

Edition 2021

BUSINESS GUIDEBOOK Czech Republic

The Country for Investment in Challenging Times





Association for Foreign Investment

is a non-governmental, non-profit organisation established by a group of leading global and regional firms with key competences in supporting new and existing investors in all areas of their activities and actively promoting the Czech Republic as an investment destination of choice. The AFI has been actively assisting investors since 1996 and cooperates closely with the Czech government, CzechInvest – Business and Investment Development Agency and all relevant public authorities.

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How we help investors

Expert support for investors and exporters in all key phases of investment decision-making and implementation:

- Support in the area of country comparison and the selection process
- General information relating to the country and investment environment
- Advice on site selection
- Comprehensive services related to getting established on the market
- Necessary information from all sectors of the economy („doing business“, analyses)
- Organisation of investors' visits to Czech Republic
- Personal consultation
- Mediation of contacts with business partners and other relevant entities on the market
- Facilitation of contact with the public sector, the academic sphere and science and research organisations
- Expert support in the area of visas and work permits
- M&A advisory, target selection

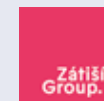
AFI Main Partner

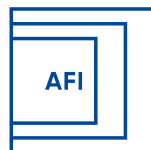


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Association
for Foreign
Investments

BUSINESS GUIDEBOOK

Czech Republic
The Country for Investment in Challenging Times
Edition 2021



This is the sixth edition of the publication *Business Guidebook: Czech Republic – The Country for Investment in Challenging Times*, which was first issued in connection with the AFI's 20th anniversary at the beginning of 2016. The purpose of this guidebook is to provide newly incoming and existing businesses with comprehensive information about investing in the Czech Republic. The authors of the individual articles come mostly from the ranks of AFI members and are leading experts in their respective fields.

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 Kamil Blažek, Chairman, Association for Foreign Investment
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 Patrik Reichl, CEO, CzechInvest

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Andrej Babiš

Prime Minister of the Czech Republic

Dear Readers,

The year 2021 is a significant milestone and test of readiness for the whole world. Dealing with the economic and social consequences of the global health pandemic requires us to think out of the box, cooperate internationally as well as across sectors and support innovative solutions. We must use this momentum to speed up the transformation of our economy and to tackle long-term global problems such as the looming impacts of climate change on our lives and livelihoods and faster implementation of Industry and Society 4.0.

In practice, the COVID-19 pandemic has shown us the need to strengthen technology transfer, cooperation with development teams, and overall creative processes that instantly bring forth successful technological solutions and new products of global importance. The pandemic accelerated all of these processes and thus proved the viability of many of the measures introduced in the Innovation Strategy of the Czech Republic 2019-2030. At the same time, we are continuing with the Czech Rise Up 2.0 programme, which supports innovative companies that are assisting in the fight against COVID-19. Moreover, we support the spin-off environment and the academic sphere, which are also striving to combat the pandemic.

My government's top priority continues to be innovation-driven economic and social growth, which began in the pre-crisis period. The above-mentioned innovation strategy is a crucial part of this effort, with one of its most important tools being a programme for innovative companies called The Country for

the Future. Closer cooperation between local and foreign experts and between the private and public sectors promotes locally based enterprises and research initiatives, which in turn promote growth and development across the whole Czech economy and society. We see investments as the perfect opportunity for the introduction of new technologies, as well as for the establishment of stable partnerships between the private sector and R&D facilities. R&D spending has more than doubled in the last decade. In 2019 alone, EUR 4.2 billion was spent on research and development, representing a year-on-year increase of 9%. That was the historically highest expenditure on research and development from domestic public and private sources.

The Czech Republic is a business-friendly country that has long been attractive for foreign investments thanks to its great combination of a flexible, innovative culture and highly skilled and educated workforce. The process of starting a business has undergone significant changes and a new business can now be easily launched in a single day. By introducing the so-called trade package, we provide support to family-owned companies and simplify the establishment of start-ups, processing of trade licenses through the Citizens' Portal, registration for tax obligations and more.

I truly believe that the crisis will make us stronger and better prepared for the future. My government took all necessary measures to support the Czech Republic's economy and citizens in the most difficult times and has many effective tools at hand to bolster innovations and investments that are necessary in order to perform well in the future. Together, we can make it!



Kamil Blažek

Chairman, Association for Foreign Investment

Dear Readers,

I have the greatest pleasure of bringing you already the sixth edition of the *Business Guidebook: Czech Republic – The Country for Investment in Challenging Times*. This guidebook is a very special publication, as it presents contributions of leading experts in each of their respective fields in the Czech Republic and provides crucial and necessary help to foreign investors and their advisors interested in the Czech Republic.

The Czech Republic is the destination in Europe that provides an ideal mix of good return on investment, reasonable costs, strong ideas, potential for future development, superb human capital and an enthusiastic working environment, and is a place where it is fun to live and start a business. All that even in times of major changes and challenges. The coronavirus crisis has changed the world, but it has also shown how we need to think about opportunities, which are there for the taking. Investment in the Czech Republic is such opportunity.

The next two years, 2021 and 2022, will bring about a restart of investment activity and our country will be at the forefront of it.

As much as I do not aspire to predict the future, I have a few good arguments as to why the Czech Republic will continue to succeed as a safe place for investment for both Czech and international investors. Our well-educated people, institutional and political stability, excellent access to major European markets, safe environment and high quality of living – none of that has disappeared, nor will any of it disappear any time soon. All of these factors will still be here to ensure a stable return on your existing or future investment, which is something that you may not see in many other

countries. Also, at this time of expected deglobalisation of supply chains, the Czech Republic ticks all of the boxes as a target for new investment within the EU.

And I wish to highlight one particular area. The European Green Deal policy will have a massive impact on our economy and there are many fields where investing in the Czech Republic may start a continent-wide venture utilising the Green Deal challenges. For all of these reasons, I remain optimistic about our future and your future with us as well. Our Association for Foreign Investment will be here to help you succeed.

We have become the first point of contact for foreign investors in the Czech Republic and we are ready and able to help all new and existing investors to enter the Czech market and orientate them in the local environment and to provide them with assistance if and when it is needed. Our members are leading international and Czech companies that provide a comprehensive range of services for investors on the Czech market, as well as for Czech investors abroad.

In conducting our activities, we closely cooperate with CzechInvest, the Ministry of Industry and Trade, the Ministry of Foreign Affairs and other public and private institutions in the Czech Republic and abroad. Finally, I would like to thank everyone who played a role in creating this publication. We highly value your support.

I am convinced that this unique guidebook will serve as a trustworthy source of information that you find useful in your strategic decision-making. We will welcome your feedback, opinions and suggestions on how to improve it. Please get back to me at kamil.blazek@afi.cz with any ideas or comments you may have regarding this guidebook or the topics covered or not covered in it.



Martin Tlapa
Deputy Minister of Foreign Affairs

Dear Readers,

Located in the heart of Europe, the Czech Republic has been a prosperous country throughout its modern history. It is the most competitive country in the CEE region and the eighth safest country in the world, according to the Global Peace Index. Having an effective legal environment, healthy banking system and stable political culture, the Czech Republic provides you with favourable conditions for investments.

In recent years, we have marked several significant milestones of historical events that have not only shaped the Czech position towards other countries but have also had a key impact on the Czech economy, such as the anniversaries of the country's accessions to the EU, NATO and OECD.

Although we never cease to look into and learn from our history, it is essential, especially with respect to investments, to focus on the future. Even though the Czech Republic and its economy have been affected by the global pandemic, we can still rely on our modern export-oriented economy, as the country ranks among the 30 largest exporters worldwide. Czech companies are focused on technologies, R&D and innovative opportunities in the long term. As specified in the Innovation Strategy, our main goals include cultivation of an effective start-up environment, innovation centres, smart investments, digitalisation of the public sector and more all while profiting from the most industrialised environment in the EU. Speaking of the pandemic, our way to recovery is simple – we want to take advantage of our ongoing tradition of manufacturing, advances in innovation, open investment climate and advantageous location

in Central Europe. Our economic diplomacy builds on the brand “The Czech Republic – the Country for the Future”, which emphasises qualities such as scientific potential and advanced research, well-developed industry, favourable accessibility and highly skilled people from various fields of industry.

Based on estimates, our economy should grow by more than 3% in 2021. We have stable inflation (around 2.5%) and the lowest unemployment rate in Europe (around 2.7%). In terms of GDP per capita (PPP), the Czech Republic has already surpassed Israel and drawn even with South Korea. It is also necessary to mention that the Czech share of exports exceeded 1% in 2017 even though the country accounts for only 0.14% of the world's population. We are ranked as the 28th largest exporter and 29th largest importer worldwide.

Even though the aforementioned qualities draw a certain picture of the Czech economy, investors need to look further into many different variables before investing, as the market represents a complex system. In this matter, Czech economic diplomacy has undergone progressive development while interconnecting the work of governmental and non-governmental actors, employing diverse instruments, working on new strategies and supporting Czech companies inside and outside the borders of our country. This collaborative environment has shaped the Czech Republic into one of the most successful transition economies in terms of attracting foreign direct investments. Speaking on behalf of the Ministry of Foreign Affairs, I highly appreciate all the steps that the AFI, CzechInvest and other institutions are taking to support companies based in the Czech Republic. I wish you another successful year despite these challenging times.



Patrik Reichl
CEO, CzechInvest

Dear Readers,

I hope that you are in good health as you read this foreword. Perhaps all of you know why I have begun in this way. In the course of 2020, the health, economic and social situation changed dramatically and unexpectedly throughout the world and that is reflected even in this issue of the Business Guidebook, which is very different from previous editions in terms of content. The same is true of CzechInvest's activities and the scope thereof last year and in 2021. We have helped foreign investors and Czech companies in unexpected and crisis situations, while coming together with other state institutions and regularly preparing an information service for them.

A full century had passed since the last global pandemic. All efforts undertaken by the affected countries are focused primarily on restricting the spread of COVID-19. This, of course, has led to certain difficulties. Particularly Europe and North America had not seen such an extensive epidemic in many decades, so governments are staffed with people who could not have had any real experience with such a situation. We all had to learn on the fly.

As a lifelong optimist, I am trying to find the positive in this situation. I take the lockdown as a new beginning for new ideas and as the starting line for achieving higher goals that humanity has considered only with great difficulty in recent years. I believe that topics such as decarbonisation of the economy, advancement of self-sustainability through development of local economies, digitalisation and automation of activities

that have long since ceased to require human effort, motor skills and logic comprise the right path that humanity should travel.

The Czech Republic should maximally exploit this opportunity and, in so doing, become a global leader. This involves knowing how to join forces as we managed to do in spring 2020. There are a significant number of topics or, if you prefer, strategic areas and sectors in which the Czech Republic is competitive in a global comparison. Strategic domains such as artificial intelligence, healthcare and medical technology, nanomaterials and software development comprise only a small sample of areas in which we can be among the best in the world. Future successes in research, development and innovation can place us among the top 15 in terms of competitiveness. The year 2020 presented new challenges and thus a lot of new applications. We can take as an example the use of modern communication platforms and generally the expansion of information technologies among the older generation, which is something that had eluded us for years and is now a matter of course.

It is my hope that a certain paradigm shift will occur in the Czech economy also in the view of challenges brought forth by the Green Deal. Climate change is creeping in and does not come as great a shock as the onset of the coronavirus pandemic. I believe that we are beginning to realise that and the future development of new services, products and technologies will maximally take into account the impacts on our shared home – the planet Earth.

I wish all readers pleasant reading and, once again, good health.

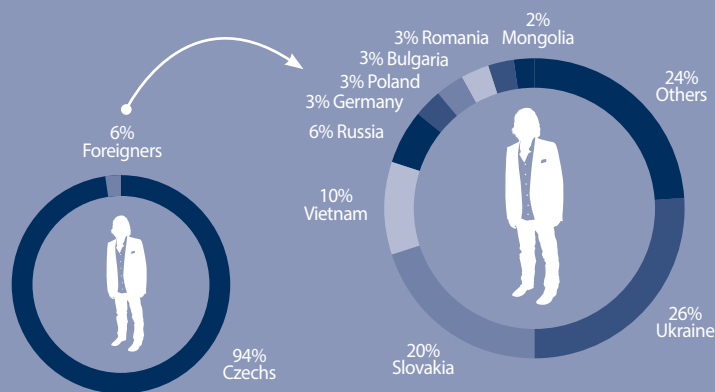
The Czech Republic

Location



10.7 mil
Population

78,866 km²
Area



Note: Percentage of foreigners in total population
Source: Czech Statistical Office, 2020

Note: Percentage of foreigners, by citizenship
Source: Czech Statistical Office, 2020



Recent history

Velvet Revolution

In November and December 1989 the people of Czechoslovakia held a series of non-violent demonstrations against the communist government, which resulted in the regime's collapse. The leading figure of the events, Václav Havel, was later named the first president of the free, post-communist Czechoslovakia.



Velvet Divorce

The federated Czechoslovakia was divided into the Czech Republic and Slovakia on 1 January 1993 through a bilateral political decision. Due to the peaceful course of the breakup, the event was called the Velvet Divorce.



Accession to NATO

The Czech Republic became a member of NATO in 1999.



Accession to the EU

The Czech Republic joined the European Union in 2004.



1989

1993

1999

2004

Political system -
Parliamentary republic



Miloš Zeman
President

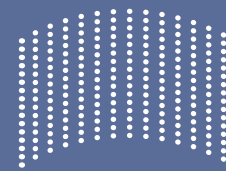


Andrej Babiš
Prime Minister



Government

14
members



Chamber of Deputies
200 members/4 years

200
members
4
years



Senate
81 members/6 years

81
members
6
years

Economy

-5%
GDP growth
(Q4/2020)

2.3%
Inflation
(12/2020)

4.0%
Unemployment rate
(12/2020)

EUR 1,336
Average gross monthly
wage (Q4/2020)

Capital
Prague

Language
Czech

Currency
**Czech koruna
(CZK)**

1 EUR = CZK 26.5
(average exchange
rate in 2020)

Quick facts about the Czech Republic



The Czech Republic – Heart of Europe

Location

The Czech Republic is a landlocked country in the middle of Europe. It is bordered by Germany to the west, Poland to the north, Slovakia to the east and Austria to the south. Thanks to its location, which makes it a notional gateway between Western and Eastern Europe, the country is often referred to as the “Heart of Europe”. The Czech

Republic is comprised of parts of historical territories which for a significant part of history were the Lands of the Bohemian Crown, namely Bohemia, Moravia and part of Silesia. Administratively, the country is divided into 14 self-governing regions. The capital city, Prague, is also one of the regions. Approximately 10.7 million people live in the Czech Republic. The population of Prague is 1.3 million.

The Czech Republic is a member of these organisations

- United Nations
- European Union
- NATO
- Organisation for Economic Cooperation and Development
- World Trade Organisation
- International Monetary Fund
- World Bank
- Council of Europe
- Organisation for Security and Cooperation in Europe
- European Customs Union
- Schengen Agreement
- Visegrad Group

The country's most populous cities:

- 1. Prague (Bohemia)**
1.3 million inhabitants
- 2. Brno (Moravia)**
381,000 inhabitants
- 3. Ostrava (Silesia)**
288,000 inhabitants

The Czech Republic's landscape comprises mainly highlands and rolling hills. Sixty-seven percent of the country's territory is at an elevation of up to 500 m above sea level, 32% in the range from 500 to 1,000 m above sea level and approximately 1% above 1,000 m above sea level.

