incentives Effective from 1st May 2015 1 EUR = app. CZK 27,5

Type of activity	Types of Investment Incentives		Eligibility criteria		Eligible costs	Maximum intensity of support for large enterprises
	Investment	Strategic investment	Investment	Strategic investment		
Manufacturing industry	Corporate income tax relief for a period of 10 years Cash grant for job creation up to the amount of CZK 300,000 Cash grant for training and retraining up to the amount of 50 % of training costs Property tax exemption for a period of 5 years in special industrial zones	Except the standard incentives: Cash grant for acquisition of assets up to 10 % of eligible costs (max. CZK 1,5 bil.)	Minimum investment of CZK 50 – 100 million depending on the region of which at least 50% must be invested in new machinery and at the same time creation of at least 20 new jobs	Minimum investment of CZK 500 million of which at least 50% must be invested in new machinery and at the same time creation of at least 500 new jobs	Assets, whereas new machinery must comprise 50% of eligible costs	25% of eligible costs, except Prague
Technology centres (R&D)	Corporate income tax relief for a period of 10 years Cash grant for job creation up to the amount of CZK 300,000 Cash grant for training and retraining up to the amount of 50 % of training costs Property tax exemption for a period of 5 years in special industrial zones	Except the standard incentives: Cash grant for acquisition of assets up to 10 % of eligible costs (max. CZK 0,5 bil.)	Minimum investment of CZK 10 million of which at least 50% must be invested in new machinery and at the same time creation of at least 20 new jobs	Minimum investment of CZK 200 million of which at least 50% must be invested in new machinery and at the same time creation of at least 100 new jobs	Assets, whereas new machinery must comprise 50% of eligible costs or Two years' wage costs of newly created jobs	25% of eligible costs, except Prague
Business support services centres	Corporate income tax relief for a period of 10 years Cash grant for job creation up to the amount of CZK 300,000 Cash grant for training and retraining up to the amount of 50 % of training costs Property tax exemption for a period of 5 years in special industrial zones	X	Creation of new jobs: SW/IT development – 20 shared service centre – 70 high-tech repair centre – 70 data centre – 20 customer support centre – 500	X	Assets, whereas new machinery must comprise 50% of eligible costs or Two years' wage costs of newly created jobs	25% of eligible costs, except Prague

Source: CzechInvest



Source: CzechInvest



Specification of Regions Based on Minimum Investment

- Regions and Special Industrial Zones CZK 50 mil.
- Regions CZK 100 mil.

Legend to the Map

1. Bílina, 2. Bílovec, 3. Bohumín, 4. Broumov, 5. Bruntál, 6. Bystřice nad Pernštejnem, 7. Česká Třebová,
8. Český Těšín, 9. Děčín, 10. Frýdlant, 11. Havířov, 12. Hodonín, 13. Cheb, 14. Chomutov, 15. Jeseník, 16. Kadaň,
17. Karviná, 18. Konice, 19. Králíky, 20. Kraslice, 21. Kravaře, 22. Krnov, 23. Kyjov, 24. Lipník nad Bečvou,
25. Litvínov, 26. Louny, 27. Mikulov, 28. Moravská Třebová, 29. Moravské Budějovice, 30. Moravský Krumlov,
31. Most, 32. Nový Bor, 33. Odry, 34. Orlová, 35. Ostrava, 36. Ostrov, 37. Podbořany, 38. Přerov, 39. Rumburk,
40. Rymařov, 41. Sokolov, 42. Stříbro, 43. Svitavy, 44. Šternberk, 45. Šumperk, 46. Tanvald, 47. Teplice, 48. Uničov,
49. Ústí nad Labem, 50. Valašské Klobouky, 51. Varnsdorf, 52. Veselí nad Moravou, 53. Vítkov, 54. Vsetín, 55. Zábřeh,
56. Znojmo, 57. Žatec

Source: CzechInvest

Conducting Business in Turkish Automotive Industry

Turkish government explicitly declares intentions to develop automotive industry to become one of the leading car manufacturers in the world.

Regardless of the location of the investment, all automotive industry investments in Turkey (including sub industry investments) are supported by several measures. Local and foreign investors have equal access to them.

Regional Investments Incentive Scheme Measures

Incentive Item		Region I	Region II	Region III	Region IV	Region V	Region VI
VAT exemption		+	+	+	+	+	+
Custom duty exemption		+	+	+	+	+	+
Tax reduction as of investment contribution rate	Out of OIZ	15%	20%	25%	30%	40%	50%
	Within OIZ	20%	25%	30%	40%	50%	55%
Social Security Premium Support (employer's share)	Out of OIZ	2 Years	3 Years	5 Years	6 Years	7 Years	10 Years
	Within OIZ	3 Years	5 Years	6 Years	7 Years	10 Years	12 Years
Land allocation		+	+	+	+	+	+
Interest support	Local loans	-	-	3 Points	4 Points	5 Points	7 Points
	Foreign currency loans			1 Points	1 Points	2 Points	2 Points
Social Security Premium Support (Employee's Share)		-	-	-	-	-	10 Years
Income Tax Withholding Allowance		-	-	-	-	-	10 Years

Various governmental and industrial institutions provide additional incentives

Institution	SME or General	Incentive details
KOSGEB	SME	Gives R&D, innovation and industrial application incentives.
TÜBİTAK	General	Uses industry incentives by Ministry of Economy; R&D investments receive R&D tax discount of %100 as of 2008; the companies that use law no:5746 discount cannot use law no:5520 discount at the same time.
Ministry of Science, Industry, and Technology	General	Supports attempts of cumulative industrialization with legislation called "Cumulative Support Program Legislation"; support amount provided by ministry without payback, for business plan cannot be more than 50% of budget, while for each supported area cannot be more than 75% of the budget.
TTGV	General	Supports two types of R&D projects <ul style="list-style-type: none"> •Technology development projects support (suspended in current in 2013): "Technological product" and "Technological Process Innovation", classified as R&D projects are supported; maximum support is 1 million USD, maximum support duration is 2 years and supports need to be paid-back •Advanced technology projects support: Companies applying for this support have R&D projects in food processing, biomedical, or climate control technologies); manufacturing and software companies are targeted and can receive a maximum support of 3 million USD to be paid back in three years.

Turkey vs Czech Republic

Categorization	Czech Republic	Turkey
Manufacturing ind., service centres, technology centres	X	
General, Regional, Large Scale and Strategic Investment	X	X

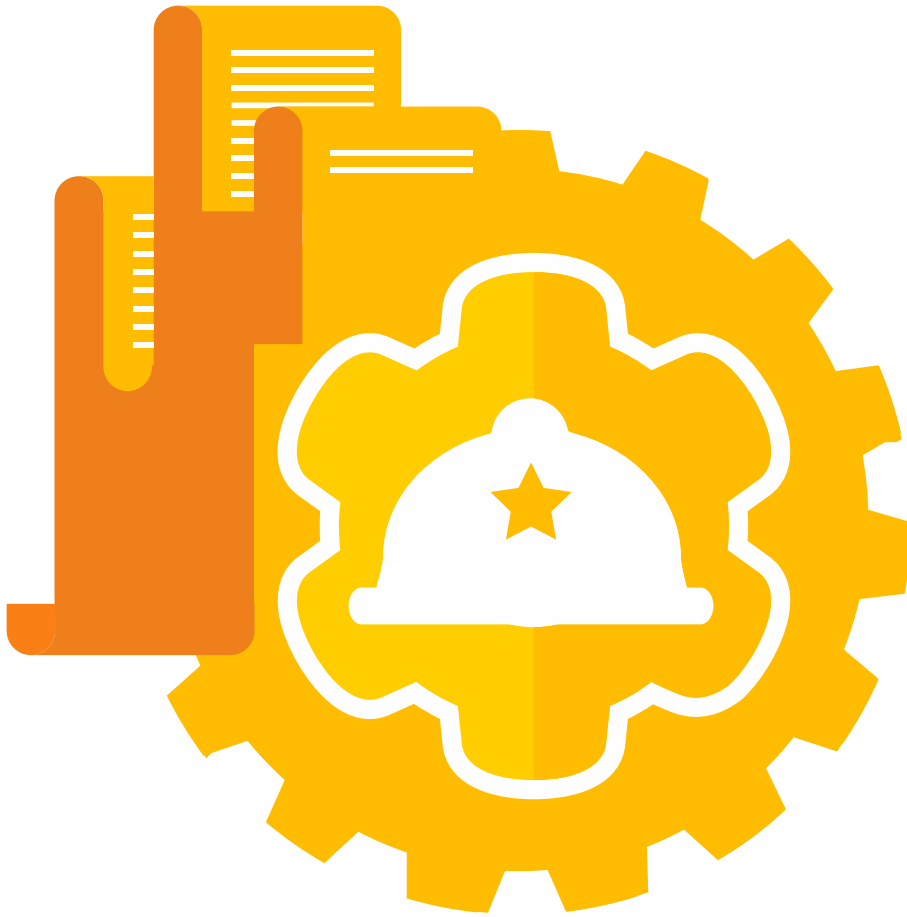
Tax incentives	Czech Republic	Turkey
corporate income relief	X	
value added tax (VAT)		X
tax Exemptions in Specific Economic Zones		X
tax exemptions in Technolgy Development Zones		X
tax Incentives for R&D		X

Other incentives	Czech Republic	Turkey
Job creation grants	X	
Training and retraining grants	X	
Cash grant for capital investments	X	
Property tax income	X	
Interes Rate Support		X
Custom Duty Exemption		X
Export Support		X
Social Security Premium Support		X

Czech Republic offers a better investment environment and a more sophisticated network for investors with the added advantage of the EU than Turkey.



Labor Costs in Automotive Sector



Employment in the Automotive Sector

Summary

The Czech law stipulates that employees must not receive wage that is lower than the minimum wage. The minimum possible wage is declared by a decree of the government of the Czech Republic and published in the Collection of Acts. As of 1st January 2016, the wage for employees remunerated by a monthly wage is 9,900 CZK, for employees paid by hourly wages was 58.70 CZK/hour. This wage for that purpose does not include overtime bonus, premium for work in difficult and harmful-

to-health working conditions, premium for night work and work on holidays (a premium for an hour of night work is amounting to 20 % of average hour income, it quotes at least 11.74 CZK). The minimum wage is valid for any employment (both for limited and unlimited period of time, for full and part-time employment); however, it does not apply to contract work agreements performed outside the employment contract.

The Total Number of Employees

Vehicle manufacturers	33,761 persons
Component manufacturers (suppliers)	74,888 persons
Other companies	4,228 persons
Total (as of 31 December, 2014):	112,877 persons

Source: AutoSAP

Currently, The Czech automotive industry employs more than 150,000 people and accounts for more than 20% of both Czech manufacturing output and Czech exports.

Labour costs

	Y 2010	23,951
	Y 2011	24,319
	Y 2012	25,101
Average gross monthly wages, in CZK	Y 2013	25,128
	Y 2014	25,686
	Y 2015	26,467
	H1 2016	26,898
Minimum wage per month in 2016, in CZK		11,000
Employer's social and health insurance contributions		34%

Average exchange rates CZK/EUR: 25.29 (2010), 24.586 (2011), 25.143 (2012), 25.974 (2013), 27.533 (2014), 27.283 (2015), 27.033 (2016)

Source: Czech Statistical Office 2017, Czech National Bank 2017

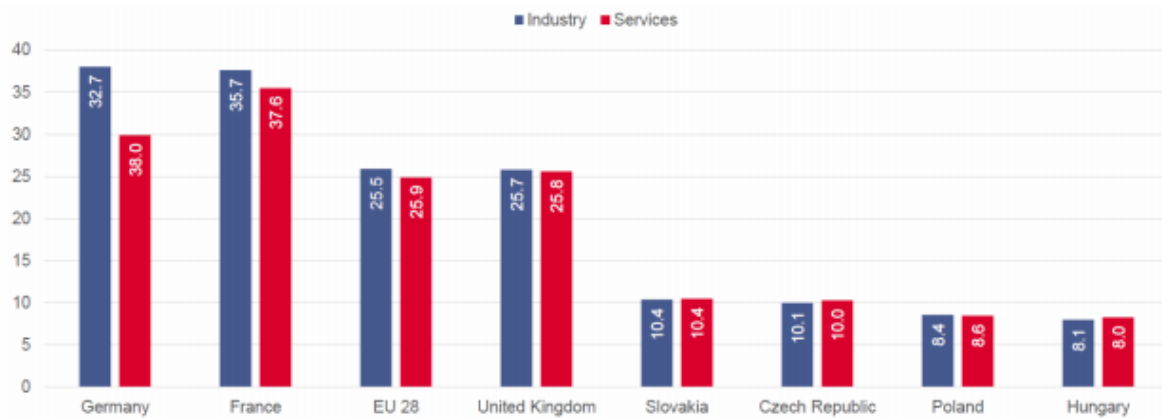
Labour costs in the Czech private sector stand at 45% of the EU-28 average. Nevertheless, the main benefit of the Czech Republic consists in the excellent cost-quality ratio of the country's highly educated and skilled workforce. This is especially relevant within the comparison to other CEE countries.

According to Eurostat's data from 2013, the Czech Republic's labour costs remain very competitive in the EU. In 2015, average hourly

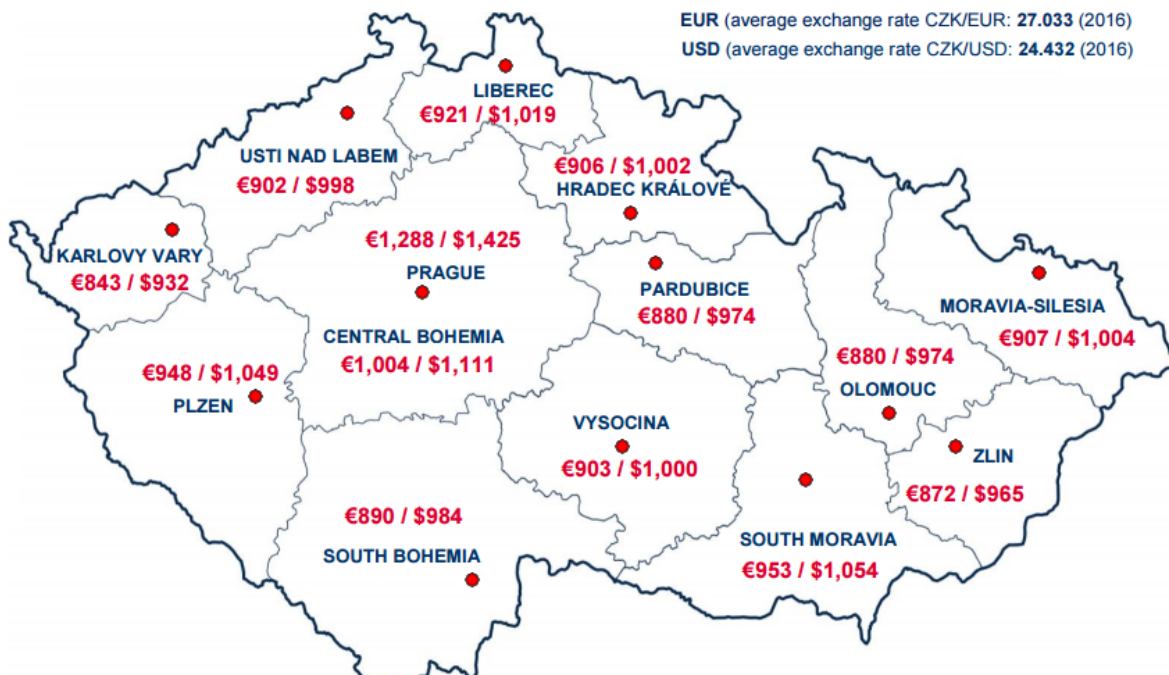
labour costs in the whole economy (excluding agriculture and public administration) were estimated to be 25.6 euro in the EU.

Average gross wage of an employee in Automotive industry is higher than average labour cost in Czech Republic. In year 2014, average wage of an employee in Automotive Sector was realized as CZK 31,867 (1,161€) with an increase of 1,6%.

HOURLY WAGES, BREAKDOWN BY ECONOMIC ACTIVITY IN 2015 (EUR)



AVERAGE GROSS MONTHLY WAGES IN THE REGIONS OF CZECH REPUBLIC, H1 2016



In year 2014, average wage of an employee in Automotive industry was realized as CZK 31,867 (1,161€). By considering the average increase rate in gross wages in Czech Republic for 2016, average wage of an employee in Automotive Sector can be assumed as 1,213€/month. As shown in below table average gross wage in “industry” is 999€. So, the average wage of an employee in Automotive industry is 16,2% higher than industry average.

Average Monthly Wages in Selected Sectors And Positions in The Czech Republic In H1 2016 (eur/month)

ISCO CODE	EUR
Legislators, senior officials and managers	1,731
Professionals	1,159
Technicians and associate professionals	1,099
Clerks	942
Service workers and shop and market sales workers	798
Skilled agricultural and fishery workers	706
Craft and related trades workers	789
Plant and machine operators and assemblers	848
Elementary occupations	500
Manual workers	671
Non-manual workers	1,138

Average exchange rate CZK/EUR: 27.033 (2016)
Source: Ministry of Labour and Social Affairs, 2017

Avg. Labour Costs in Automotive Industry (€)		
	Czech	Turkey
Per year	19,550	9,640
Per month	1,629	804

Total labour cost include employee's insure contribution and then the average total labour cost in automotive industry for 2016 was 1,629€/month.