- **The highest point**
Sněžka Mountain (Krkonoše),
1,603 m above sea level
- **The lowest point**
Hřensko, 115 m above sea level

Modern history

The Habsburg monarchy

From the 16th century, the Czech lands were ruled by the Habsburg dynasty, which gradually incorporated the territory into the Habsburg monarchy, later the Austro-Hungarian Empire. In response to Germanification, the Czech national revival began at the end of the 18th century as an effort to restore Czech culture and language and, later, to foster the acquisition of power by Czech political parties. The Czech lands underwent major economic development in the second half of the 19th century. The majority (approximately 70%) of industry in Austria-Hungary at time was concentrated in the Czech lands.

Czechoslovakia

At the end of the First World War, Czechoslovakia was established through the joining of the Czech lands with the geographically and linguistically close Slovak nation. Tomáš Garrigue Masaryk was elected the first president of Czechoslovakia. During the interwar period from 1918 to 1938, Czechoslovakia became the last remaining democracy in Central Europe and enjoyed a rich industrial heritage and high quality of life.

Communism

The Communist Party of Czechoslovakia seized power in February 1948. The country became a totalitarian state and part of the Eastern Bloc. The structures of civil society, free association and economic life were suppressed. The end of the 1950s saw the start of a gradual liberalisation, which came to an end on 21 August 1968, when an invasion by the Soviet Union and other Warsaw Pact countries crushed the reform movement known as the Prague Spring.

The Velvet Revolution

The Velvet Revolution, which began on 17 November 1989, overthrew the communist regime and enabled the return of democracy and restoration of free enterprise. Václav Havel became the first president of the free, post-communist Czechoslovakia. On 1 January 1993, the Czechoslovak Federative Republic was dissolved through a bilateral political agreement, the result of which was the establishment of two independent successor states: the Czech Republic and

Slovakia. The Czech Republic was gradually accepted into Western European political structures, joining significant World and European organisations.

Political system

The Czech Republic was established on 1 January 1993 in connection with the dissolution of Czechoslovakia. Since that date, the country has had a constitution according to which it is a parliamentary democracy with a liberal political system based on free competition of political parties and movements. The head of state is the country's president, whereas the supreme and only lawmaking body is the Parliament of the Czech Republic. Parliament is a bicameral body composed of the Chamber of Deputies and the Senate.

The Chamber of Deputies has 200 members elected every four years on the basis of proportional representation. The Senate's 81 members serve six-year terms, with two-round majority elections held for one-third of seats every two years.

The president and the government (i.e. the prime minister and cabinet) hold executive power, whereas the government is the supreme executive body. The government is accountable to the Chamber of Deputies. The president, who is elected through direct voting, appoints the justices of the Constitutional Court with the consent of the Senate. Under certain conditions, the president can dissolve the Chamber of Deputies and veto bills. The president also names the prime minister, and other members of the government are named at his suggestion. The Constitutional Court, with 15 justices, is the guarantor of constitutionality, ensures protection of fundamental rights and can repeal laws or provisions of laws. However, it is not part of the system of general courts. The Supreme Court is the highest body in civil and criminal justice as well as in the area of administrative adjudication.

Economics

The Czech Republic is a developed country with a market economy. According to a number of economic, social and political indicators, it ranks among the world's most advanced countries. Since 2005, the Czech Republic has been part of the group of the thirty most advanced countries according

National holidays in the Czech Republic

1 January	New Year's Day, Restoration Day of the Independent Czech State	28 September	Czech Statehood Day
Varies	Good Friday, Easter Monday	28 October	Independent Czechoslovak State Day
1 May	Labour Day	17 November	Struggle for Freedom and Democracy Day
8 May	Victory in Europe Day	24 December	Christmas Eve
5 July	Day of Slavic Missionaries Cyril and Methodius	25 December	Christmas Day
6 July	Jan Hus Day	26 December	St. Stephen's Day

Investment risk rating

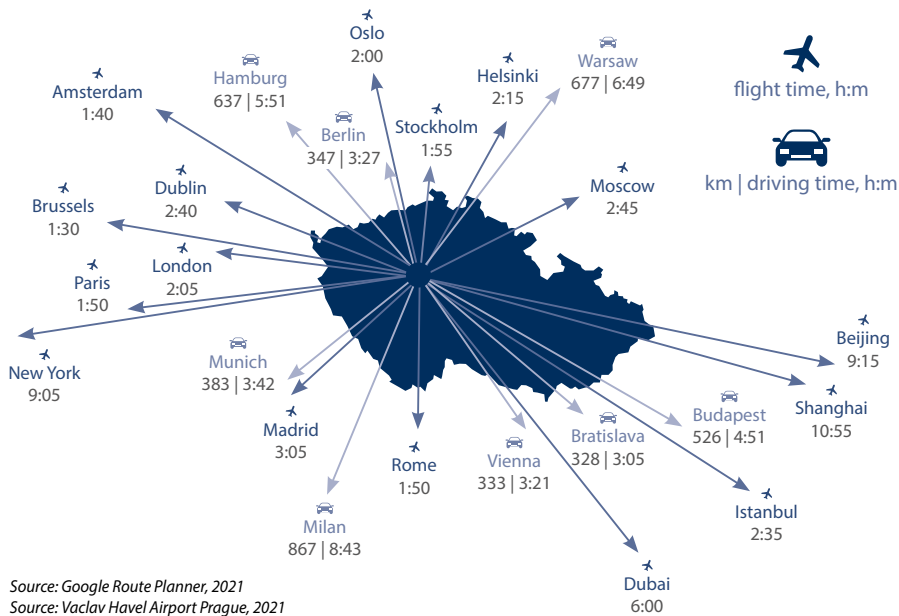
Country	Standard and Poor's	Moody's	Fitch
Czech Republic	AA-	Aa3	AA-
Hungary	BBB	Baa3	BBB
Poland	A-	A2	A-
Slovak Republic	A+	A2	A

Source: Czech National Bank, 2020

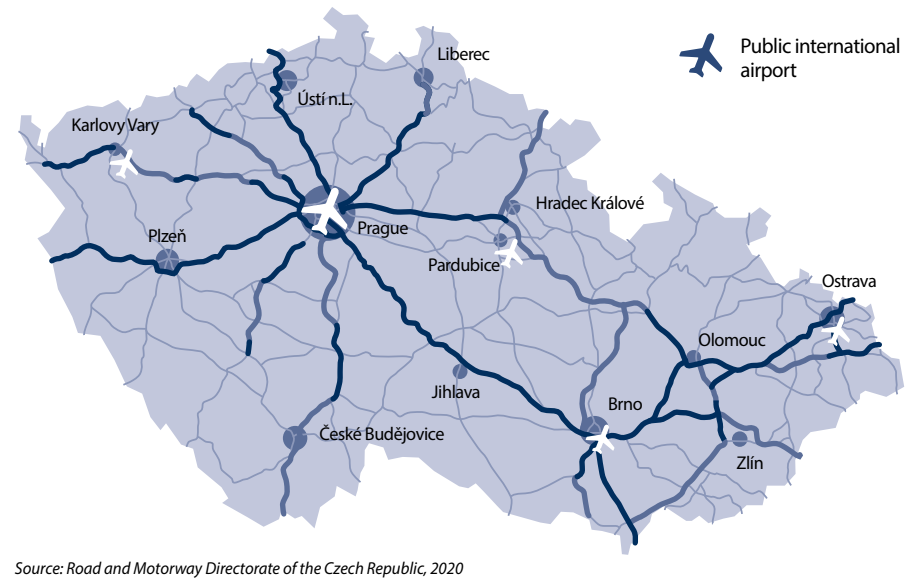
to the World Bank, to whose budget it has become a contributor. The country is considered to have the most stable and most prosperous economy of all post-communist states. According to Eurostat, it was the seventeenth richest country of the European Union in 2020 in terms of per-capita GDP based on purchasing power parity. It was the most successful of the new EU members. In 2020, industrial production declined by 8% year on year, which was due mainly to declines

in motor-vehicle and trailer manufacturing, production of machinery and equipment, and manufacturing of metal structures and products. Industrial production increased in the areas of paper and paper products, wood processing, manufacturing of wood, cork, wicker and straw products, and basic pharmaceutical products. The most important branch of Czech industry is vehicle manufacturing, including motorcycles and trailers. The other main pillars of Czech industry are the mechanical-engineering, metals, chemical and

Travel distances from Prague



Motorway network in the Czech Republic



food sectors. The energy, construction and consumer-goods industries are also important components of the Czech economy. Germany is the country's biggest foreign trade partner. The Czech Republic's currency is the koruna. Due to a foreign exchange intervention carried out by the Czech National Bank, the koruna-euro average exchange rate in 2020 was CZK 26,50/EUR 1 (as at January 29, 2021). Upon accession to the European Union in 2004, the country committed to adopting the single European currency. The Czech Republic's national debt is low in comparison with that of other EU member countries. The development and current state of the country's finances are also judged favourably in comparison with other European countries. In August 2011, Standard & Poor's raised its rating of the Czech Republic by two places, from A to AA-, which is the fourth-best possible rating.

Infrastructure

The Czech Republic has a well-developed network of motorways and expressways. The motorway network is under construction and is constantly being refurbished. The most significant motorway in the Czech Republic is the D1 joining Prague and Brno with Ostrava and Poland (toward Katowice). Construction of another section of the D11 motorway is being under construction since 2017 with the purpose of connecting Hradec Králové and the Polish border. Another motorway under construction is the D3 linking Prague to České Budějovice and Austria; the D2 will follow the route of the E55 backbone international motorway. The country's motorways that have already been completed are the D2 connecting Brno and Slovakia (toward Bratislava) and the D5 connecting Prague, Plzeň and Germany (toward Nuremberg). The amount of goods transported on Czech roads and motorways in 2019 was 474,841,880 and via rail trans-

port it was 372,992,000 tons according to statistics from the Ministry of Transport.

Together with road transport, rail transport in the Czech Republic makes up the backbone of the domestic transportation system while also serving for international transit. With 9,580 km of track, the Czech Republic has the densest rail network in Europe. The corridor routes of the nationwide lines leading to the European rail system for long-distance and transit service cover 1,402 km. The Railway Infrastructure Administration is the administrator and operator of the absolute majority of railway infrastructure in the Czech Republic. The biggest rail transporter is Czech Railways, whose subsidiary, ČD Cargo, is the fifth-biggest rail freight operator in European Union. The rail freight market has been liberalised; liberalisation of the passenger transport is ongoing. The Czech Republic is connected

to the EuroCity international rail network, while some international connections are covered by SuperCity trains, for which the busy Prague-Ostrava line is a core route. Czech Railways operates on the same routes as the high-speed Pendolino trains. Other private railway companies also provide passenger transport.

The Czech Republic has public international airports in Brno, Karlovy Vary, Ostrava, Pardubice and Prague. Václav Havel Airport in Prague is the most important Czech airport and is also the biggest airport among the new EU member countries. Its operator is the company Prague Airport. Václav Havel Airport annually handles almost nineteen million passengers carried by approximately 70 airline companies connecting Prague on direct routes to roughly 160 destinations around the world. Eight freight carriers also operate out of Prague's airport and dozens of other companies provide charter services. ■

Myths and misconceptions about the Czech Republic

Infrastructure is poor

Actually we have metros, trams and buses that run 24/7 and very much on time, unlike places in Western Europe or the US, where scheduled times and departure frequencies are quite often completely unknown.



Czech

Slovak

The Czech and Slovak languages are the same

No, actually they are not. Though there are many similarities, they are in fact two separate languages with different rules and a lot of different vocabulary. But Czechs and Slovaks can understand each other with enough exposure to each other's languages.

The language is difficult

Actually, this one is true! However, using English is becoming easier and easier in major cities. Many people try to learn Czech but have a hard time practicing because locals so often want to practice their English.



The Czech Republic

Czech Republic

Slovakia

Czechoslovakia still exists

Czechoslovakia peacefully split into two sovereign nations – the Czech Republic and Slovakia – in 1993, a little more than three years after the Velvet Revolution.



Outside of Prague, there is not much else in the Czech Republic

While Prague is the centre for a lot of commerce and tourism, the country offers a lot of other beautiful tourist destinations and great places to do business, including Brno, Ostrava, Plzeň and Liberec, among many others.

Eastern European country

The Czech Republic is part of Central Europe. In fact, Prague is located farther west than Vienna.



The euro is the currency of the Czech Republic

There are countries in the European Union that have adopted the Euro as their currency and many that have not. The Czech Republic has not and therefore we have and use Czech korunas. However, euros are quite widely accepted at many official locations.



Everything is so cheap

Yes, some things (food, rent) are cheap, especially outside of Prague, but other things are definitely not (clothing, cars).

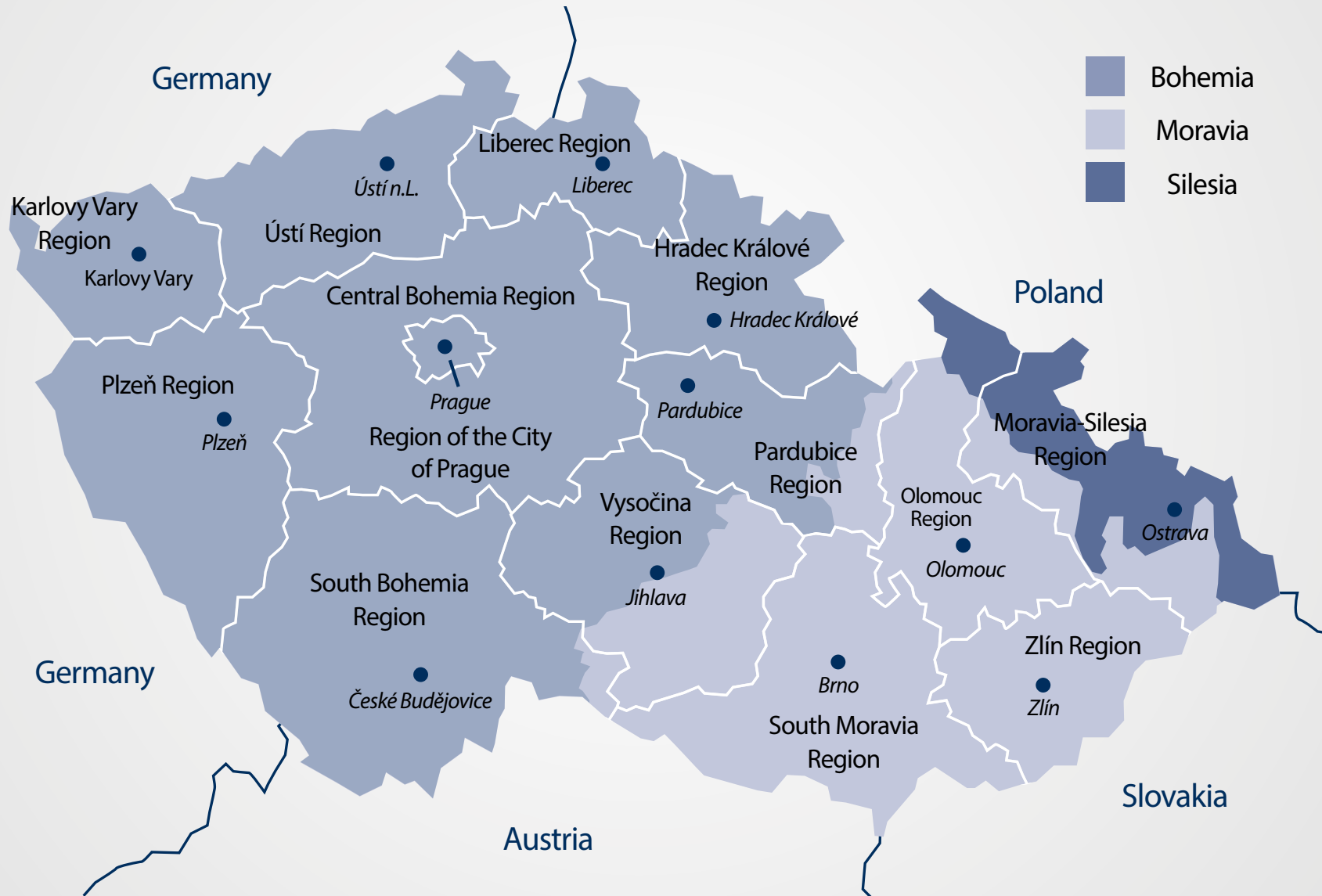


Technology is way behind

The Czech Republic achieved full, nationwide mobile phone penetration (every man/woman/child with a mobile device) several years ahead of the US (approx. 2005-06 in the Czech Republic, compared to 2009-10 in the US).