CZ-NACE	EUR
Financial and insurance activities	1,950
Information and communication	1,853
Electricity, gas, steam and air conditioning supply	1,538
Professional, scientific and technical activities	1,239
Mining and quarrying	1,130
Public administration, defence; compulsory social security	1,085
Human health and social work activities	1,003
Manufacturing	999
Wholesale and retail trade; repair of motor vehicles and motorcycles	934
Transportation and storage	925
Education	919
Water supply; sewerage, waste management and remediation activities	914
Construction	883
Real estate activities	872
Agriculture, forestry and fishing	769
Administrative and support service activities	659
Accommodation and food service activities	565

Average exchange rate CZK/EUR: 27.033 (2016)
Source: Czech Statistical Office 2017,
Czech National Bank 2017

Gross Monthly Wages (median) In the Automotive Sector, 2013

Position	CZK/month	EUR/month	Total labour costs*
Mechanical engineers	40,602	1,480	1,983
Mechanical engineering technicians	29,114	1,061	1,422
Welders and flame cutters	23,840	869	1,164
Sheet-metal workers	23,046	840	1,125
Electrical mechanics and fitters	24,265	884	1,185
Motor vehicle mechanics and repairers	20,433	745	998
Assemblers	18,956	691	926
Mechanical-machinery assemblers	21,386	779	1,044
Manufacturing labourers	15,623	569	763

*Total labour costs include employer's insurance contributions (34%).
Average Exchange Rate 1 EUR=27.441 CZK (average for Q1 2014, Czech National Bank 2014)
Source: Ministry of Labour and Social Affairs, 2014

In 2013, a technician's gross salary in automotive industry in Czech Republic was 1,061€ as seen in above table. When we put the average salary increase rate it becomes 1,135€ for 2016.

In Turkey average gross salary for a technician in automotive industry in Turkey is 1,093€ which is 4% less than a technician's gross salary in automotive industry in Czech Republic.

In 2013, assemblers' gross salary in automotive industry in Czech Republic was 691€ as seen in above table. When we put the average salary increase rate it becomes 740€ for 2016.

In Turkey average gross salary for assemblers' in automotive industry in Turkey is 613€ which is 18% less than a assemblers' gross salary in automotive industry in Czech Republic.



Taxes on Automotive Sector



1. Car Registration

1.1. When does a car need to be registered?

The moment a new or second-hand vehicle is put into operation on Czech public roads, the obligation to register such car arises. The registration should be applied for via a form (issued for this purpose) from the authorised municipal office.

At the moment of its registration, the car must have an approval of technical ability (a certificate of roadworthiness) and be insured to cover damage caused to other vehicles. If the car is acquired from another EU member state and qualifies as a new means of transport, proof that Czech VAT on acquisition has been paid must be provided.

1.2. Who can register a car?

A vehicle needs to be registered in the name of the owner or in the name of the operator of the vehicle (if the operator differs from the owner). The person registering the vehicle should be an individual whose permanent address (or residence permit address) is in the Czech Republic or a legal person with its registered seat in the Czech Republic that is allowed to use the vehicle.

However, if the duration of stay of the physical person (Czech non-resident) owning/operating a vehicle in the Czech Republic does not exceed 185 days within the relevant calendar year, there is no obligation to register the vehicle in the Czech Republic.

If the owner or operator of a vehicle in whose name the registration was made changes, an obligation to notify the municipal office arises within ten days of the day the owner/operator changed.

1.3. Is a foreign owner allowed to register a vehicle in the country?

A foreign owner (physical person) is allowed to register his vehicle on the condition that he has a permanent address (or residence permit address) in the Czech Republic. The legal person is obliged to register a vehicle if he has a seat in the Czech Republic or if the vehicle is operated by a Czech resident (i.e. by an individual with a permanent address in the Czech Republic or staying in the Czech Republic for over 185 days within the calendar year, or a legal person with its registered seat in the Czech Republic).

1.4. Can a vehicle with a foreign number plate be used on public roads?

If a vehicle is operated by a Czech physical person (non-resident) for less than 185 days, it can be used on Czech public roads with foreign number plates. If a vehicle is operated by a legal person not having its seat in the Czech Republic, it can be used on Czech public roads with foreign number plates (unless it fulfils any of the conditions set in 1.2 and 1.3 above).

1.5. Registration fee In case of registration fee the following administrative fee is required:

Administrative fee	Fee
Motor vehicle with at least 4 wheels	800 CZK
Trailer with weight maximum 750 kg	500 CZK
Trailer with weight over 750 kg	700 CZK

When a vehicle is registered for the first time in the Czech Republic, the registration fee due is as follows.

Emission limit	Fee
Euro 3 and above	0 CZK
Euro 2	3,000 CZK
Euro 1	5,000 CZK
No limit	10,000 CZK

2. Car taxation

2.1. What are the different car taxes?

There is only one car tax, called the road tax (which is applied to vehicles used for business purposes), in the Czech Republic.

2.2. Road tax (applied to vehicles used for business purposes)

2.2.1. Taxable event

Cars and trailers registered and operated in the Czech Republic, if used by a payer of corporate income tax with taxable income or a payer of personal income tax who uses the car for his taxable business activity, are subject to tax. Lorries and cargo trailers with a maximum permitted weight of over 3.5t registered in the Czech Republic are subject to tax regardless of whether they are used for business purposes. There are several exemptions from the road tax, e.g. for vehicles used by diplomats (based on a reciprocity principle), public traffic vehicles, first-aid vehicles, electric-driven, hybrid vehicles, vehicles using as a fuel E85 (a mixture of 85% ethanol and 15% gasoline), LPG (Liquefied Petroleum Gas) or CNG (Compressed Natural Gas). Further conditions for exemption apply.

2.2.2. Taxable person

A taxable person is

- the operator of the car stated in the car documentation;
- an employer paying an allowance to an employee for his using of his private car for business purposes (if the tax liability did not arise for the operator of the vehicle);
- a branch of a foreign entity or a permanent establishment that has been established for corporate tax purposes.

2.3. Tax due

The road tax liability arises starting from the month the above-mentioned conditions are fulfilled.

The taxable period is a calendar year, and a road tax return has to be filed by January 31 of the following calendar year. A taxpayer is obliged to pay tax advances on a quarterly basis by April 15, July 15, October 15 and December 15.

For other cars and trailers, the tax is dictated by the maximum permitted weight, the number of axles or the maximum permitted weight on axles and varies from 1,800 CZK to 50,400 CZK. 2.4

Tax reductions

The tax is reduced by

- 48% during the first 36 months following the first registration of the car,
- 40% during the following 36 months and
- 25% during the following 36 months.

Lorries and trailers qualify for an additional reduction scheme.

For cars imported from abroad, a taxpayer can declare an entitlement to a tax reduction by producing a certificate or other document confirming the first registration of the car. This document should be issued either by a foreign registration authority or, if all required information is at hand, by a Czech registration authority.

An employer using its employee's private passenger car for business purposes can use a special scheme if it is more beneficial than the above rates. Under this scheme, the tax is 25 CZK for every day the car is used within the Czech Republic.

	Engine's cylinder capacity (cc)	Annual amount of road tax*
For passenger cars, the tax is dictated by the engine's cylinder capacity.	< 800	1,200 CZK
	800–1,250	1,800 CZK
	1,250–1,500	2,400 CZK
	1,500–2,000	3,000 CZK
	2,000–3,000	3,600 CZK
	> 3,000	4,200 CZK

3. Income taxes

3.1. Depreciation

The purchase price of a vehicle used for business purposes can be depreciated for tax purposes by its legal owner.

The depreciation period for most vehicles is five years (second depreciation group). Either a straight-line or accelerated depreciation method can be used. In this respect, the following depreciation rates/coefficients must be applied:

Depreciation	First-year depreciation	Depreciation rate/coefficient	Depreciation rate/coefficient for increased input price
Straight-line depreciation	11	22.25	20
Accelerated depreciation	5	6	5

The tax depreciation may be claimed in the full amount even if the entrepreneur or his employees use the vehicle partly for private purposes.

Costs related to the reconstruction or modernisation of a vehicle exceeding CZK 40,000 within one tax period which qualify as a technical appreciation (improvement) should be capitalised into the input value of the car and depreciated together with the car for tax purposes.

3.2. Operational lease

The lessor, being the owner of the vehicle, can depreciate it for tax purposes (straight-line or accelerated depreciation).