Regions of the Czech Republic



Region of the City of Prague

Name: Region of the City of Prague

Regional capital: Prague

Total area: 496 km²

Population: 1,331,464 (as at September 2020)

Working-age population: 862,264 (as at December 2019)

Unemployment rate: 3.51% (as at December 2020)

Institutions of higher education – type, number of students:

more than 120,000 students enrolled in eight public and at least twenty-two private universities, forty-nine public research institutions (67% of the country's total) (2019/2020)

Sectors in which the region excels: artificial intelligence, gaming, space technologies, cultural and creative industries, financial services

Highlights: The City of Prague is the capital of the Czech Republic, which is located in Central Europe. It is not only the nation's largest city, but is also one of the country's 14 autonomous regions. Prague is the cultural and economic centre of the Czech Republic, accounting for a quarter of the country's GDP. The city has a rich historical and architectural heritage and its historical centre has been listed as a UNESCO World Heritage site since 1992.

According to the PICS Index, Prague ranks 13th out of 113 world cities in terms of quality of life. Prague is also ranked as the 26th best location in the world for study according to international students. FDI ranks Prague as the second best small European region of the future in terms of business friendliness. Prague is a cosmopolitan city with one of the best public transportation systems in Europe. Prague is ranked second in the CEE region in terms of sustainable development, is the third largest European City of the Future (human capital and lifestyle) and sixth most developed region in the EU.

The City of Prague is ranked among the world's top 50 cities for start-ups and among the top three Eastern European ecosystems for start-ups and scale-ups. Prague won first place in the European Enterprise Promotion Awards 2019 at the national level and was shortlisted at the European level in the Improving the Business Environment category. Prague is also a city of science and research and the capital of satellite navigation, as it hosts the headquarters of the European Global Navigation Satellite Systems Agency. Prague's ESA Business Incubation Centre is the first facility of its kind in the CEE region focused on developing technologically progressive start-ups that use space technologies and systems. Prague also hosts the Prg.ai initiative, which has the long-term goal of transforming the city into one of the global hubs of artificial intelligence (AI) by focusing on creating an active AI ecosystem, reversing brain drain, attracting AI researchers, educating AI talents, incubating AI start-ups and innovating businesses.

Zdeněk Hřib
Mayor of Prague
www.praha.eu



Central Bohemia Region

Name: Central Bohemia Region

Regional capital: none; the seat of the Regional Authority is in Prague

Total area: 10,928 km²

Population: 1,395,970 (as at September 2020)

Working-age population: 862,264 (as at December 2019)

Unemployment rate: 3.52% (as at December 2020)

Institutions of higher education – type, number of students:

Czech Technical University, Faculty of Biomedical Engineering in Kladno, Škoda Auto University (private university)

Sectors in which the region excels: engineering and automotive industry, biotechnology, biomedicine, chemical industry, laser industry, glass manufacturing, agriculture and food production

Highlights: Central Bohemia is the largest of the Czech Republic's 14 regions and encompasses the nation's capital, Prague. The region has 26 administrative districts, municipalities with extended powers and 1,144 municipalities. The region's location has a significant influence on its economic characteristics and it has strong ties with Prague, for which Central Bohemia is source of labour and a supplier for Prague's industries, whilst also providing recreational opportunities for the capital's residents. There are many important and valuable historical sights and several protected landscape areas in Central Bohemia, and the region is also home to two UNESCO heritage sites – the royal town of Kutná Hora and the Průhonice chateau and park. The iconic Karlštejn and Konopiště castles and the birthplace of St Ludmila, Mělník, are also located in this beautiful region.

Several major companies, such as Škoda Auto, TPCA, Valeo, Amazon, Philip Morris, Procter & Gamble and Lego, have either their headquarters or major operations facilities in Central Bohemia, which has a very positive influence on the region's employment rate. The current development of the region is aimed at making Central Bohemia a leader in implementing technologies and innovations. The region has recently attracted significant investments in science and research. Top research centres of transnational importance have been established here: ELI Beamlines in the field of lasers and BIOCEV in the area of biomedicine and biotechnologies.

Central Bohemia offers a wide range of investment opportunities. Support is targeted especially at investments in prospective fields and services with high value added; strong emphasis is placed on the re-appropriation of brownfields. The region has excellent conditions for attracting new production, e-commerce, digital infrastructure and R&D-related investments.

Petra Pecková
Governor
www.kr-stredocesky.cz

South Bohemia Region

Name: South Bohemia Region

Regional capital: České Budějovice

Total area: 10,057 km²

Population: 644,239 (as at September 2020)

Working-age population: 410,332 (as at December 2019)

Unemployment rate: 3.19% (as at December 2020)

Institutions of higher education – type, number of students:

approximately 16,000 students enrolled in four public (University of South Bohemia in České Budějovice, VŠTE, Faculty of Management of the University of Economics, Department of the Faculty of Mechanical Engineering of the University of West Bohemia in Plzeň) and three private universities (VŠERS, FAMO, CEVRO Institut Český Krumlov) (2020)

Sectors in which the region excels: services, construction, tourism, industry, fisheries, agriculture, forestry

More detailed information was not provided.

Plzeň Region

Name: Plzeň Region

Regional capital: Plzeň

Total area: 7,649 km²

Population: 591,590 (as at September 2020)

Working-age population: 378,516 (as at December 2019)

Unemployment rate: 3.36% (as at December 2020)

Institutions of higher education – type, number of students:

University of West Bohemia in Plzeň (10,722), Charles University Faculty of Medicine in Plzeň (2,144), Metropolitní univerzita Praha, o.p.s. (189)

Sectors in which the region excels: manufacture of electronic components and consumer electronics, machinery and equipment, electrical equipment, motor vehicles, railway locomotives, rolling stock and other transport equipment, aircraft and spacecraft and related machinery (aircraft interiors, aircraft seats, aircraft engine parts), medical and dental instruments and supplies (eyeglass lenses, plastic products for the medical industry)

Highlights: The Plzeň Region's industrial history dates more than 150 years. Well-established companies manufacturing highly specialised products, such as Škoda Transportation (locomotives, trams, trolleybuses) and DOOSAN (development and manufacture of unique turbines), are successfully doing business in the region. The world's leading carmakers engage in collaboration with the local companies MBtech Bohemia (AKKA) and ZF Engineering, which develop systems for self-driving cars, e-mobility and vehicle safety and efficiency. The Plzeň Region sees the future in automation and robotics. One exceptionally successful company in this field is Aimtec, a Plzeň-based company that develops and supplies smart manufacturing systems.

Universities are strongly represented in the Plzeň Region, with the University of West Bohemia playing a crucial role. More than 11,000 students study technical, art, medical and humanities-based fields at the university's nine faculties. The university is outstanding due to its range of courses in mathematics, mechanics, electronics, and software and application automation and development. Specifically, the Faculty of Applied Sciences, Faculty of Mechanical Engineering and Faculty of Electrical Engineering offer interesting fields of study. The city of Plzeň hosts the 2,500-student campus of the prestigious Charles University Faculty of Medicine.

The region's technically focused research centres, which primarily specialise in mechanical engineering, development of new materials, nanotechnology, electrical engineering, electronics and ICT, have also achieved success. Plzeň-based researchers were involved in the development of an alpha, beta and gamma radiation detector that is about the size of a USB stick.

Excellent medical research is conducted in the Plzeň Region, including in the fields of clinical and general medicine and medical engineering. Scientists working in the region have made major advances in organ replacement and regeneration.

The Techmania Science Centre popularises science and fosters interest in science and technology, annually welcoming over 200,000 visitors, mostly young people.

"The region's innovation environment is developing well due to the Plzeň Region II Smart Accelerator project, financed from the Operational Programme Research, Development and Innovation, reg. no.: CZ.02.2.69/0.0/0.0/18_055/0016623."

Ilona Mauritzová
Governor
www.plzensky-kraj.cz

Karlovy Vary Region

Name: Karlovy Vary Region

Regional capital: Karlovy Vary

Total area: 3,314 km²

Population: 293,789 (as at September 2020)

Working-age population: 189,736 (as at December 2019)

Unemployment rate: 5.45% (as at December 2020)

Institutions of higher education – type, number of students: branches and dislocated workplaces of four public universities and regional workplaces of two private colleges, dozens to several hundred students (official numbers are not publicly accessible)

Sectors in which the region excels: mechanical engineering and custom metal-working, automotive industry, traditional industries – glass, ceramics, porcelain, other non-metal mineral products, power industry and use of renewable energy sources, spas and tourism, beverage production

Highlights: Welcome to the Karlovy Vary Region, to the region that never gave anything for free to its residents, but that rather always offered those who settled here something extraordinary. Its geographical location on the borders of Bohemia, Bavaria, and Saxony always presented and remains to be a challenge for logistics. For example, 500 years ago, its natural wealth gave birth to the precursor of the dollar – the Jáchymov silver tolar, and helped, for instance, in the discovery of the element of radium. It also offers materials for production of porcelain and glass, releases the energy stored in coal, began with Daguerreotypes and made it all the way to the International Film Festival, progressed from the very beginnings of air travel to an international airport, and primarily, it is the home of mineral waters and spas.

The sector of the spa industry and balneology is characterised by the so-called spa triangle formed by the cities of Karlovy Vary, Mariánské Lázně and Františkovy Lázně. The significance of traditional industries, such as the production of glass and porcelain, cannot be ignored, and companies such as Moser, Thun, and others are renowned in the field worldwide. In terms of the largest employers in industry, we should mention Sokolovská uhelná, which produces electricity and mines brown coal, and WITTE, which operates in the sector of the production and development of locking systems in the automotive industry. Traditional engineering production has great potential in the region, and the portfolio of traditional companies has been enriched by the arrival of the prominent automotive brand BMW, which plans to construct a testing centre with a polygon for autonomous cars.

The Karlovy Vary Region is distinguished by its lower unemployment rate in the long term, but it also is taking the necessary steps to remain an interesting location for the development of industry as well as for the development of research and development in science. Especially the Sokolov area, which is now facing the challenges of the transformations of the “post-coal” era, offers great potential for the arrival of new, interesting investors.

We invite you as business partners, tourists, spa guests, and even as our future neighbours to this region that aspires to be and will be a pleasant and promising place for life.

Petr Kulhánek
Governor

www.kr-karlovarsky.cz

Ústí Region

Name: Ústí Region

Regional capital: Ústí nad Labem

Total area: 5,339 km²

Population: 818,940 (as at September 2020)

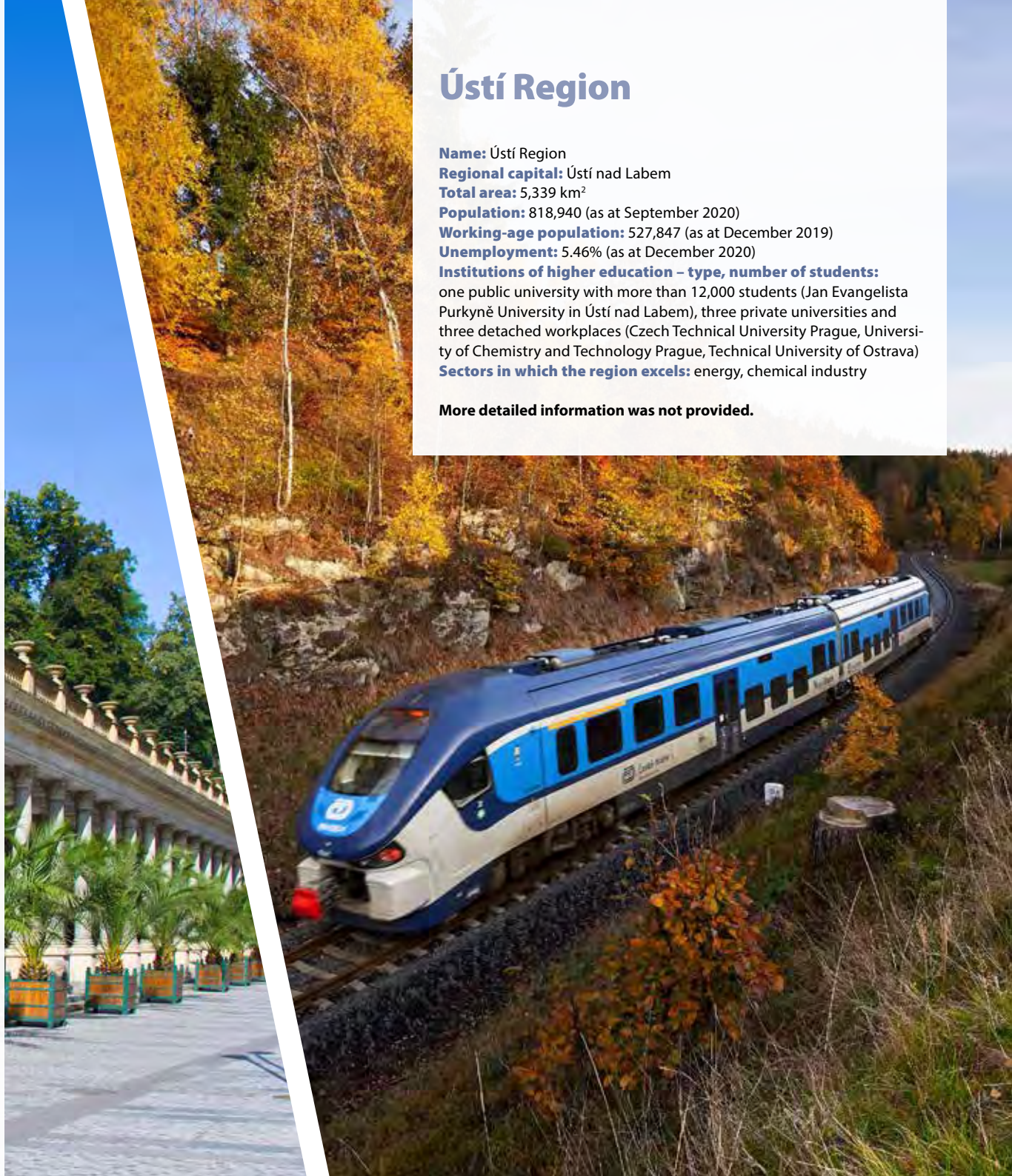
Working-age population: 527,847 (as at December 2019)

Unemployment: 5.46% (as at December 2020)

Institutions of higher education – type, number of students: one public university with more than 12,000 students (Jan Evangelista Purkyně University in Ústí nad Labem), three private universities and three detached workplaces (Czech Technical University Prague, University of Chemistry and Technology Prague, Technical University of Ostrava)

Sectors in which the region excels: energy, chemical industry

More detailed information was not provided.