The rent generally represents a tax-deductible cost for the lessee. Specific conditions must be met if the lessee buys the vehicle after the end of the operational lease (i.e., the conditions for financial lease were not met).

In case there is a purchase of the vehicle during or after the term of the contract by the lessee - for the paid lease instalments to remain a tax-deductible cost, the purchase price of the car must not be lower than the tax net book value of the car calculated using the straight-line depreciation method. In case

this condition is not met, all the lease instalments which were paid in the past become tax nondeductible in the current period when the purchase took place. The purchase price of the vehicle might be increased by the lessee/purchaser by these amounts (i.e., they will be tax deductible expense in the form of tax depreciation).

3.3. Financial lease

In respect of a financial lease with subsequent purchase of the leased vehicle or with the

right of the lessee to purchase the vehicle, lease payments should be recognised as tax-deductible expenses by the lessee on condition that:

the term of the lease is at least a minimum tax depreciation period reduced by 6 months (i.e., 54 months for most vehicles);

- on termination of the lease, ownership of the vehicle is immediately transferred from the lessor to the lessee and the purchase price of the vehicle does not exceed the tax net book value that such vehicle would have had if depreciated by the straight-line method of depreciation as at the day of such purchase (if, as at the day of purchase, a leased vehicle has accumulated depreciation equal to 100% of the input price, this condition shall not apply);
- on termination of the financial lease, the lessee includes the subsequently purchased vehicle in his business assets (i.e. records it in accounts);
- during the term of the contract the rights to use the vehicle, duties of care and risks associated with the use of the vehicle are transferred to the lessee.

The lessor, being the owner of the vehicle, can depreciate the vehicle in a standard way (straight-line or accelerated depreciation).

3.4. Hire purchase

Czech income tax law does not prescribe a specific treatment for this type of sale. Therefore, the income tax treatment of hire purchase will be determined to a large extent by the legal treatment - in particular, the transfer of title of the vehicle. If the title passes at the beginning (effectively a purchase loan), the tax treatment will be the same as for a standard purchase. The debtor may depreciate the car for tax purposes. The creditor will generate taxable income.

If the title passes after payment of the last instalment, the hire purchase will likely be treated in the same way as a financial lease.

If ownership of a car is transferred from the debtor to the creditor in order to secure the related debt, the debtor can depreciate the vehicle based on a contract to borrow for the period for which the debt will be secured through the transfer of ownership.

4. VAT

4.1. General

Generally, the standard rate of 21% VAT applies to all car-related transactions that are deemed for VAT purposes to take place in the Czech Republic.

4.2. Deduction

Under general conditions a VAT payer is entitled to claim full VAT deduction on the acquisition or technical improvement of all types of cars if the VAT payer is using a car solely for business purposes. It is also possible to claim full VAT deduction on the lease of a vehicle. However, an input VAT claim is possible only if the VAT payer holds a valid tax document in the respective period.

If a car (purchased or leased by way of a financial lease) is being used for both business and private purposes by an entrepreneur or by his employee, the entrepreneur is entitled to claim a VAT deduction only to the extent to which the vehicle is used for business purposes. This is done via an estimated coefficient. If, however, the actual use differs

by more than ten percentage points from the estimated coefficient, the taxpayer may correct the claim (if the actual claim was higher than the estimate) and must correct it (if the actual claim was lower than the estimate). Also, there is a mechanism for correcting the claim in subsequent years (in total, five years are subjected to this clawback provision).

In the case of an operational lease, the taxpayer can choose to deduct 100% of the input VAT upon each instalment and to tax the subsequent private use of the business car. VAT on other related costs (especially fuel) should also be claimed only to the extent the vehicle is used for business purposes.

4.3. Hire purchase

Czech VAT law does not prescribe a specific treatment for this type of sale. Therefore, the VAT treatment of hire purchase will be determined to a large extent by the legal treatment - in particular, the transfer of title of the vehicle.

If the title passes at the beginning (effectively a purchase loan), the tax treatment will be the same as for a standard purchase. The debtor may claim input VAT from the price of the vehicle as described in section 4.2 above. If the title passes after payment of the last instalment, the hire purchase will be treated for VAT purposes in the same way as either a financial lease or an operational lease depending on whether an obligation or option to buy the vehicle was agreed in the lease agreement (see sections 4.4 and 4.5 below).

4.4. Operational lease

Generally, an operational lease is considered to be a supply of services and is similar to a rental agreement. Operational leases are subject to Czech VAT at the standard rate of 21%. VAT should be calculated on each payment made.

The lessee is allowed to deduct all VAT incurred with respect to an operational lease where the vehicle is used for economic activities. If mixed use is made of the car, the taxpayer can choose either to deduct 100% of the input VAT at the beginning and tax the subsequent private use or to claim only a

respective proportion of the VAT.

In general, the place of supply of an operational lease is the place where the lessee's business is established or the place where the lessee has a fixed establishment if the supply of an operational lease is provided to that fixed establishment. If the lessee's business is established in a non-EU country, but it is VAT registered in the Czech Republic and, at the same time, the actual use of the vehicle is in the Czech Republic, the place of supply is in the Czech Republic.

However, different rules apply for short term operational leases. If the operational lease does not exceed 30 days (i.e. short term lease), the place of supply is the place where the vehicle is physically put at the disposal of the lessee. If the vehicle is put at the disposal of the lessee in a non-EU country but it is actually used in the Czech Republic, use and enjoyment rules will apply and Czech VAT will be due. If, on the other hand, the vehicle is put at the disposal of the lessee in the Czech Republic, but it is actually used in a non-EU country, Czech VAT will not be due.

Special rules apply for the long term lease of vehicles to non-taxable persons.

4.5. Financial lease

A financial lease is generally considered a supply of goods according to the Czech VAT Act.

The lessee is entitled to deduct VAT from the full amount paid to the lessor under a financial lease of a vehicle. This applies provided the VAT payer will use the vehicle for business purposes only. In the case of using the vehicle for both business and personal purposes, the same approach as indicated in section 4.2 will be applied.

Provided that the contract does not include an obligation for the lessee to acquire the title to the respective vehicle, the lease is treated as an operational lease from the VAT point of view (see section 4.4 above). However, if the vehicle is eventually purchased by the lessee, the purchaser may, apart from the rent, claim input VAT from the purchase price of the vehicle as described in section 4.2 above.

4.6. Car manufacturing

A specific regime applies to car manufacturers. In the course of the production of cars, input VAT from related costs can be claimed by the manufacturer. However, in the case of cars from own production, which the manufacturer uses for purposes not entitling him to a full deduction (mostly if he is letting his employees use company cars for private purposes), output VAT must be declared and paid as soon as the car is put to use, and a partial input VAT deduction should be claimed in the way described in section 4.2 above.

5. Company Car

5.1 VAT due on private use of company cars

If the employer allows his employee to use a company car for private purposes for free, he is obliged to reduce the input VAT claimed (from either the acquisition price or financial lease fees, as applicable) proportionately between the private and business use of the particular employee. Documentation and evidence should be kept to justify the deduction. In case the car of the employer has been hired based on an operational lease, the employer can choose to deduct 100% of the input VAT upon each instalment and to tax the subsequent private use of the business car. For more details please refer to section 4.2.

5.2. Company car

An employee who can use a company car not only for business but also for private purposes has his tax base for personal income tax purposes increased by an amount equal to 1% of the price of the car (including VAT) per month. The increase is at least 1,000 CZK per month.

In the case of non-business trips, company costs on fuel are generally not deductible for corporate tax purposes (unless it is an employee benefit declared in an internal bylaw or work contract). The company's fuel used for private journeys is liable to personal income tax for the employee.

Commuting is not considered travelling for

business purposes, and the company's fuel used for commuting is generally non-tax-deductible for the employer (unless it is an employee benefit declared in an internal bylaw or work contract). The company's fuel used for private journeys is subject to personal income tax for the employee.

A lump-sum deduction for using a car for business purposes may be applied. A taxpayer can either claim the expenses in their actual amount supported by documentation or as a monthly lump-sum deduction (5,000 CZK per car per month). This lump sum covers fuel and parking expenses. This lump-sum deduction cannot be applied in case the vehicle could be used by the employee for private purposes. If the car is only partly used for business purposes, the lumpsum deduction would be reduced by 20%, to 4,000 CZK. Other related costs including tax depreciation must be reduced accordingly (i.e., by 20%).

One taxpayer is entitled to claim expenses as a lump sum (or reduced lump sum) for a maximum of three vehicles. In this respect, the reduced lump sum can only be applied to one car, whereas the full lump sum will always apply to the other two cars (although these cars are also used only partly used for business purposes).

However, a lump-sum rule does not apply to VAT. VAT payers are still obliged to prove that purchased fuel or other expenses subject to input VAT claims are used for their business activities. One of the ways of doing this is justification through a mileage book.

6. Income taxes – driver's personal taxation

An employee using his private car for the company's business purposes is entitled to compensation for the use of the car and for the fuel consumed. The fuel is compensated based on the actual price, while the use of the car is compensated by way of a fixed allowance of 3.80 CZK per kilometer. These compensations do not affect the driver's tax base for personal income tax purposes and are taxdeductible for the company.

7. Electric vehicles

Electric vehicles, hybrid vehicles, CNG or LPG vehicles and vehicles using ethanol 85 (E85) are exempt from road tax.

8. Future developments

No major amendments to the legislation regarding car taxation are expected.

Regulations in Turkey

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

Motor vehicle tax taken yearly depends on the age and the engine size of the vehicle for passenger cars and motorcycles.

Engine Size	Motor Vehicle Tax (Yearly)				
	1 - 3 age	4 - 6 age	7 - 11 age	12 - 15 age	16 and above age
Passenger Cars					
1301 - 1600 cm ³	1.035,00	776	450	318	122
1601 - 1800 cm ³	1.827,00	1.428,00	841	513	199
1801 - 2000 cm ³	2.878,00	2.217,00	1.303,00	776	306
2001 - 2500 cm ³	4.317,00	3.134,00	1.958,00	1.170,00	463
2501 - 3000 cm ³	6.019,00	5.236,00	3.271,00	1.760,00	646
3001 - 3500 cm ³	9.166,00	8.247,00	4.968,00	2.480,00	910
3501 - 4000 cm ³	14.411,00	12.444,00	7.329,00	3.271,00	1.303,00
4001 cm ³ and above	23.586,00	17.687,00	10.475,00	4.708,00	1.827,00
Motorcycles					
100 - 250 cm ³	122	92	68	43	17
251 - 650 cm ³	252	191	122	68	43
651 - 1200 cm ³	646	385	191	122	68
1201 cm ³ and above	1.565,00	1.035,00	646	513	252

Motor vehicle tax taken yearly depends on:
The age and the engine size of the vehicle for panel van and motor caravans,
The age for minibuses

The age and number of seats for buses
Maximum weight and age for truck, tractors and so on.

Type of vehicle & # of seats /	Motor vehicle tax (Yearly)		
	1 - 6 age	7 - 15 age	16 and above age
Max total weight			
1) Minibus	776	513	252
2) Panel van and motor caravans			
1900 cm ³ and below	1.035,00	646	385
1901 cm ³ and above	1.565,00	1.035,00	646
3) Bus			
Max 25 people	1.958,00	1.170,00	513
26 - 35 people	2.348,00	1.958,00	776
36 - 45 people	2.613,00	2.217,00	1.035,00
46 people and above	3.134,00	2.613,00	1.565,00
4) Truck, trucktor and so on			
until 1.500 kg	697	463	228
1.501 - 3.500 kg	1.408,00	817	463
3.501 - 5.000 kg	2.115,00	1.760,00	697
5.001 - 10.000 kg	2.348,00	1.995,00	936
10.001 - 20.000 kg	2.821,00	2.348,00	1.408,00
20.001 kg and above	3.529,00	2.821,00	1.640,00

VAT

The sale of new passenger cars is subject to 18% VAT.

The VAT rate for the operational or financial leasing of the passenger cars is also 18 %.

The second hand sale of the passenger cars and that of the vehicles which are designed specifically for the passenger transportation is subject to VAT at the rate of 1 %.

Special consumption tax

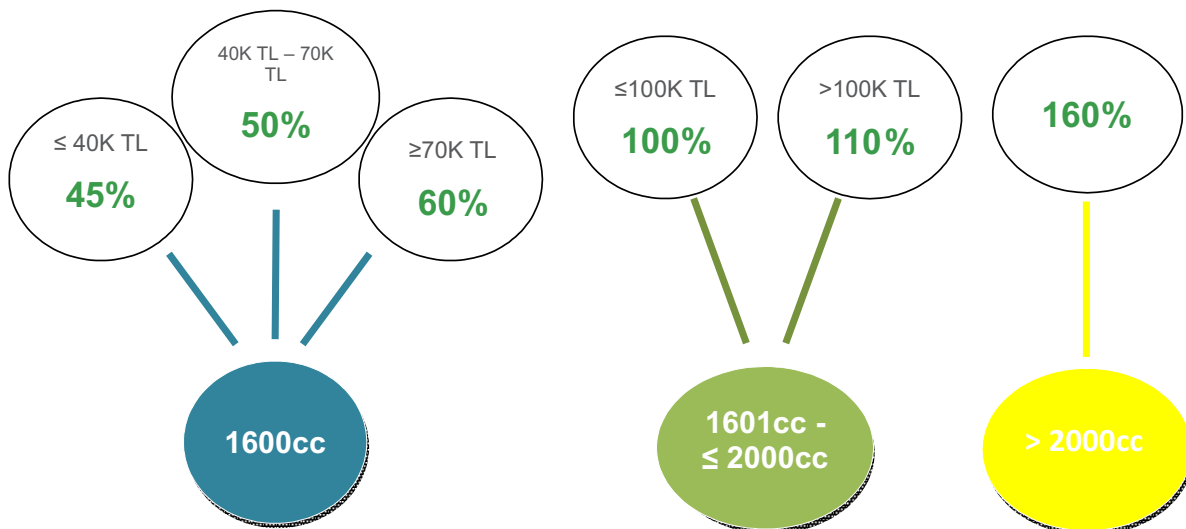
Special consumption tax is an indirect tax due for the list of the goods stated in its particular Law. The passenger cars are in this list and subject to special consumption tax.

For the hybrid engine passenger cars, special consumption tax ratio:

- If the engine does not exceed 1800cm³, the electric motor will exceed 50kW., the tax is 45%
- If the engine is between 1800cm³ - 2500cm³, the electric motor will exceed 100kW., the tax is 90%
- If the engine volume is 2500cm³ or more, there is no change, the tax is 145%.

Special consumption tax ratio for passenger cars with only electric engine is 10%.

Special consumption tax for passenger cars with combustion engine depends on the engine size and the price before tax as shown



VAT

Turkey and Czech Republic have similar taxation system in general. On the other hand in Turkey, because of the special consumption tax, high tax ratio is being applied.

In Czech Republic electric vehicles, hybrid vehicles, CNG or LPG vehicles and vehicles using ethanol 85 (E85) are exempt from road tax.

	Czech Republic	Turkey
Value-added tax (VAT)	X	X
Registration fees	X	
Road Tax (ownership tax)	X	
Motor Vehicle tax (ownership tax taken yearly)		X
Special consumption tax		X

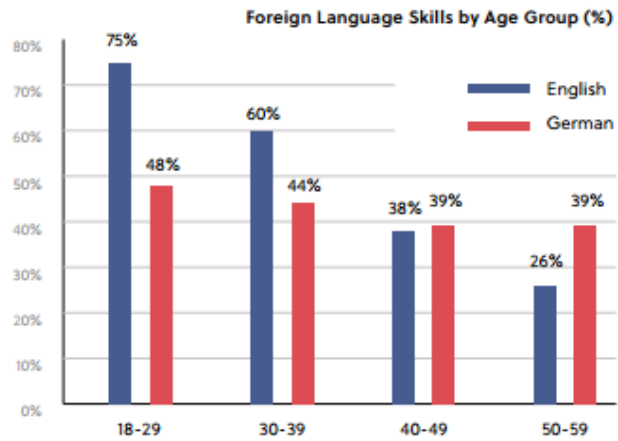


Education/Training in Automotive Sector



Well-Educated and Skilled Workforce

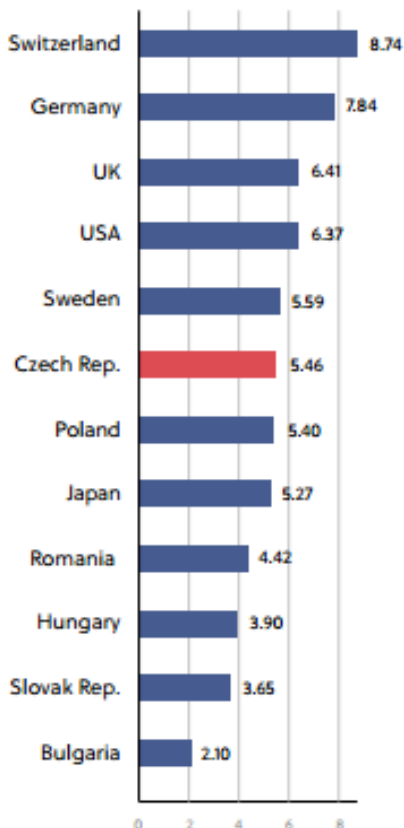
The Czech education system meets the needs of a competitive economy, according to the IMD World Talent Report 2015 published by IMD World Competitiveness Centre. The Czech Republic can provide manufacturers with impressive productivity levels and highly skilled labour. In the 2015/2016 academic year, there were more than 91,000 students enrolled in technical fields at Czech universities. The number of university students increased from 118,000 in 1990/1991 to 326,909 in 2015/2016, due not only to changes in the education system but also to a demographic surge of 18- to 26-year-olds who comprise a promising group of potential employees for foreign investors. According to a survey conducted by STEM for CzechInvest in 2014, 72% Czechs aged 18 to 59 speak at least one foreign language and their knowledge is rapidly improving.