Liberec Region

Name: Liberec Region

Regional capital: Liberec

Total area: 3,163 km²

Population: 443,222 (as at September 2020)

Working-age population: 281,448 (as at December 2019)

Unemployment rate: 4.06% (as at December 2020)

Institutions of higher education – type, number of students:

one public university - Technical University of Liberec (approximately 6,300 students - of which PhD students: 272) (2019/2020)

Sectors in which the region excels: nanotechnologies, advanced machinery, mechatronics, glass industry, optics, optoelectronics, automotive industry, electronics, ICT, advanced remediation, separation and membrane technologies, textile industry, plastics industry

More detailed information was not provided.

Hradec Králové Region

Name: Hradec Králové Region

Regional capital: Hradec Králové

Total area: 4,759 km²

Population: 551,527 (as at September 2020)

Working-age population: 346,227 (as at December 2019)

Unemployment rate: 3.11% (as at December 2020)

Institutions of higher education – type, number of students:

two public universities – University of Hradec Králové (6,500 students); Charles University Faculty of Medicine in Hradec Králové (1,827 students)

Sectors in which the region excels: industry, agriculture and tourism

Highlights: The Place for Life comparative survey has honoured the Hradec Králové Region by naming it the country's best region in terms of quality of life three consecutive times. According to the survey, the region constantly leads in healthcare and social services in comparison with other regions in the country. The country's shortest average distance to the post office is evidence of high degree of development of the region's infrastructure. It is also worth mentioning its high level of traffic safety, good child care and educational possibilities.

Many natural attractions are located in Hradec Králové Region, such as Krkonoše National Park, whose dominant feature is Snežka, and the stunning sandstone formations in nearby Adršpach and Jičín. We can find many castles and other cultural and historical landmarks in this region. The newly renovated Kuks lapidarium, which formerly served as a hospital, is described as the baroque highlight of the north-central part of the Czech Republic and is proudly honoured as one of the most beautiful architectural monuments in the Hradec Králové region. Many famous public figures, such as writer Karel Čapek and artist František Kupka were born in the Hradec Králové Region.

Ideal conditions for hiking, cycling, canoeing and skiing go hand in hand with the region's cultural heritage, which attracts both local and international visitors of all ages.

The region's largest industrial complex, which belongs to Škoda Auto Kvasiny and its suppliers, is located near Rychnov nad Kněžnou.

The plant employs more than 12,000 people, who manufacture the Škoda Superb, Kodiaq and Karoq and Seat Ateca.

A project involving the complete renovation and modernisation of the hospital in Náchod was finished in September 2020 after 27 months of construction work. It is the largest investment in the region to date in history so far. The partial renovation of the surrounding buildings and development of two new pavilions cost almost EUR 53 million in total.

The former Gayer military base in Hradec Králové is currently being converted into a repository of historical artefacts. The area will serve as new offices for employees of the East Bohemian Museum in Hradec Králové and will gather more than two million artefacts.

Martin Červíček
Governor

www.kr-kralovehradecky.cz

Pardubice Region

Name: Pardubice Region

Regional capital: Pardubice

Total area: 4,519 km²

Population: 523,580 (as at September 2020)

Working-age population: 333,567 (as at December 2019)

Unemployment rate: 2.92% (as at December 2020)

Institutions of higher education – type, number of students:

approximately 8,000 students at one public university - University of Pardubice (as at February 2021)

Sectors in which the region excels: electrical engineering, chemical industry, mechanical engineering, the Pardubice is a transport hub combining air, rail and water transportation

Highlights: Located in the centre of the Czech Republic, the Pardubice Region will be ranked among important transport hubs in the near future due to the development of road, rail, air and water transport. It is an attractive region thanks not only to its high degree of safety, housing quality, health and life satisfaction, but also to its long industrial tradition. The decision two nearby cities – Pardubice and Hradec Králové – to join forces in the implementation of Integrated Territorial Investments in the Hradec-Pardubice agglomeration, thus further enhancing the area's attractiveness, has proven to be the right step. The dominant role in the region's economy is played by the manufacturing industry, which is driven by enterprises buttressed by their own research. The region is home to large companies that develop, produce and sell innovative final products and are competitive on the European and global scale, as well as innovation champions among small and medium-sized enterprises with a significant proportion of their own research at the international level, particularly in radio technology, chemistry and biomedicine. A positive aspect is that three-fourths of research funding comes from the private sector. Basic research is conducted at the University of Pardubice, which is developing successfully and where new space for collaboration is being opened. The P-PINK business incubator, whose operation is focused on active support for start-ups, was established in 2018. The Pardubice Region offers a combination of beautiful countryside and magnificent history, arts, captivating music and all possible kinds of sports. The most important events undoubtedly include Smetana's Litomyšl Festival, the Grand Pardubice Steeplechase and the Golden Helmet. The region is also associated with the taste of Pardubice gingerbread and the presence of horses, which are an essential part of the region. When visiting the Pardubice Region, you will be able to familiarise yourself with the local traditions including handicrafts, see numerous castles and chateaux, ancient military forts and fortifications, urban conservation areas and many attractive examples of Renaissance, Baroque, Art Nouveau and modern interwar architecture.

Martin Netolický
Governor
www.pardubickykraj.cz



Vysočina Region

Name: Vysočina Region

Regional capital: Jihlava

Total area: 6,796 km²

Population: 509,895 (as at September 2020)

Working-age population: 326,248 (as at December 2019)

Unemployment rate: 3.31% (as at December 2020)

Institutions of higher education – type, number of students:

one public university - College of Polytechnics Jihlava (2,248 students) (as at December 2019)

Sectors in which the region excels: automotive industry, metal-processing and mechanical engineering

Highlights: The Vysočina Region is situated in the centre of the Czech Republic. Thanks to its strategic location between the two biggest Czech cities (Prague, Brno) and near the border with Austria, it is easily accessible both by road and by rail. There are also two international airports – Prague and Brno – within easy reach.

The region's well-developed industrial manufacturing is comprised of traditional sectors such as the automotive industry, metalworking, mechanical engineering, wood processing and the furniture industry, as well as the newly growing sectors of industrial automation and IT. There are a number of highly innovative companies that are competitive on the European and global scale not only in these sectors, but also in the electrical engineering and energy industries. More than 98% of R&D funding comes from the private sector. There are also several R&D Centres and research facilities in the region, including, for example, the Institute of Theoretical and Applied Mechanics of the Czech Academy of Sciences in Telč, the College of Polytechnics Jihlava, the Forestry and Game Management Research Institute in Pelhřimov, the Potato Research Institute in Havlíčkův Brod, the Institute of Vertebrate Biology of the Czech Academy of Sciences in Studenec and the Nuclear research Institute in Dukovany. These centres naturally cooperate not only with enterprises but also with educational institutions.

The Vysočina Region has a well-educated and flexible work force. As for tertiary education, there is the young but rapidly developing College of Polytechnics Jihlava, which offers study programmes in the fields of electrical engineering and informatics, technical engineering and applied technology, economics and management, tourism, midwifery, healthcare and clinical social work. Many other benefits are derived from international cooperation with partner regions such as Lower Austria (Austria), Grand Est (France), the Nitra Self-governing Region (Slovakia), the Minsk Region (Belarus), Hubei Province (China), Transcarpathian Ukraine, the European Region Danube-Vltava, etc. The Vysočina Region has many positive attributes including its rich cultural and natural heritage, beautiful landscapes and a pristine and safe environment. Together with the region's talented population, these represent the many good reasons to invest here.

Vítězslav Schrek
Governor
www.kr-vysocina.cz

South Moravia Region

Name: South Moravia Region

Regional capital: Brno

Total area: 7,188 km²

Population: 1,195,226 (as at September 2020)

Working-age population: 761,769 (as at December 2019)

Unemployment rate: 4.55% (as at December 2020)

Institutions of higher education – type, number of students:

approximately 61,500 students enrolled in five public, four private and one state university (2019)

Sectors in which the region excels: information technology, life sciences, electron microscopy, the space industry, precision instruments, mechanical engineering, production digitalisation, cybersecurity

Highlights: South Moravia is a region that excels in innovative business and research and development. It is a unique combination of two worlds: the “big”, which includes business, science, innovation and state-of-the-art technology, and the “less visible” personal, creative and balanced world, which also includes relaxation for everyone. It is a place where ideas are created and used for the purpose of making the world a better place.

The capital city of Moravia is Brno. This region has significant potential. Its twelve universities are guaranteed to give the region a youthful spirit, creativity and dynamism. Universities with a long tradition ensure progressive research primarily in biology and medicine, which is also supported by the presence of state-of-the-art scientific research centres such as CEITEC and the ICRC.

Several multinational companies (e.g. Thermo Fisher Scientific, Honeywell, IBM, Red Hat) have built their research and development centres and state-of-the-art production halls in South Moravia. The city of Brno excels in supporting science and research, especially in the field of IT, as a result of which it has become known as the “Czech Silicon Valley”. South Moravia actively cooperates on the development of its potential with institutions in the region (e.g. the South Moravian Innovation Centre, the South Moravia Regional Development Agency, Business and Investment Development Agency CzechInvest, Brno Regional Chamber of Commerce, universities, science centres and entrepreneurs).

Other than the region’s abundant universities and scientists, it is also home to businesses and entrepreneurs who are striving to closely cooperate with public institutions. The advantage of this cooperation consists in excellent conditions for increasing the region’s competitiveness in the long run.

South Moravia has long been implementing and supporting investments from national and EU structural funds in the region’s research and development capacities, while also providing support for transportation infrastructure, education, healthcare, culture and social care, thereby ensuring the region’s development.

The region’s international airport in Brno, with regularly scheduled flights to Milan and London. Rail connections from Brno to Prague, Bratislava and Vienna (approx. two hours) are also beneficial for the region.

Jan Grolich
Governor

www.kr-jihomoravsky.cz

Olomouc Region

Name: Olomouc Region

Regional capital: Olomouc

Total area: 5,267 km²

Population: 631,660 (as at September 2020)

Working-age population: 402,274 (as at December 2019)

Unemployment rate: 4.11% (as at December 2020)

Institutions of higher education – type, number of students:

approximately 22,000 students enrolled in one public (Palacký University in Olomouc) and two private universities (Moravian Business College Olomouc, College of Logistics)

Sectors in which the region excels: industry, agriculture, chemical industry

More detailed information was not provided.

Moravia-Silesia Region

Name: Moravia-Silesia Region

Regional capital: Ostrava

Total area: 5,430 km²

Population: 1,195,433 (as at September 2020)

Working-age population: 775,886 (as at December 2019)

Unemployment rate: 5.55% (as at December 2020)

Institutions of higher education – type, number of students:

more than 25,800 students enrolled in three public (Silesian University in Opava, Technical University of Ostrava, University of Ostrava) and two private universities (The College of Entrepreneurship and Law, Prigo University) (as at January 2021)

Sectors in which the region excels: IT industry, iron-ore processing, mechanical engineering, vehicle manufacturing, chemical industry, agriculture, food industry and forestry

Highlights: Moravia-Silesia is a dynamically developing region with a changing image. Originally reliant on heavy industry and infamous for the negative effects of that, the region is being transformed into an important technological centre. Digitalisation and young technological companies are transitioning the region away from coal and steel towards Industry 4.0. Currently, the number of people working in the region's IT industry is equal to those working in metallurgy. The region welcomes innovations and focuses on research, and is enhancing its enterprising approach while keeping pace with the times and development. The Moravia-Silesia Region is on the right path and is taking specific steps in the area of environmental protection, developing healthcare and social care, strengthening its communities and interconnecting generations. It stresses education, supports culture and sport and generally strives hard to be more attractive and a great place to live.

Ivo Vondrák
Governor
www.msk.cz

Zlín Region

Name: Zlín Region

Regional capital: Zlín

Total area: 3,963 km²

Population: 581,304 (as at September 2020)

Working-age population: 372,805 (as at December 2019)

Unemployment rate: 3.22% (as at December 2020)

Institutions of higher education – type, number of students:

one public university – Tomáš Baťa University in Zlín (approximately 9,600 students)

Sectors in which the region excels: plastics processing, rubber, machinery, aerospace, electrical engineering, product and industrial design.

Highlights: The Zlín Region is situated in the eastern part of the Czech Republic, on the border with Slovakia. The motorway network connects the region with the main development centres in the Czech Republic (Prague and Brno) and construction of the new motorway infrastructure within the Trans-European Transport Network (TEN-T) the direction of Slovakia and Austria is ongoing. In terms of per-capita GDP growth, the Zlín Region ranks among the more successful regions of the Czech Republic, as it possesses professional and flexible workforce and high-quality education system.

The economy of the Zlín Region is distinguished by a strong basis comprising innovative companies, especially in the segment of small and medium-sized enterprises, a large number of which operate in industrial and significantly export-oriented sectors. A particularly strong position is held by the plastics industry due to the presence of Tomáš Baťa University in Zlín and its Centre for Polymer Systems, which is an important research partner of companies associated in the Plastics Cluster. The position of the aerospace industry, which is represented in the region by manufacturers of aircraft and aircraft components and related technologies, is also significant. These companies are associated in the Moravian Aerospace Cluster. Other strong sectors in the region include the mechanic engineering, electrical engineering and metalworking industries, as well as ICT, which is a developing part of the services sector. And there are dynamically growing creative companies supported by the Zlín Creative Cluster, with their success based on the design of their products or technologies. The Technological Innovation Centre and its partners in the ZLINNOVATIOO platform offer a broad range of support services for entrepreneurs and investors in the Zlín Region. An important part of this offer is the Holešov Industrial Zone, which is one of the largest development areas in the Czech Republic, with the entire necessary infrastructure for investors from industrial, research and development, and strategic services sectors. Moreover, there is the Progress Technology Park, situated in the heart of the zone, which offers, in addition to production halls, spaces for laboratories, offices and other facilities for entrepreneurs. You can also visit popular tourist areas in the Zlín Region with natural, cultural and historical diversity, including monuments listed on the UNESCO World Heritage List, spas and a variety of folk traditions. The local folk culture and the regions distinctive gastronomy are unique in the Czech Republic.

Radim Holíš
Governor
www.kr-zlinsky.cz

Foreign direct investment in the Czech Republic, developments and trends

Selected key investors in the Czech Republic by industrial sector

Sector	Investor (country/region of origin)	Sector	Investor (country/region of origin)
Aerospace	GE Aviation materials (US)	High-tech mechanical engineering	Bombardier (CA)
	Honeywell Aerospace (US)		Daikin (JP)
	Latecoere (FR)		Edwards (UK)
	Bell Helicopters (US)		Ingersoll Rand (US)
	UGMK (RU)		Siemens (DE)
Automotive	Hyundai (KR)	Information and communication technologies	Microsoft (US)
	Nexen Tire (KR)		Oracle (US)
	Robert Bosch (DE)		Red Hat (US)
	Toyota/Groupe PSA (JP/FR)		Solarwinds (US)
	Volkswagen (DE)		Tieto (FI)
Business support services	Accenture (US)	Life sciences	Lonza (CH)
	DHL (DE)		MSD (US)
	IBM (US)		Otsuka Pharmaceutical (JP)
	Infosys (IN)		Synthon (NL)
	SAP (DE)		Teva Pharmaceutical Industries (IL)
Electrical engineering and electronics	ABB (CH)	Nanotechnologies and advanced materials	AGC (JP)
	ThermoFisher Scientific (FEI) (US)		Thermofisher Scientific (FEI) (US)
	Foxconn (TW)		Fibertex Nonwovens A/S (DK)
	On Semiconductor (US)		Saint-Gobain (FR)
	Panasonic (JP)		Toray Industries (JP)

Source: CzechInvest, 2020

The Czech Republic offers an excellent environment to support investments with higher value added, i.e. investments that are technologically oriented or related to research and development, sometimes also referred to as high-tech investments, in key sectors (aerospace, automotive industry, life sciences, nanotechnology, ICT, business services, electronics and advanced engineering). In 2019, two-thirds of arranged investments were expansions of the operations of companies already established in the Czech Republic.

The change in the structure of foreign direct investment in the past ten years indicates a new trend in the Czech Republic. The number of demanding projects in the fields of research and development and business support services is rapidly increasing the number activities (technology centres and business support services centres) coming to the Czech Republic. Other trends in the area of investment include autonomous driving, electromobility, virtual and augmented reality, cybersecurity, artificial intelligence and advanced materials. ■

Investment in individual years, 2010-2019

	Number of projects	Investment (CZK mil.)	Investment (EUR mil.)	Number of jobs
2010	60	14,615	578	7,037
2011	72	33,016	1,343	10,702
2012	81	20,369	810	8,530
2013	108	47,937	1,846	10,412
2014	147	86,956	3,159	16,842
2015	106	44,969	1,648	14,040
2016	101	62,494	2,312	12,102
2017	106	62,996	2,393	12,116
2018	82	36,687	1,431	6,146
2019	94	54,677	2,130	6,948
Total	957	464,716	17,650	104,875

Source: CzechInvest, 2020

Top 6 investments, 1993-2019

Investor	Sector	Country of origin	Investment (CZK mil.)	Investment (EUR mil.)
Volkswagen	Motor-vehicle manufacturing	Germany	18,996	739
Nemak	Motor-vehicle manufacturing	Mexico	11,361	443
Denso	Motor-vehicle manufacturing	Japan	9,575	373
Toyota/PSA	Motor-vehicle manufacturing	Japan	23,500	915
Hyundai Motor Company	Motor-vehicle manufacturing	South Korea	34,429	1,341
Nexen Tire Corporation	Rubber	South Korea	22,764	887

Source: CzechInvest, 2020

Top 10 investment by country of origin, 2010-2019

Country of origin	Number of projects	Investment (CZK mil.)	Investment (EUR mil.)
Germany	178	95,286	3,712
Czech Republic	222	86,316	3,363
United States	115	45,361	1,767
South Korea	19	34,303	1,336
Netherlands	40	32,136	1,252
Austria	36	29,116	1,134
Japan	55	23,613	920
Switzerland	43	13,701	534
France	30	11,183	436
China	20	10,650	415
Total	758	381,665	14,869

Source: CzechInvest, 2020

Structural change of investments



Economic transition

- Privatisation of large Czech companies
- Incentives only for major foreign direct investments in manufacturing

Greenfield investment in manufacturing

- Large foreign direct investments
- Peak of newly created jobs
- Establishment of a supplier base for Western European markets

2012-2018

Diversification of supported activities

- Investment incentives for technology centres, high-tech repair centres, software development, data centres, etc.
- Technology interchange

2018 +

Innovation

- Higher-value-added foreign direct investments
- Encouragement of investment in KETs
- Advancement of Czech suppliers into global value chains
- Start-up accelerators and incubators

Top 10 investment by sector, 2010-2019

	Number of projects	Investment (CZK mil.)	Investment (EUR mil.)
Motor-vehicle manufacturing (automobiles, buses, trailers)	240	138,730	5,404
Rubber and plastics	87	59,824	2,331
Metalworking and metal-processing	115	51,221	1,995
Paper and wood-processing	36	39,762	1,549
Mechanical engineering (machinery manufacturing)	96	32,015	1,247
Food	40	20,248	789
Electrical devices (batteries, generators, cables, appliances)	30	18,055	703
Other	48	17,243	672
Chemical and petrochemical	27	17,168	669
Electronics (computers, optical instruments, electronics)	28	15,489	603
Total	747	409,755	15,962

Source: CzechInvest, 2020

Benchmarking of the Czech Republic in the V4 context

Czech Republic



10.7 mil
Population in 2020



78,866 km²
Area



Czech
Language



Czech Koruna
Currency



1 EUR = 26,5 CZK
Average exchange rate
in 2020 (EUR)

Basic facts

GDP (EUR billion)	219.5	Consumer price inflation (%)	2.86
GDP (PPP) per capita (EUR)	34,379	Labor force (million)	5.42
Real GDP growth (%)	2.4	Current account balance (%)	-0.34

Slovakia



5.45 mil
Population in 2020



49,035 km²
Area



Slovak
Language



Euro
Currency

Basic facts

GDP (EUR billion)	95.8	Consumer price inflation (%)	2.77
GDP (PPP) per capita (EUR)	32,399	Labor force (million)	2.74
Real GDP growth (%)	2.6	Current account balance (%)	-2.82

Poland



37.95 mil
Population in 2020



312,679 km²
Area



Polish
Language



Polish złoty
Currency



1 EUR = 4,52 PLN
Average exchange rate
in 2020 (EUR)

Basic facts

GDP (EUR billion)	525.2	Consumer price inflation (%)	2.31
GDP (PPP) per capita (EUR)	29,857	Labor force (million)	17.02
Real GDP growth (%)	4.1	Current account balance (%)	0.47

Hungary



9.76 mil
Population in 2020



93,030 km²
Area



Hungarian
Language



Hungarian Forint
Currency



1 HUF = 0,0028 EUR
Average exchange rate
in 2020 (EUR)

Basic facts

GDP (EUR billion)	143.3	Consumer price inflation (%)	3.37
GDP (PPP) per capita (EUR)	30,588	Labor force (million)	4.59
Real GDP growth (%)	4.9	Current account balance (%)	-0.80

Note: Basic facts data refer to 2019 Source: IMD World Competitiveness, 2020

About

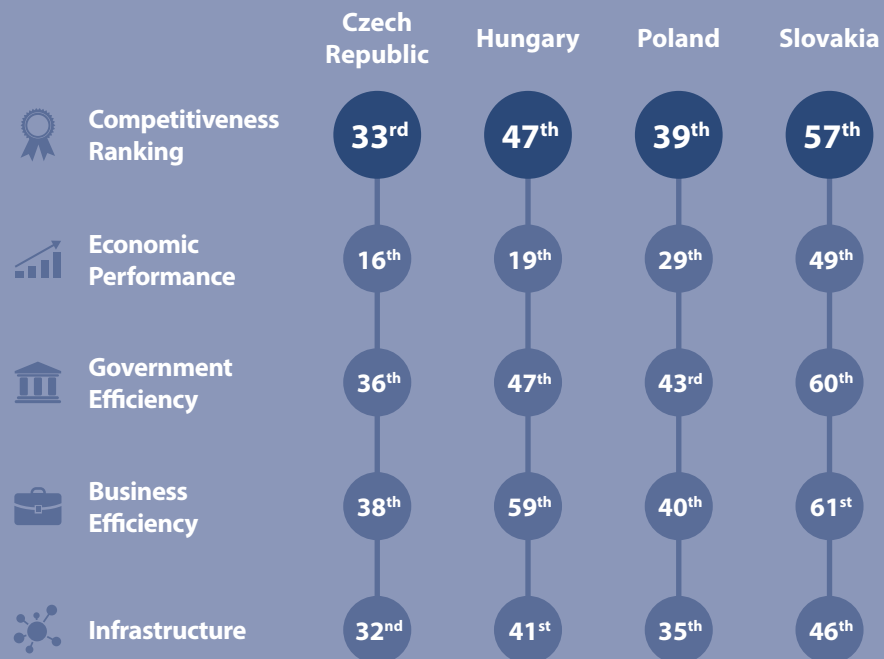
The Visegrad Group (also known as the “Visegrad Four” or simply “V4”) was formed in 1991 with the aim of reflecting the efforts of the countries of the Central European region to work together in a number of fields of common interest within the all-European integration. Czechia, Hungary, Poland and Slovakia have always been part of a single civilization sharing cultural and intellectual values and common roots in diverse religious traditions, which they wish to preserve and further strengthen.

Source: MVCR, 2020

What's trending in the Czech Republic

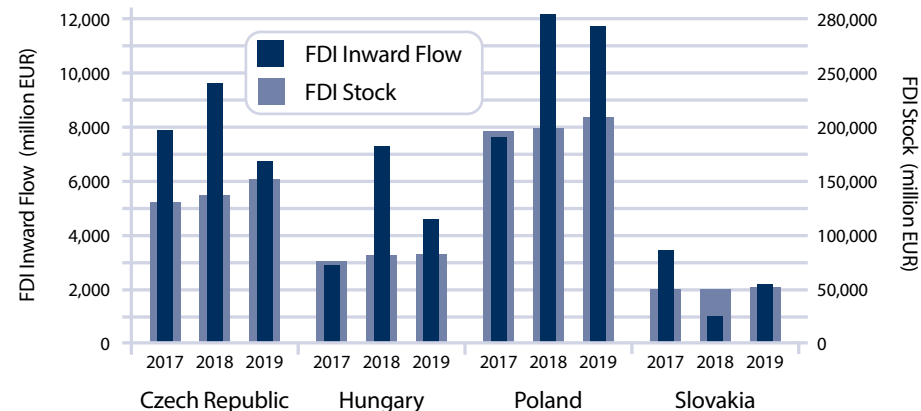
- Structural trends fuelling long-term demand are being accelerated by both business and consumer reactions to the COVID-19 pandemic.
- The industrial sector seems to be the least affected by the global pandemic; the industrial & logistics and office sectors remain the most preferred property types for investment.
- In the development field, investors remain cautious and favour core and core-plus developments.
- Demand drivers highlight gaps in supply chains that can potentially be addressed by the expanded range of logistics asset types.
- Increased demand for new land availability: result of the combination of strong demand and supply chain reconfigurations to enhance efficiencies.
- Development of new infrastructure will be strong, including all asset classes (transport, smart and renewable energy, data, social amenities and accommodation).

Overall rank



Source: IMD, 2021

Foreign Direct Investment



Source: UNCTAD, 2020

The Global Innovation Index 2020

Rank 2020	Country	Score
24	Czech Republic	48.34
35	Hungary	41.53
38	Poland	39.95
39	Slovakia	39.70

Source: Global Innovation Index 2020 Report, 2021

Global Talent Competitiveness Index

Rank 2020	Country	Score
25	Czech Republic	60.91
39	Slovakia	52.08
44	Poland	49.48
52	Hungary	46.62

Source: INSEAD, Adecco Group, Human Capital Leadership Institute, 2021

Quality of Life Index

Rank 2020	Country	Score
25	Czech Republic	156.24
29	Slovakia	152.53
36	Poland	141.83
44	Hungary	128.16

Source: Numbeo, 2021

Ready for business

The Czech Republic is one of the fastest-growing economies in Europe with the most favourable long-term macroeconomic indicators such as per-capita GDP and public debt. The country has been a regional industrial leader for more than a century and is one of the most successful CEE countries in terms of attracting foreign direct investments.

According to the Czech National Bank (2019), the Czech Republic has received a total of EUR 130 billion worth of FDI since 1993. The largest amount of FDI flows from Germany. According to a survey carried out in 2019 by the Czech-German Chamber of Commerce, 70% of German companies with operations in the Czech Republic consider the country's investment climate to be good. The survey shows that the Czech Republic is the second most attractive location in the CEE region for many reasons, such as its proximity to Germany, quality and availability of local suppliers, productive and motivated skilled workforce and R&D infrastructure. An open investment climate has been a key element of the Czech Republic's economic transition.

Strategic location

One of the factors that make the Czech Republic extremely attractive for foreign investors is its good access to the European market. The country's convenient location in the middle of Europe makes it possible to reach all European capitals very quickly. Together with EU membership, this makes the country a perfect gateway to the single European market of 500 million consumers and 21 million SMEs. Given the fact that the Czech Republic is at the crossroads of European trade, advanced transport infrastructure was naturally developed here. The Czech Republic is ranked among the world's most advanced countries in terms of transport-network density and several projects involving modernisation and extension of the network are currently underway.

Stable and transparent business environment

A stable political situation, well-developed private sector, effective legal environment and healthy banking system with a strong and independent central bank are the key features of a society in which business can be conducted effectively and safely. The Czech Republic's open investment climate was a key element in the country's transition, which is reflected in its investment rating from international credit-rating agencies, putting it on an equal footing with Japan and Taiwan and opening the door to early membership in the OECD. The Czech Republic is a fully-fledged parliamentary democracy and one of the most advanced new members of the European Union, which it joined in 2004. Its currency, the koruna (CZK), is fully convertible and extremely stable. Under Czech law, foreign and domestic entities are treated identically in all areas, from protection of property rights to investment incentives. The tax system offers the lowest rates in Europe and has remained stable over the long term. The country's investment grade ratings from international credit-rating agencies and its early membership in the OECD testify to its positive economic fundamentals.

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 that 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.