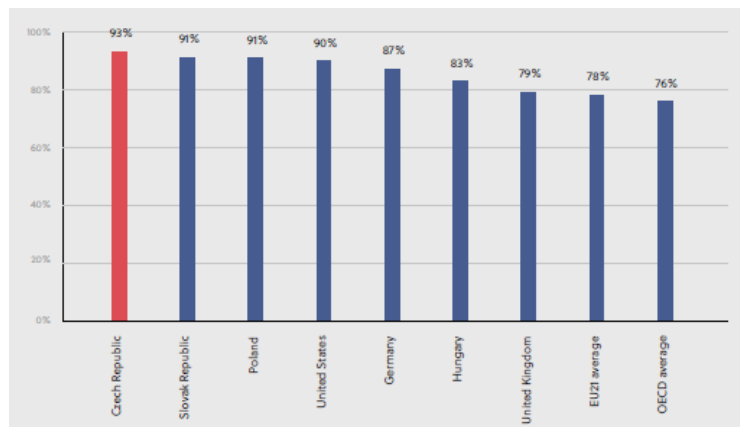
Source: STEM 2014

The Czech Education System Meets the Needs of a Competitive Economy (2015)

The Czech Education System Meets the Needs of a Competitive Economy (2015)



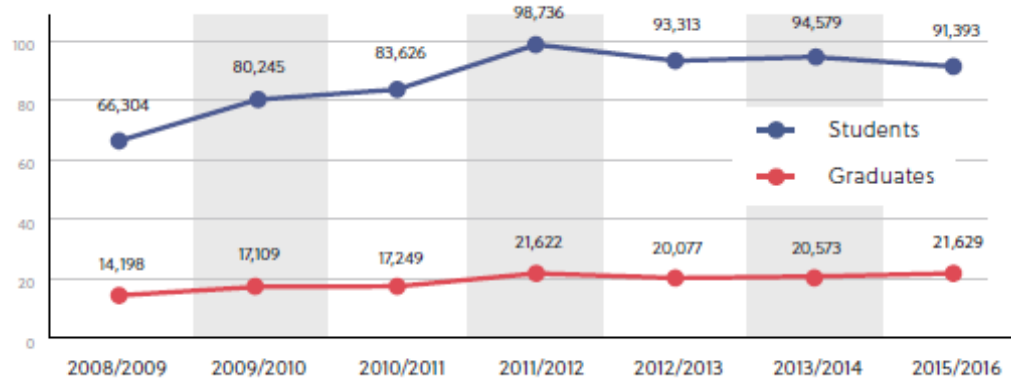
Source: IMD Executive Opinion Survey based on a scale of 0 to 10 Source: IMD World Talent Report 2015, IMD World Competitiveness Centre, 2016



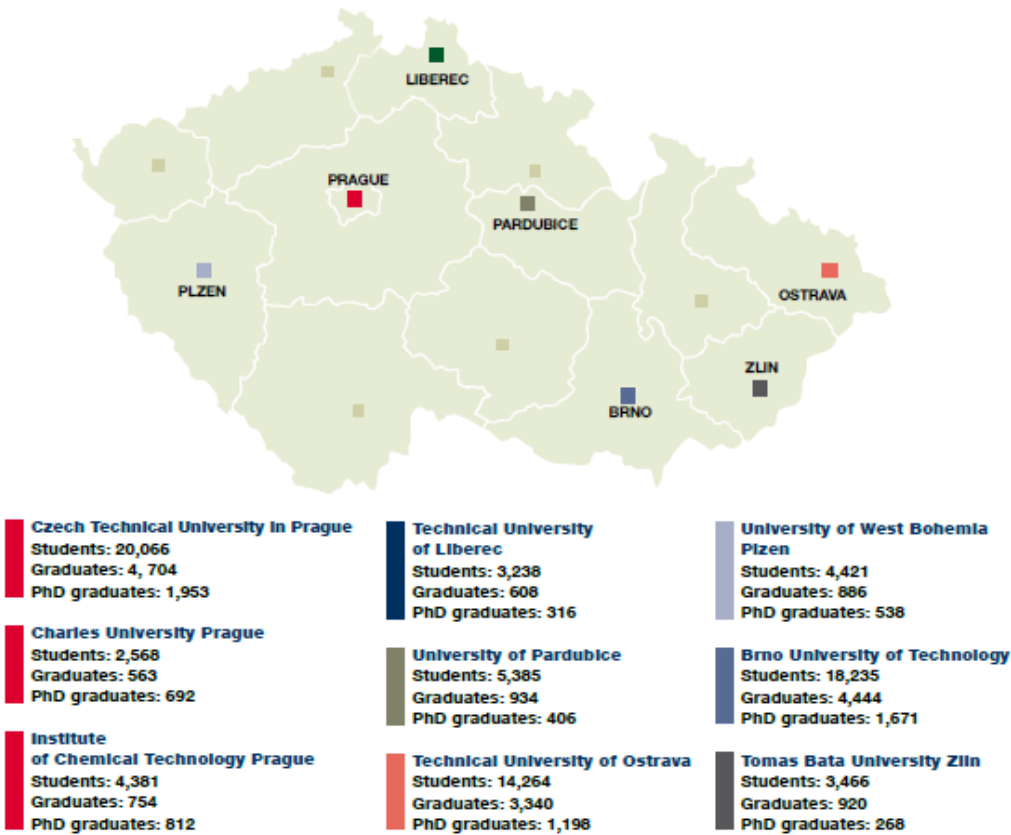
Source: Education at a Glance, OECD Indicators, 2015

More than 20,000 graduates enter the workforce every year and the number of technical graduates increase every year.

Students and Graduates of Technical Universities



Source: Ministry of Education, Youth and Sport, 2016



Source: Ministry of Education, Youth and Sport

Training and retraining grants are offered in the amount of up to 25% or 50% of eligible training costs depending on the region.

Proven Research and Development Capabilities

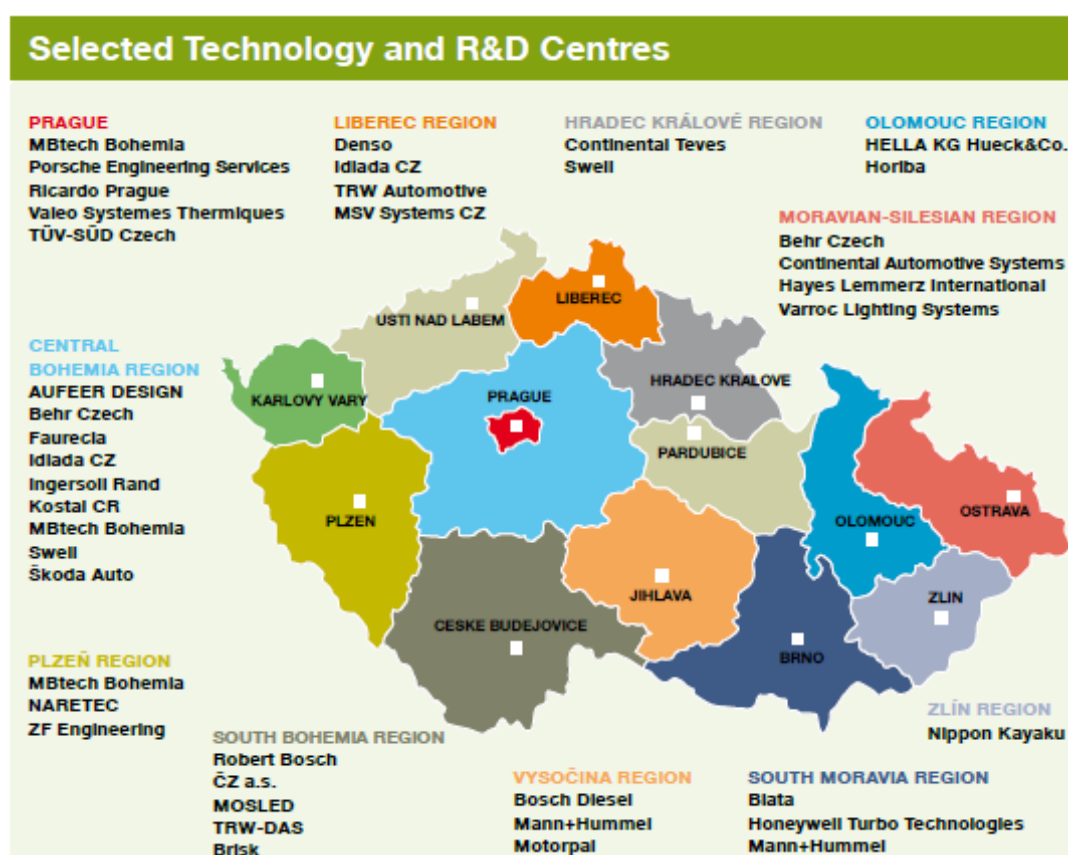
The Czech Republic spends more resources on research and development than many competing countries. Over the past twenty years, the Czech Republic's spending on R&D has increased from 0.95% of GDP to 2% (2014). Many multinationals have Czech R&D or design centres, including Panasonic, Honeywell, Mercedes-Benz, Motorola, Rockwell Automation and Visteon. Czech scientists are behind some of the world's well-known inventions and patents, such as soft contact lenses, polarography (a Nobelprize-winning method of quantitative analytical measurement) and the anti-HIV drugs cidofovir (Vistide®) and tenofovir (Viread®), to name only a few.