Educated and skilled workforce

The Czech Republic combines an outstanding level of general education with a strong tradition and experience in science and engineering disciplines. The availability of graduates educated in technical fields at a fraction of the cost of western labour makes the country especially advantageous for manufacturing and R&D-oriented companies. In the academic

Czech Republic – worldwide rankings

1st in Eastern Europe

Quality of Life Index by Country 2020 (Numbeo, 2020)

16th Attractive Country for Expats

Expats Insider 2020

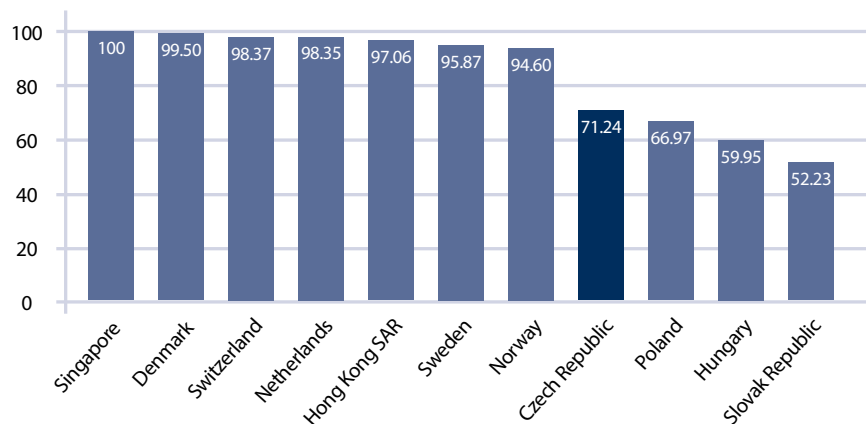
8th safest country

Global Peace Index 2020

33rd out of 140 countries

Global Competitiveness Index 2020

The IMD World Competitiveness Ranking 2020



Source: IMD, 2021

year 2019/2020, nearly 300,000 students were enrolled in the country's 60 universities (Ministry of Education, Youth and Sport, 2020). Roughly one-third of Czech university students study economics and finance, while more than 81,000 students are enrolled in technical programmes. Because the Czech Republic is a relatively small country, studying foreign languages is a necessity. According to the latest STEM survey, more than 72% of Czechs have knowledge of at least one foreign language (predominantly English or German); this figure rises above 90% for those in management positions. The Czech Republic has strong technological potential thanks to its pool of well-educated science workers and its skilled workforce, which have given rise to several rapidly growing industries such as biotechnology and software development. 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. Czech employees are very loyal, hardworking and precise. The local workforce is considered to be very reliable and stable.

Well-developed infrastructure

Besides the country's transport infrastructure, its energy distribution and telecommunications networks also contribute to the creation of an ideal environment for doing business. Energy supplies are very stable with some of the lowest prices

in the region. Both the electricity and gas markets are fully liberalised without any regulations, only activities of a monopolistic nature continue to be regulated. The Czech Republic's energy infrastructure is among the most reliable, efficient and adequately supplied in the region, as the country has some of the largest gas reserves in the EU. The Czech telecommunications market – one of the most highly developed and most liberalised in Central and Eastern Europe – is distinguished by growing demand for data, internet and other communication services. The country's advanced fibre-optic network is part of the European backbone and is being further developed. No exclusive rights exist in the area of electronic communications and the competition environment is sufficiently robust in the context of the European Union. In terms of the business-property market, the country is quite advanced with respect to the number of industrial zones and parks as well as office premises.

Quality of life

The Czech Republic has the 25th best quality-of-life index in the world according to Numbeo.com, which ranks the Czech Republic first among the Eastern European countries. The country's urban centres and beautiful countryside offer countless possibilities for leisure activities for both tourists and locals throughout the year. Municipal public transport systems are well managed and efficient, while trains provide a popular and easy way to travel around the country. The Czech Republic is an expat-friendly country with plenty of organisations helping foreigners with everyday

issues and organising networking events. Furthermore, in larger cities it is easy to find international schools for children at all grade levels. The country is close to Western Europe not only geographically, but also in terms of social and cultural values. Together with its sustainable business environment and its ability to harness its potential in order to respond to the needs of the global economy, the Czech Republic's high quality of life is yet another factor making it an ideal investment location. ■

Global Peace Index 2020

Rank 2020	Country	Score
1	Iceland	1.078
2	New Zealand	1.198
3	Portugal	1.247
4	Austria	1.275
5	Denmark	1.283
8	Czech Republic	1.337
24	Hungary	1.559
25	Slovakia	1.568
29	Poland	1.657

Source: Institute of Economics and Peace, 2020

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Prague: **A top location** for European headquarters

Every year, Prague is visited by more than four million foreign tourists wanting to see one of the most beautiful cities in the world. What is less obvious to them and others is Prague's complete readiness to host the CEE headquarters of multinational companies.

The Czech capital is a unique location combining favourable costs and a sense of culture and tradition with a well-developed private sector, a highly skilled workforce and innovation potential, as well as an enticing atmosphere and great conditions for expats. These factors have made this attractive city a popular location for the regional headquarters of major multinationals such as Tesco, Ness Technologies and Bell Helicopters. Furthermore, Prague secured first place in the category Eastern European Regions of the Future 2020/2021 and it ranks

among the top 25 European Regions of the Future according to fDi Intelligence magazine 2020/2021.

At the centre of one of the world's biggest markets

Prague is very easily accessible from many other places in the world and is within a two-hour flight of most European cities. There are many daily direct flights connecting Prague to the main European business centres, such as London, Amsterdam and Frankfurt, as well as global centres including New York, Toronto, Tel Aviv, Dubai, Seoul and Beijing. The fact that the European Union is one

of the largest markets in the world undoubtedly makes Prague the top choice for those investors who want to conveniently access the European market or further develop their business in Europe.

Strong innovation potential, R&D and a skilled workforce

The Czech Republic has strong potential in the area of R&D. The main areas of technological specialisation in the Czech Republic include, but are not limited to, construction and construction technologies, materials engineering, transport technologies, biotechnology, environmental technologies, energy and security. Prague is among the EU regions with the largest share of researchers in total employment (over 2%). The city is home to nine public universities and the Academy of Sciences, which drives the development of new ideas and approaches for the innovation of products and services. Many R&D-focused start-ups are based in Prague. Prague shows compelling results especially in the field of human resources. Thanks to many opportunities for tertiary education across disciplines, the city is full of highly qualified specialists looking for work in the private sector.

A safe, expat-friendly city of culture

Prague offers expatriates a truly safe and culturally rich environment and very good municipal infrastructure. The Czech capital also offers great conditions for families, an effective public transport system and high-quality services in the areas of shopping, dining and entertainment. More than 16% of Prague's inhabitants are expatriates.

Features of Prague and the Czech Republic

- + 2nd** Prague is second in the category Small European Regions of the Future in terms of human capital and lifestyle (fDi Intelligence, 2020/2021)
- + 7th** Prague ranks seventh among major European cities in terms of cost effectiveness (fDi Intelligence, 2020/2021)
- + 2 h** Prague is within a two-hour flight of most European cities
- + 15%** The personal income-tax rate in the Czech Republic is only 15%
- + 25** Prague is among the top 25 European Regions of the Future and the top 25 European Cities of the Future (fDi Intelligence, 2020/2021)
- + ↑** Prague is among the EU regions with the largest share of researchers in total employment (Eurostat, 2019)
- + 2nd** fDi Intelligence ranks Prague as the second best Small European Region of the Future in terms of business friendliness (fDi Intelligence, 2020/2021)

According to the 2019 Expat Insider survey, the Czech Republic is the second most attractive country in the world in terms of working abroad after Vietnam. Prague is a truly cosmopolitan city whose many notable advantages include the fact that it is more than one-third cheaper to live here than in London and two times cheaper than in New York (data according to numbeo.com). In addition to that, the Czech Republic is the eighth-safest country in the world according to the 2020 Global Peace Index. Though Prague is generally and rightly perceived as a city with a rich cultural heritage and a well-preserved historical centre, it also has a captivating and lively modern cultural environment offering an abundance of concerts, coffeehouses, libraries, theatres, cinemas and museums, as well as film, music, arts and food festivals. Beyond entertainment options, Prague has outstanding municipal infrastructure including green spaces and facilities for sports and outdoor recreation. Family life is very easy for expatriates in Prague thanks to the presence of over forty international preschools and elementary and secondary schools. With its highly efficient public transport system, it is possible to reach the centre of Prague from practically anywhere in the city within half an hour. The Czech capital also excels in terms of the availability of premium shopping and services. Numerous luxury brands are present here and residents can enjoy a number of top-level restaurants and bars, including Michelin-starred establishments.

Open business environment

Prague has an open business environment and a well-developed private sector. Most of the business in Prague takes place in the city's very strong tertiary and quaternary sectors. This leads to an appropriate environment for HQs, thanks to the accessibility of all necessary services and outsourcing. The Czech Republic's legal environment forms a good foundation for effective company management, flexible employment and property management. fDi Intelligence 2020/2021 ranks Prague as the second best small European region of the future in terms of business friendliness. The tax environment

in the Czech Republic is stable and offers very good conditions not only for corporations, but also for expatriates. "The corporate income-tax rate was set at 19% in 2010 and remains at that low level today. The personal income-tax rate is also very favourable, especially for persons with high incomes and for a significant part of the expatriate population. The personal income-tax rate is only 15%. Expatriates who are sent to work in the Czech Republic under the regime allowing them to stay within the social-security system of their home country do not have to pay additional social security in the Czech Republic, whereas expatriates from some countries pay only for health insurance," says Jan Linhart, partner at KPMG ČR.

Cost effectiveness

Although Prague has a well-developed private sector, prices are still significantly lower than in Western Europe. Investors can thus use most necessary resources for very reasonable prices. According to fDi Intelligence, Prague ranks seventh among major European cities in terms of cost effectiveness. With respect to office rents, the price level is the same as or lower than the average rate in nearby locations in Central Europe. Compared to other major cities in Europe such as London, Munich, Vienna, Amsterdam and Paris, the rental rate in Prague is 20% to 80% lower. The Czech Republic is also very affordable in terms of labour costs, as the average wage here is about one-third of the EU average. However, the quality and availability of workers is satisfactory according to fDi Intelligence, which has ranked Prague fifth among major European cities in the Human Capital category. Due to its size and diversity, Prague's labour market offers numerous advantages in terms of the availability of human resources. Prague welcomes both jobseekers from other regions within the Czech Republic as well as foreign specialists. Prague is a truly cosmopolitan city that has become the home of many expatriates due to the many opportunities for high-paying jobs, good quality of life and low cost of living. Especially jobseekers from other European countries have found their permanent home in Prague. ■

Reasons for relocating to Prague according to Mayor Hřib

■ One of the safest cities in the world

Prague is one of the safest cities in the world. The Czech Republic is one of the safest European countries and is the eighth safest destination in the world according to the 2020 Global Peace Index.

■ High quality of life

The Czech Republic, especially its capital, is a preferred destination for many relocating companies, individuals and families. It is a modern country with not only good infrastructure and a well-developed business ecosystem, but also a rich history offering a truly broad range of cultural opportunities.

■ Great transport accessibility

Thanks to its ideal location in the heart of Europe, Prague is easily accessible to travellers from practically anywhere in the world.

■ Location

Prague's location makes it easy to travel to neighbouring countries and their beautiful cities.

■ Transport

Public transport is another thing that Prague can be proud of. In comparison with the mass transit systems of other capital cities, it is cheap, efficient and highly integrated. Prague is also a green city that is suitable for walking, as it offers a great number of tourist attractions in a small area.

■ Education

Prague has a great selection of international and multi-lingual educational institutions ranging from preschools to universities. Prague is the home of Charles University, which was established in 1348, making it one of the oldest institutions of higher learning in Europe. Furthermore, the best Czech technical university and the Czech Academy of Sciences are both located in Prague.

■ Living costs

Living costs in Prague are considered to be low and affordable compared to most other European cities. Average rent is EUR 850/month for a 70 m² apartment.

■ Experience with hosting GSA

Prague is the host city of the GNSS Agency and has thus proven its ability to serve as the home of major international institutions and organisations.

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Legal environment



- 

Investor-friendly
Western democracy
with a stable and modern
legal environment
- 

Predictability
of the law
- 

Party to 76 bilateral
investment treaties
- 

Most legislation is
aligned with other
European Union
countries

The Czech Republic is a member of:

- World Trade Organization
- European Investment Bank
- International Monetary Fund
- Bank for International Settlements
- European Patent Office
- International Energy Charter
- World Intellectual Property Organization
- World Customs Organization
- United Nations UNCITRAL
- The World Bank
- International Center for Settlement of Investment Disputes
- The Multilateral Investment Guarantee Agency

Core legal concepts recognised

- ON Contractual freedom
- ON Choice of law
- ON Choice of court jurisdiction
- ON Enforceability of foreign judgements (EU)
- ON Alternative dispute resolution – arbitration
- ON Attorney-client privilege
- ON Contractual limitation of liability
- ON Protection of intellectual property rights
- ON Proprietary (in rem) security rights (e.g. pledge, lien, security transfer)
- ON Security agent
- ON Parallel debt structure (if governed by foreign law)
- ON Prohibition of financial assistance
- ON Whitewash procedure
- ON Contractual subordination
- ON Reorganisation
- ON Marketability of contracts, receivables and claims
- ON Trusts
- ON Common corporate vehicles and structures
- ON Single-tier board in joint-stock companies
- ON Different types of shares with different rights
- ON Very small mandatory registered capital in limited liability companies (less than EUR 1)
- ON Transformations
- ON Criminal liability of legal entities
- ON E-identity and e-signature
- ON Investment incentives

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KINSTELLAR

Six main things to do first



1

Establish your **business**

There are multiple ways to establish a business in the Czech Republic. Here is what you should know before you decide which way you want to go.

Suitable investment vehicle
When starting a business in the Czech Republic, one must decide in what form the business should be established. There are essentially two basic ways of starting a business – setting up a branch office of a foreign entity or establishing a company under the laws of the Czech Republic. It is important to mention that foreign entities have the same rights to conduct business in the Czech Republic as domestic ones. The key differences between branches and newly established entities are shown in the table below.

Legal entities

Most investors choose to establish a Czech legal entity. The two most popular forms are limited liability company (LLC) and joint-stock company (JSC). The main differences between the two are:

- The obligatory minimum amount of registered capital, which is CZK 1 (approx. EUR 0,04) per shareholder

- in an LLC and CZK 2,000,000 (approx. EUR 75,000) in total for a JSC.
- Corporate governance is more complex in the case of a JSC.
- Transfer of shares in a JSC can be simpler than transfer of ownership interests in an LLC.
- Shareholders of LLC are liable for the company's debts up to the amount of their unpaid contributions, shareholders of JSC are not liable at all.

Overall, the JSC form is usually recommended for bigger businesses with multiple investors, where small numbers of shares are transferred more frequently. LLC is the most frequent starting point of most entrepreneurs, as it is cheaper and easier to establish.

Representing the branch office/company

A branch office is represented by its appointed branch manager. On the other hand, representation of a company can be modified in various ways. Members of the statutory body can act either independently or collectively (two or more together) in some or all instances, or some

of them may be allowed to act independently and some of them collectively. There can also be only a single member of the statutory body. It is up to the shareholders how they modify the company's representation within the boundaries of the law.

Time and costs of establishment

The timeline varies in different situations, but it usually takes 1-2 weeks after the initial decision to establish and register the branch office/company in the Czech Republic. First of all, the articles of association are adopted – this has to be carried out in the form of a notarial deed. After that, a couple of initial steps must be taken, such as opening a bank account in the Czech Republic, transferring contributions to the registered capital and registering a trade licence. Once all necessary steps have been completed, the company can be registered in the Commercial Register and can officially start conducting business. The company can be registered in the Commercial Register by a notary directly or by filing a registration motion with a registration court. The estimated costs of establishment are shown in the table below. ■

	Branch office of a foreign entity	Czech legal entity (company)
Legal capacity	No legal capacity by itself	Full legal capacity
Contracts	Enters into contracts on behalf of the parent entity	Is a party to contracts itself
Governing law	Governed by the law of the country in which the parent entity is located	Governed by Czech law
Founders/shareholders	Can be established by a single entity only and cannot be established by a natural person	Can be established by an unlimited number of persons/entities
Contribution during establishment	No contribution required	Obligatory contribution (monetary/in kind)
Ownership	Ownership of property held by the parent company (through the branch)	Ownership of property directly by the company

	Branch office	Branch office	JSC
Estimated local fees (excluding legal, tax and other advisory services)	No less than EUR 300	No less than EUR 470	No less than EUR 1,106 + registered capital of EUR 75,000 (minimum)

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KONECNA.
— **ZACHA.**

Invest in the heart of Europe

Have you established a new business and are you looking for a property? If so, the Czech Republic is the right choice for you. With an ideal location in the centre of Europe, the Czech Republic is a stable and safe country with a good investment rating, a high level of science and technical education and well-developed infrastructure. Combined with the country's long-term economic growth (not including 2020, which was affected by the global COVID-19 pandemic), these factors make it attractive for both domestic and foreign investors. In our article, we map the Czech market so that you can get an idea of why and where you should invest in the Czech Republic.

Commercial property options
Practically all Prague office occupants prefer to rent, which is more flexible. Leases are usually for three to five years, after which the given company can respond to the market situation by leasing larger premises or by downsizing. Buying a property for occupation can tie up a considerable amount of valuable capital that could be used to grow the business. In terms of liquidity, the ease of selling a property to access the invested capital can often be overestimated and such a sale needs to be carefully planned well in advance. Brno, the second largest city in the country, is another attractive option. It is a university centre and

Allocation of capital driven by comfortable yield gaps

The Czech market offers higher returns than western markets:

- prime office yields at 4.25%,
- prime retail shopping centres trading at 5.25%,
- industrial/logistics sector at 5.50%.

has recently attracted several renowned office occupants. The Czech Republic has continued to enjoy a buoyant real estate investment market. The underlying strengths of the market are dominated by the country's strong macro-eco-

conomic position in the region, as it has the highest ratings from agencies such as Moody's, S&P and Fitch. This provides investors with confidence that the country has a strong and stable economic base and positive outlook. The most prominent and active real estate sectors are office, retail and industrial/logistics.

Retail sector

The retail sector is dominated by major shopping centres and retail parks in Prague and the regional cities. For the past several years, the prime shopping centres and retail parks continue to benefit from growth in consumer spending with increasing retail turnover and visitor numbers, except for in 2020, which was significantly affected by the global pandemic.

Office and industrial sectors

The economic slowdown and uncertainty caused by the pandemic took its toll on office market performance during 2020, particularly in terms of net take-up. ■

↑ 7%

Due to weaker leasing activity during 2020, the vacancy rate increased by 1.5% to 7% in Q3 2020. However, this level of vacancy is still healthy.

Despite the global pandemic in 2020, the industrial property sector is still enjoying a strong occupancy market with low vacancy rates and strong occupancy demand.

Rise of domestic capital

- Czech investors continued to dominate the market in 2019 with a 40% market share.

This representation of domestic capital is a great symbol of the market's strength.

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3

Find out more about the labour market

Excellent human resources, a central location and a stable political and economic environment are the main reasons that foreign investors frequently choose the Czech Republic as the country in which to implement their investments. The volume of investments requiring well-educated workers is increasing especially in relation to the high-quality education of the Czech population.

The most frequently provided benefits

- Flexible start/end of working hours
- Home office
- Company food vouchers
- Refreshments at the workplace

The most desired benefits

- Flexible start/end of working hours
- Bonuses and other financial rewards
- Five weeks (or more) of holiday leave
- Home office
- Company food vouchers
- Sick days

Source: Grafton Recruitment, 2020

Whether this concerns research and development centres, ICT companies, shared service centres or manufacturing enterprises, the Czech Republic is able to offer a high-quality business environment in terms of good location and transport infrastructure, high-quality workforce and suitable real estate market conditions.

Companies are flourishing in the heart of Europe

The Czech Republic has an indisputable advantages thanks to its central location, its advanced infrastructure, high quality of university education, excellent quality of life and high level of safety. The good news for investors considering locating their business activities in Central Europe is the fact that the Czech Republic and other countries here demonstrate long-term political and legislative stability, which is why this part of the world is slowly becoming a synonym for nearshoring.

Human resources

Human resources are the alpha and omega of every successful business project. The costs of people's work

are not the only issue to be addressed; access to workers and, in the case of investments based on intellectual activities, also the educational level, language skills and so-called soft-skills of potential employees are also important. It is apparent that Czechs possess these skills and traits in abundance, as they are very adaptable and compatible with a number of cultures.

Labour market

In 2020, the pandemic strongly affected the labour market, especially in traditional Czech export industries such as the automotive, engineering and electrical engineering sectors. In contrast, however, certain market segments, notably e-commerce, logistics, IT, business services, the pharmaceutical industry and nanotechnology, are booming. The working conditions of 37% of employees were influenced by the coronavirus pandemic. Thanks to government support, however, there were no widespread redundancies in the first phase. Four percent of people between 18 and 65 years of age lost their jobs. Much more often, companies had to lower salaries and benefits and reduce work hours. These changes affected a total of 31% of Czech employees.

The situation helped to strengthen the loyalty of employees. Compared with the pre-coronavirus period, interest in changing jobs fell, as did the desire to change professions. Compared to February 2020, the number of people not looking for work increased by 13 percentage points. Interest in changing professions declined by nine percentage points lower. The coronavirus has changed the preferences of job-seekers as well. While the salary level and benefits, the option of working from home, length of commute and/or type of contract were previously among the most important aspects for new employees when choosing a job, today certainty of job permanence and stability are in second place behind the salary level. Salary is traditionally more important for men than for women, while young people consider the meaningfulness of a job and personal development to be important. The importance of stability increases with age. People over the age of 35 significantly prioritise it. The labour market in the Czech Republic still offers investors an unprecedented opportunity to hire skilled workers, regardless of what the general unemployment rate may indicate. ■

What motivates employees the most in their job?

Salary	37%	Personal growth, new experience	13%
Meaningful work	24%	Benefits	5%
Colleagues	15%	Career growth	3%

Source: Grafton Recruitment, 2020

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Get more information about **state aid**

Over the past few years, the Czech Republic has significantly increased its focus on investments with higher value added and innovation projects. The current priority is to support high-tech projects, research and development and environmentally friendly initiatives

Investment incentives are provided mainly in the following forms:

- Corporate income-tax relief for ten taxable periods.
- Cash grants for creation of new jobs (only for selected regions).
- Cash grants for training and retraining of employees (only for selected regions).
- Cash grants for acquisition of fixed assets for strategic investments.

Additional tax benefit can be obtained for R&D activities under a separate measure – R&D tax allowance. There are also other types of state aid available, especially for prioritised investments in R&D, innovations and energy savings.

Main conditions

The following types of investments can obtain investment incentives:

- **Manufacturing industry** – launch of new production, expansion of existing production or expansion of the product range through introduction of new products or a fundamental change in the production process.
- **Technology centres** – establishment of a new technology centre, expansion of an existing one or expansion through the introduction of new products.
- **Business support services centres** - establishment of a new business support services centre, increase of capacity or launch of new services covering software centres, data centres, repair centres or shared-services centres.

Every project will be subject to the government's approval. Moreover, projects in the manufacturing

industry will also have to achieve higher value added, which relates to R&D activities and wage conditions in selected regions.

Strategic investments (large projects)

Large projects can qualify for strategic investment status. The main benefit of this status is the possibility to obtain a larger portion of incentives in the form of cash grants instead of tax relief.

Investment projects involving the production of strategic products (mainly medical supplies and pharmaceutical products) should be regarded as strategic investment projects without having to meet the requirements such as the minimum investment amount and the minimum number of new jobs as stated above.

Income-tax relief

The calculation of tax relief is different for greenfield projects (tax holiday) and expanded facilities. However, tax relief may be applied for ten taxable periods for both types of projects.

Permissible level of state aid

The maximum amount of state aid is set at the level of up to 25% of eligible costs (investment in land,

buildings, machinery and equipment and selected intangible assets).

Cash grant

Job creation

Cash grants can be provided to an investor that creates new jobs in a region where the unemployment rate is higher than 7.5%. The cash grant for job creation amounts to CZK 200,000-300,000 per new job (approx. EUR 7,500-11,000) based on the type of position and the region where the investment is carried out.

Training and retraining of employees

Cash grants for training and retraining employees can cover up to 50% of the eligible costs expended on training and retraining.

R&D tax allowance

Companies performing R&D activities can apply a special tax deduction for such activities. The R&D deduction in fact allows companies to claim internal R&D costs twice, both within their profit-and-loss account and as a special tax deduction.

However, companies are newly obligated to notify the tax administrator of their intent to claim an R&D allowance in advance. ■

The following conditions apply for all types of investments

- Acquisition of assets for the project, including construction works, cannot start before the application for incentives is submitted.
- Implementation of environmentally friendly activities, buildings or facilities.
- Retention of the investment at the location of the investment project in the amount and structure corresponding to the claimed state aid.

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5

Protect your **intellectual property rights**

As today's business market develops at a faster and faster rate and competition between entities is forever growing in all sectors of business, one of the most highly recommended steps in terms of doing business is ensuring the protection of intellectual property rights. Therefore, it is necessary to be familiar with the most common intellectual property rights connected with doing business and to know how to ensure protection of those rights in the Czech Republic.

A trademark is understood to be a designation consisting of words, letters, numerals, colours, drawings, shapes of products or their packaging and sounds that is capable of (i) distinguishing the products and services of a particular entity from those of other entities, and (ii) being expressed in the Czech Trade-mark Register in a way that allows Czech bodies to determine the scope of rights vested in the trademark owner.

Trademarks Under Czech law, trademarks are regulated by Act No. 441/2003 Coll., on Trademarks, as amended (Trade-mark Act).

Registration of a trademark

In order to obtain an ownership title to a Czech trademark, it is necessary to register the trademark with the Czech Intellectual Property Office (IPO). However, only a designation that meets the legal requirements

can be successfully registered. It is also important to note that a designation shall not be registered if the owner of the earlier trademark successfully objects to the registration (due to identity or similarity of the earlier registered trademark).

The protection period is ten years following the filing date of the application with the Czech IPO (thanks to the priority right) with the possibility of renewal for another ten years.

Patents

Protection of an invention takes the form of a patent and the registration process and the patent itself are regulated by Act No. 527/1990 Coll., on Inventions and Improvement Proposals, as amended.

Registration of a patent

Again, the process of registering an invention with the Czech Patent Register is carried out by the Czech IPO. The application must include a description of the invention and, most importantly, the claims for the patent. As for the duration of the patent, an invention is protected in the Czech Republic for 20 years following the filing date of the application (i.e. the priority date).

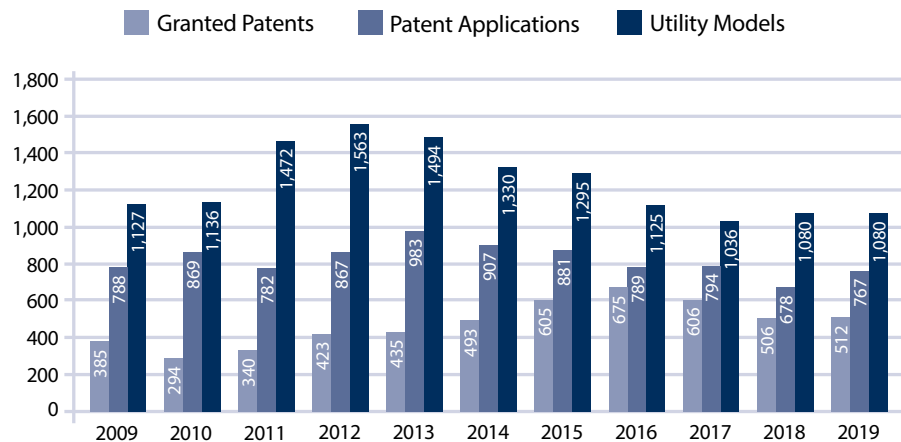
Copyrights

The current Czech legislation governing copyrights is Act No. 121/2000 Coll., on Copyrights, as amended, and Act No. 89/2012 Coll., the Civil Code, as amended.

Ownership of copyrights

Since copyrights are exclusively associated with an author, only a natural person can be an author of a copyrighted work, i.e. a company cannot be an author. Authorial works are mainly literary works (e.g. books, articles), art works, cartographic works (e.g. maps), musical works, audio-visual works (e.g. cinematographic works), etc. A copyright under Czech law has two basic components: personal rights and economic rights. Different consequences are connected with each right (see the web article for more information). Although copyrights are not registered in any official register, a person other than the author cannot use a copyrighted work without the prior consent of the author. Nevertheless, the Czech legislation regulates many other types of intellectual property rights and a person should consider which type best suits his or her situation. ■

The total number of granted patents of Czech applicants at the Czech Intellectual Property Office.



Source: Czech Statistical Office, 2020

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Moving to the Czech Republic

(housing, education and medical costs)

The Czech Republic has a number of attributes that make it attractive to foreign corporate and individual investors, not the least of which are its investment incentives, low taxes, strategic location and affordable cost of living. Housing, education and medical costs are all essential considerations that dramatically affect the cost of living and quality of life in any country. So, just how affordable is the Czech Republic?

Cost of living in the Czech Republic
 According to Numbeo, one of the world's largest databases focusing on cost-of-living expenses, Prague ranks 347th out of 598 cities in the world in the Cost-of-Living Index. Brno ranks 362nd, followed by Ostrava at 380th.

Housing
 The costs of short-term serviced apartments, which can be used as temporary accommodation, vary from EUR 1,000 to EUR 3,000 per month depending on location and the scope of provided services.

Cost of living index

New York, NY	100
Paris	94.23
London	86.75
Munich	82.01
Berlin	72.52
Vienna	71.31
Barcelona	66.18
Liubiana	62.56
Bratislava	52.69
Prague	52.43
Brno	49.71
Warsaw	46.70
Budapest	45.39

Source: Numbeo, January 2021

Average monthly rental costs

Studio flat	Two-bedroom flat
Prague	
EUR 414	EUR 807
Brno	
EUR 364	EUR 609
Ostrava	
EUR 257	EUR 458

Note: Prices of furnished and unfurnished apartments excl. fees
 Source: Sreality.cz, January 2021

Education

Needless to say, school is very important. It is not only a place for education, but also for students to socialise and build a network of peers, which leads to good physical and mental health. Education at public schools/preschools is free of charge in the Czech Republic. Students are required to speak Czech in order to enrol. For expat students who do not speak Czech, international schools/preschools can be

a perfect solution. Average annual tuition of private international schools/preschools (for ages range 3-18) cost from approx. EUR 8,500 to 11,000 in Prague, Brno and Ostrava.