Using financial resources obtained from EU structural funds, new research centres are being established with the objective of becoming prestigious European science centres with state-of-the-art infrastructure and conditions making it possible to employ the best researchers. Among these are the Central European Institute of Technology in Brno focusing on life sciences and advanced materials and technologies; the International Clinical Research Centre in Brno targeted at prevention, early detection and treatment of cardiovascular and neurological diseases; IT4Innovation in Ostrava, a large super-computer facility combining IT research and applications; and two research centres located near Prague - Biotechnology and Biomedicine Centre and Extreme Light Infrastructure, which operates the world's most powerful lasers.

Top Automotive R&D Location

In the long term, the Czech Republic is one of the world's most attractive automotive R&D

locations. This is due to the perfect blend of an outstanding engineering tradition, excellent technical education and consistent attention to ongoing training of new, high-quality automotive professionals.



Czech Technical Universities and Their Automotive Partners

Czech Technical University in Prague	Technical University of Liberec	University of West Bohemia, Pilsen	Brno University of Technology	VŠB – Technical University of Ostrava
				
TRW Automotive Škoda Auto Porsche Engineering Honeywell Siemens Bosch Brano Tatra www.cvut.cz	Škoda Auto MAN Audi Daimler Bosch Continental Magna Saint-Gobain TRW Automotive www.tul.cz	Volkswagen AG Valeo Škoda Auto Bosch MBtech Bohemia ABB ZF Friedrichshafen www.zcu.cz	Škoda Auto TRW Automotive Tatra Volkswagen Honeywell Magna Powertrain Motropal www.vutbr.cz	Škoda Auto Brose Continental Hayes Lemmerz Honeywell Varroc Lighting www.vsb.cz

Selected Czech-Based Technology Centres



MBtech Bohemia

MBtech Bohemia is based in three locations in Plzeň, Prague and Mladá Boleslav as a subsidiary of MBtech Group, a global provider of automotive engineering and consulting services. The Czech R&D centres specialize in CAD design of components and modules for new vehicles, engines and electronics. The scope of services ranges from concepts including Class A Design engineering services, production of prototype parts and model building, as well as complete vehicle testing. MBtech Bohemia in the Czech Republic is the biggest foreign subsidiary of MBtech Group worldwide



Ricardo Prague

Ricardo Consulting Engineers UK operated in the Czech Republic from 2000 until Ricardo Prague Ltd. was established in 2005. Prague Technical Centre cooperates daily with other members in the UK, USA, Germany, Italy, Japan, China and India Ricardo locations, and

others to provide CAE design and analysis support to satisfy customers around the world. Prague Technical Centre offers research and development and design support mainly in the field of internal combustion engines, transmissions, vehicle technology and Control&Electronics. The current number of 160 engineers is a consequence of the interrupted growth during the crisis period. Ricardo Prague undertook a major expansion of its technology centre in the Czech Republic in 2004 and has been growing recently again.



Swell Technology Centre

At its Development Services Centre in Hořice, Czech Republic, the engineering company SWELL operates a progressive technology centre for comprehensive development support in the automotive industry. The scope of services covers CAD/CAE engineering and prototyping, mainly in the sheet-metal area (BIW structures), and a wide range of development testing (vibration tests at high temperatures for engines and exhaust-system components, frequency and modal analyses, combined mechanical/environmental testing for plastic and metal structures, etc.). The company's customers include Škoda Auto, Honeywell Turbo Technologies, Continental Automotive Systems, Faurecia Exhaust Systems, Magna International, and many others.



Valeo Climate Control

Valeo Climate Control has a technology centre in Prague to provide engineering support for its heating, ventilation and air-conditioning (HVAC) and control panel programmes. As it is engaged in all new development projects, the Czech R&D centre cooperates with nearly all Valeo climate control divisions elsewhere in the world. As a state-of-the-art yet cost-effective development location, Valeo's Czech R&D centre is considered a centre of excellence for air-conditioning system design.



Varroc Lighting Systems

Varroc Lighting Systems, a wholly-owned entity of the Varroc Group, is a leading Tier 1 global automotive supplier specializing in Research & Development and manufacturing of exterior lighting products such as headlamps, signal lamps, auxiliary lamps, projector systems, and electronic control modules. Varroc Lighting Systems is registered in the Netherlands, headquartered in Plymouth, Michigan, USA, and operates in Asia, Europe and North America, with nearly 5000 employees. The Varroc Group completed the acquisition of the global lighting division of Visteon Corporation on the 1st of August 2012 and now presents its brand as Varroc Lighting Systems. In the Czech Republic, Varroc Lighting Systems operates two plants, a tool factory and a global development centre. With more than 2,300 employees Varroc Lighting Systems is one of the major employers in the Moravian-Silesian Region and the Czech Republic.

Universities and R&D Institutions in Turkey

Automotive industry in Turkey is one of the manufacturing sectors that employs mostly higher education graduates. Approximately 8% of the employers have engineering degrees. In the last years many universities opened new programmes specifically devoted to Automotive Engineering:

Okan University, one of the most eminent and distinguished foundation universities in

Turkey, is home to a diverse undergraduate and graduate student body of 14,000. Currently, Okan University has students from 43 different countries. It offers more than 138 undergraduate and graduate programs. The University comprises six faculties, two applied sciences schools and three graduate schools. The university also offers a variety of two year associate degree programs that correspond to the in-demand vocational opportunities.

University	Bachelor	Masters	Doctorate
Afyon Kocatepe University	+		
Atılım University	+	+	
Boğaziçi University		+	
Cumhuriyet University	+		
Çukurova University	+	+	
Fırat University	+	+	
Gazi University	+	+	+
Hacettepe University	+		
Işık University	+		
İstanbul Teknik University		+	
Karabük University	+		
Kocaeli University	+	+	+
Mersin University	+		
Okan University	+	+	
Pamukkale University	+	+	
Sakarya University		+	+
Süleyman Demirel University	+		
Uludağ University	+	+	+
Yakın Doğu University	+		

The new global business era of borderless business relations demands a new set of engineering competencies. Okan University Automotive Engineering Undergraduate Program, having revised its programs accordingly, offers a rich selection of concentration areas in order to meet the unique career needs of our students. The world-class faculty members from diverse backgrounds provide a balance of theory and practice in the execution of the curriculum.

The Engineering Faculty of Atılım University has a unique position among Turkish universities, with its new and popular engineering fields such as mechatronics, manufacturing, software, informatics systems, energy systems and automotive engineering in addition to the existing conventional engineering departments. Altogether there are fourteen departments in the faculty. Having been established in 1997, the faculty, with its relatively large number of departments, a strong and dynamic academic cadre, and modern educational and research facilities, has secured a reputable position in a very short time and now is competing with the famous public universities in Turkey

Department of Mechanical Engineering at Hacettepe University offers an undergraduate program in Automotive Engineering and Master of Science and PhD programs in Mechanical Engineering. The research focus of the department lies in the areas of automotive engineering, solid mechanics and design, mechanisms and machine theory, materials, control, mechatronics, sensors and thermal-fluids engineering and energy.

Uludag University Automotive Engineering Department was established in 2010 and was started to give education on master of science degree in 2011. The Automotive Engineering Department is a pioneer department for Turkey, as being one of the first of its kind in Turkey. The Department offers two programs to qualified students for further education and research at advanced level, leading to the degree of MSc in Automotive Engineering. The Graduate Programs are MSc with thesis and non-thesis programs in Automotive Engineering. Non-thesis program is a MSc without thesis program with the support of Politecnico di Torino (PdT) Italy.

Czech Republic vs Turkey

Considered one of the most beautiful countries in Eastern Europe, the Czech Republic was formed at the start of 1993, having formerly been part of Czechoslovakia. Previously a communist state under the influence of the Soviet Union, it has undergone rapid development in the past few decades, and in 2006 became the first former Eastern Bloc state to be rated as a “developed country” by the World Bank.

Today, the Czech Republic is an increasingly popular destination for international study, with over 39,000 foreign students currently enrolled at its universities. EU statistics released in 2014 listed it as the 12th most popular destination for Erasmus students in Europe. There are certainly many perks for those choosing to study in the Czech Republic: well-esteemed universities, affordable tuition fees and living costs, and last but not least, a vibrant and colorful cultural life.

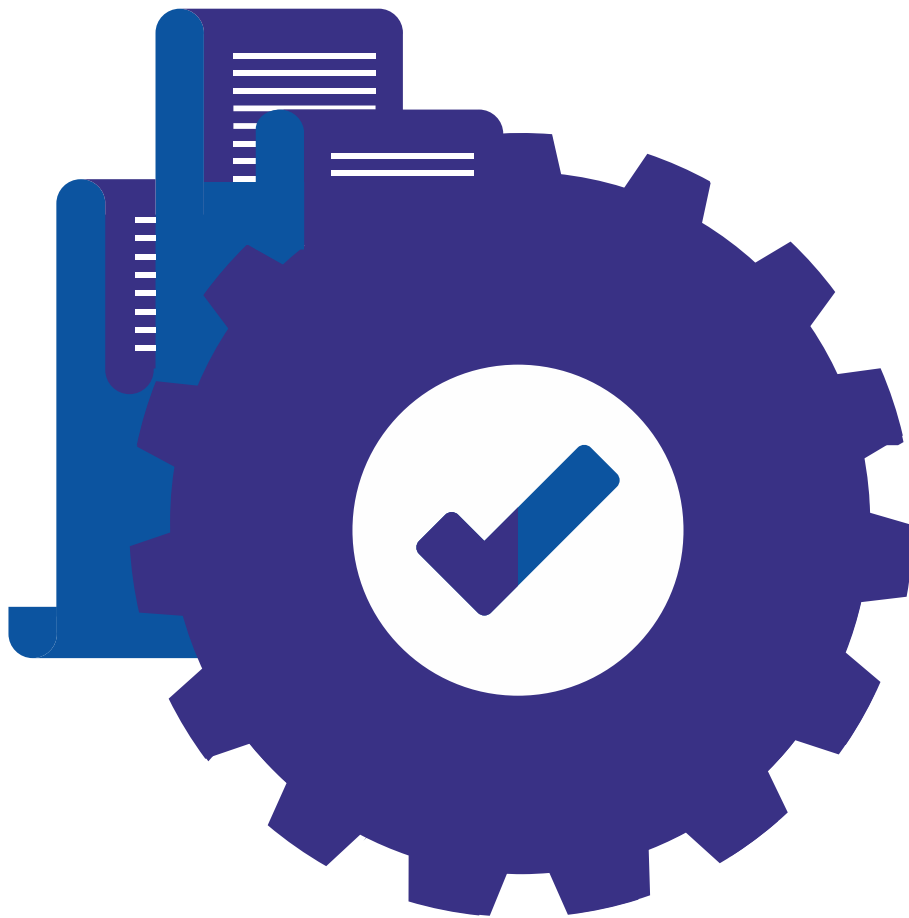
The number of international students choosing to study in Turkey has more than doubled since 2006, signalling the country's growing importance as a higher education destination. In the 2015-16 academic year, there were around 48,000 foreign students in Turkey.

Motivations for study in Turkey include the opportunity to gain a relatively inexpensive and good quality education, with opportunities for scholarships that also pay a monthly allowance, covering accommodation and tuition fees, health insurance and travel expenses.

Even though both countries attract talented students, Czech Republic offers a more unified front for engineering students in term of cooperation between universities and the private sector.

6

Conclusions



Concluding Remarks

The Czech Republic is a fully fledged parliamentary democracy and one of the most advanced among CEE countries. Its economic policy is consistent and predictable. An open investment climate is a key element of Czech Republic's economy. The Czech Republic has attracted a large amount of investment (FDI) since 1990, making it the most successful country in terms of FDI capita. The country's investment grade rating from international credit-rating agencies and its early membership in the OECD testify to its positive economy fundamentals.

Investors are currently experiencing a distinct shortage of skilled workers caused by the Czech Republic's record low unemployment rate. The fact that many large investors are giving priority to countries other than the Czech Republic is also due to the lack of prepared locations where they could commence operations in a short period of time. The investment process itself, from planning to implementation, is also accelerating. In this respect, inordinately lengthy permit processes remain a major disadvantage of the Czech investment environment.

Automotive accounted for 30% of FDIs in the Czech Republic. The automotive is the largest industrial sector in the Czech Republic accounting for 20% of industrial output and export with more than more than 150,000 employee. The Czech automotive is strongly export-oriented. Almost 85% of the vehicle produced is exported mainly to the Western European markets.

Turkey's automotive industry offers companies a dynamic domestic market and reach to a qualified yet relatively inexpensive labor force versus European countries. The automotive market grows and the production of vehicles increases steadily. The Turkish government supports the automotive industry in various ways and gives a special attention to R&D efforts.

TUBITAK Marmara Research Center coordinates several automotive projects including range extended electric vehicle. 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. The positive developments in Turkish logistics sector also presents ample opportunities to Turkish automobile manufacturers.

On the other hand, import dependency of the industry and increasing energy prices are the main threats against Turkey. Also, taxes on new vehicle sales is a slowing factor for development of vehicle parc.

Turkey's growing current account deficit creates a significant macroeconomic risk for investors. Political risks such as terrorist attacks in major cities and Turkey's proximity to the civil war in Syria also add to macroeconomic instability.

Turkey became the largest automotive producer in Eastern Europe, overtaking the Czech Republic and Slovakia, as well as being the largest light commercial vehicle producer in Europe. Turkey is one of 12 countries to which the Czech government awarded priority status in its Export Strategy for the Years 2012-2020.

Energy, plays the role of a locomotive in our bilateral investment relations. Czech companies are primarily interested in the energy sector; hence Czech investments in Turkey are predominantly focused on this area. Czech investments in Turkey totals around 2,5 billion USD. Another area with a considerable potential for cooperation is Turkey's ambitious program aimed at the development of nuclear energy and renewable energy sources.

Turkey's total amount of direct investments in Czech Republic reached to 150 million USD in the period of 2002-November 2016. There are around 70 Turkish firms in the country, which are mainly small enterprises and active in the fields food, textiles and gift market.

Automotive sector remains very well developed for mall of the Turkish automotive industry players

References

Automotive Industry Report Czech Republic
1st Quarter 2017 - The Economist Intelligence
Unit

Investment Climate in Czech Republic -
Czechinvest

Czech Republic - Automotive Manufacturing -
Marketline

Global Automotive Tax Guide 2016 - PWC
Czechinvest

The International Organization of Motor
Vehicle Manufacturers OICA

European Automobile Manufacturers' Association ACEA

European Economic Area EEA

Emisia SA

Eurostat

AutoSAP

Ministry of Finance

Ministry of Labour and Social Affairs

Ministry of Education, Youth and Sport

ASEP - Repository of the Czech Academy of
Sciences

IMD World Talent Report 2015 - IMD World
Competitiveness Centre, 2016

STEM

Education at a Glance - OECD Indicators, 2015

Czech Statistical Office

Czech Republic Tyre Market Forecast &
Opportunities Report 2016-2020 - Research
and Market

Worlds Top Exports -
<http://www.worldstopexports.com>



Xsights
RESEARCH AND CONSULTANCY

Istanbul Office
Divanyolu Caddesi, Hoca Rüstem Sk,
Kader Han, Kat: 3-4,
Sultanahmet, Istanbul / Turkey

P : +90 212 213 60 02
M : info@xsights.co.uk
W : www.xsights.co.uk

London Office:
First Floor, 736 High Road,
North Finchley,
London N12 9QD.

P : +44 203 868 01 68
M : info@xsights.co.uk
W : www.xsights.co.uk