Healthcare

Czech citizens, permanent residents, EU nationals and those contributing to the public healthcare system are entitled to medical care in the Czech Republic (which is funded by mandatory health-insurance contributions). Moreover, there are many private health-insurance plans available for those who need them (e.g. third-country nationals who are not employed in the Czech Republic). The average annual price of comprehensive private health insurance varies from approximately EUR 400 to EUR 2,000, depending on the age of the insured person, level of coverage, insurance policy, etc. If you are seeking individualised healthcare and a language you are familiar with, you can also register at private medical facilities in the Czech Republic. The annual membership fees at such facilities vary from approximately EUR 300 to EUR 800 depending on the facility and the scope of provided services. ■

The Czech education system

Preschool education	2 to 5 years old
Elementary education	6 to 15 years old
Secondary education – high schools, grammar schools, colleges and training colleges	16 to 19 years old
Higher education – universities	19 and above

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 RELOCATION & CONCIERGE

Association for Foreign Investment

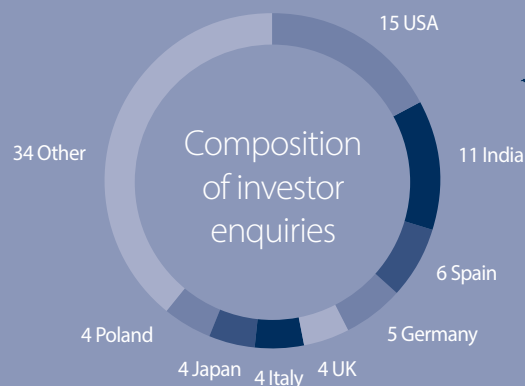


Association for Foreign Investments

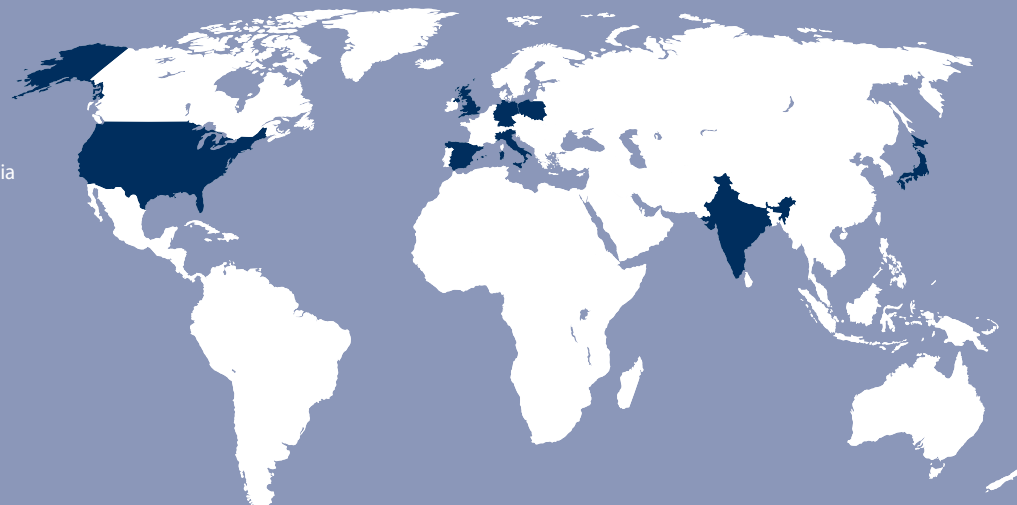
About the AFI

The Association for Foreign Investment (AFI) is a non-governmental, non-profit organisation representing a group of leading global and regional firms actively supporting investors. The AFI focuses on foreign direct investment, export of investments and services, commercialisation of R&D, support for innovative start-up projects and development of the Czech business environment.

Countries from which investors turn to the AFI



Note: data for the period 2020.



“ We have been cooperating with AFI members for years in a wide range of areas – tax, legal, HR and construction issues. The service they provide us is always on a high professional level that we can rely on and is crucial for such a huge investment project as ours. To a certain extent, the AFI's members are like our guides helping us to understand the local business environment. I am happy that the AFI has become the first point of contact for foreign investors in the Czech Republic. ”

Ivan Dzido

External Affairs Manager
NEXEN TIRE Europe



- 1996 when the AFI was established
- 37 members
- 87 enquiries from investors (2020)
- 24 events in the Czech Republic and abroad in 2020

Notable events

The AFI Annual Conference

This event is organized to support the investment environment of the Czech Republic, where speakers from among private and public sector experts discuss current topics and news from all key areas for foreign investors.

Cooperation of the Year project

The main objective of the project is to raise the profile of the Czech R&D environment and thus support the inflow of new investments and expansion of existing investments in this sector with higher value added.

Regional seminars

In cooperation with CzechInvest and other partners, the AFI regularly organises seminars, especially for aftercare clients, in areas such as visas, permits and HR. All seminars were held online due to the COVID-19 pandemic in 2020.

Investment seminars

In cooperation with CzechInvest and other partners, the AFI regularly organises seminars for investors abroad. Most of the seminars were cancelled or transformed into online due to the COVID-19 pandemic.



Tomáš Ctibor



Jan Ámos Havelka



Martin Slabý



Jan Bobek



Kamil Blažek

Chairmen of AFI

1996

2000

2005

2008

2010



Finance your investment



200 1
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How investment incentives work in the Czech Republic

Investors who place their investments in the Czech Republic can obtain aid in the form of investment incentives, which are provided pursuant to Act No. 72/2000 Coll., on Investment Incentives, as amended.

Czech and foreign legal entities and natural persons engaged in business can apply for investment incentives. Only a legal entity with its registered office in the Czech Republic can be a recipient of investment incentives.

General eligibility criteria

For all types of activities, it further applies that the recipient shall not start work on the given project (i.e. shall not acquire any assets including orders of machinery and equipment and shall not commence construction works) prior to submitting the incentives application to CzechInvest. All of the conditions must be fulfilled within three years from the issuance of the Decision to Grant Investment Incentives and the recipient shall retain the assets and created jobs throughout the entire period of utilising state aid, at least for a period of five years.

nology centre. The state-aid intensity is 25% of eligible costs. Therefore, the maximum state-aid ceiling is EUR 1.5 million. The maximum amount of state aid may be utilised in the form of corporate income-tax relief for ten years and cash grants for job creation. Cash grants for training and retraining of employees are provided above the state-aid ceiling, i.e. as cash in addition to the previously mentioned EUR 1.5 million.

Application process

The process of applying for investment incentives differs depending on whether the investor is initiating a new investment or an expansion of an existing investment. In both cases, the incentives application has to be approved by the Czech Government based on the anticipated benefits of the project for the region and for the state budget. A recent amendment to the Investment Incentives Act extended the application process.

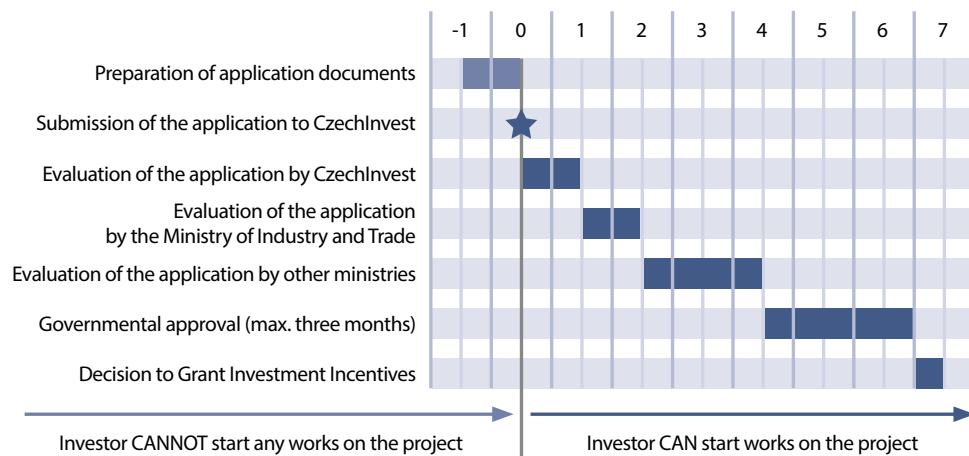
In the case of expansion of an investment, it is a single-round process described in the scheme.*

Extended two-round process in the case of initiating a new investment: This process involves the establishment of a new Czech legal entity. The Decision to Grant Investment Incentives is issued within roughly ten months following submission of the application to CzechInvest. The investor can start implementing the investment immediately after submitting the application; it is not necessary to wait for issuance of the aforementioned decision.

Forms of investment incentives

Corporate income-tax relief for companies for a period of up to ten years. For new companies,

Expansion of a Czech entity*



The approval process takes approx. seven months.

Source: CzechInvest, 2020

State aid

Size of company	% of eligible costs
large	25
medium-sized	35
small	45

Sample calculation

The investor (large enterprise) plans to invest a total amount of EUR 6 million in assets in a tech-

Supported areas		
Manufacturing industry	Technology centres	Business support services centres
introduction or expansion of production	construction or expansion of R&D centres	construction or expansion of shared-services centres
		construction or expansion of software-development centres
		construction or expansion of high-tech repair centres
		construction or expansion of data centres

Source: CzechInvest, 2019

Definition of the high-value-added condition		
Min. 80% of employees are paid at least the average wage in the region	+ one of the following conditions A) or B) or C)	A) 10% ratio of university degree employees and active collaboration with R&D institutions amounting to 1% of eligible costs *if spend at least 1%, ie. 1% or more
		B) 2% ratio of R&D employees
		C) Investment of 10% of eligible costs in machinery for R&D purposes

Source: CzechInvest, 2019

this incentive is provided in the form of full tax relief; for existing companies, in the form of partial tax relief.
Cash grants for job creation in technology centres in the amount of EUR 7,500 per each new job created. An investment in production can receive a cash grant for job creation only in regions with an unemployment rate of at least 7.5%.

Cash grants for acquisition of assets for strategic investments in the manufacturing industry in the amount of up to 10% of eligible investment costs; in technology centres and high-tech repair centres, up to 20% of eligible investment costs. This type of support must be approved by the Czech government.
Cash grants for training and retraining of new employees in technology centres in the amount

Eligibility criteria for strategic investments		
	Min. investment in EUR million	Min. number of new jobs
Manufacturing industry	19	500
Technology centres	7	70
High-tech repair centres	7	100

Source: CzechInvest, 2019 Note: Half of the investment must go into new machinery.

of 50% of training costs. An investment in production can receive a cash grant for training and retraining only in regions with an unemployment rate of at least 7.5%.

Eligibility criteria
Manufacturing industry: Investment of EUR 1.5-3 million depending on the region, half of which must be invested in new machinery + the condition of high value added in developed regions.
Production of strategic products for the protection of life and health of citizens: Investment of EUR 1.5-3 million depending on the region, half of which must be invested in new machinery. The condition of high value added is not applicable.
Technology centres: Investment of EUR 0.4 million, half of which in new technology + creation of 20 new jobs.
Business support services centres: creation of 20-70 new jobs depending on the type of BSS. Services must be provided in at least three countries.

The required investment is reduced to one-half of the stated amounts for medium-sized enterprises and to one-quarter for small enterprises. The required number of new jobs is reduced to one-half of the stated amounts for SMEs.

Eligible costs
 ■ **Long-term tangible and intangible assets,** whereas the value of machinery must comprise 50% of eligible costs.
 ■ **Two years' gross wages** of employees in newly created positions.

The investor must select one option.
 In the period from 1998 to 31 December 2019, a total of 1,278 Decisions to Grant Investment Incentives were issued on the basis of registered applications. In the period from 1998 to 2019, investors committed to investing more than CZK 955 billion (approx. EUR 36 billion) and creating more than 198,600 new jobs. ■

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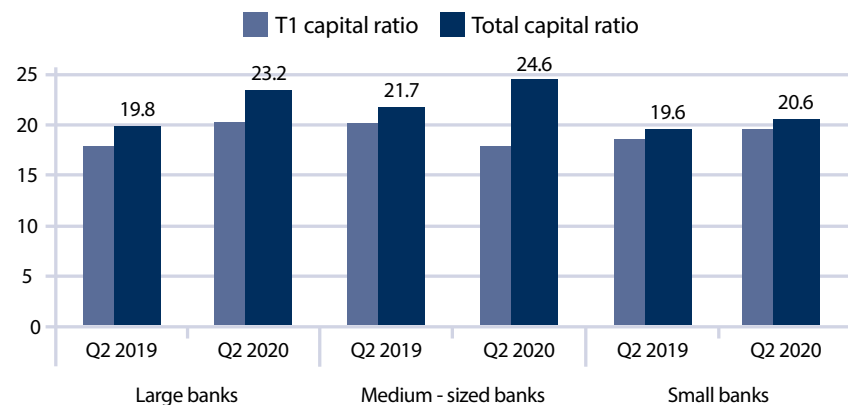

CZECHINVEST
 Business and Investment Development Agency

Financing foreign investments in the Czech Republic

Many countries strive to attract foreign direct investment (FDI), as the knowledge brought by multinationals is likely to spill over into domestic industries and increase their productivity. Local governments typically use different investment incentives to support FDI inflow. However, incentives need to be complemented with liberal exchange control rules, a healthy banking wsector and functional financial and capital markets to allow for efficient financing of individual investments.

The Czech Republic has been a member of the European Union since May 2004 and it fully complies with the key principles of free trade and capital flows. Therefore, there are virtually no restrictions or administrative burdens for foreign investors with respect to providing equity contributions or intercompany loans to finance their investments and, conversely, to repatriating profits from their investments through payment of dividends or to repaying intercompany loans. The country's legislation and regulations also permit the utilisation of liquidity management structures and investors can efficiently manage their intragroup funding through all types of local and cross-border target balancing and cash pooling systems. If investors need external funding in the Czech Republic, they will find a very modern, safe and competitive banking sector. There are 49 entities with banking licenses on the Czech market (as at December 2020). Two of these are owned by the Czech state while most of the remaining 47 institutions are either branches or subsidiaries of foreign banks.

The Czech banking system's capital adequacy ratios, in %



Source: Czech National Bank, 2020

In terms of market share, the local banking sector is quite concentrated on loans and roughly 62% of all loans are held by the four leading banks (as at September 2020). The Czech banking sector is very safe, with strong liquidity (average loan/deposit ratio of 72% as at September 2020), high capital adequacy (average total capital ratio of 22.6% as at September 2020; see chart) and good asset quality (average share of non-performing loans to resident and non-resident clients of 2.7% as at December 2020). As a result, local banks are able and willing to extend financing to all viable foreign investments in the Czech Republic at very competitive prices in domestic and foreign currencies. Local banks offer all types of funding products, from plain vanilla financing (investment loans, working capital financing, overdrafts) through trade, export and asset-based finance (buyer's credit, factoring, forfaiting, structured trade finance, real estate financing, leasing), to structured finance (club and syndicated loans, acquisition and leveraged finance, project finance), all of which support foreign investments throughout all stages of their lifecycle.

Larger investments can be financed through debt and equity capital markets that offer deep and liquid distribution to both domestic and international investors. The Czech Republic boasts the best ratings (S&P and Fitch: AA-, Moody's: Aa3, all of which are stable) of all the CEE countries and its sovereign strength is positively reflected in sought-after corporate issuance in CZK and EUR. Thus, the local capital market has proven to be the most active when compared to its CEE peers. The individual funding instruments are typically used in combination in order to create the optimum capital structure and to minimise financing costs. Corporate issuers can also make use of hedging of the interest-rate and FX risks related to the chosen funding structure.

The Czech Republic is an open, export-oriented economy with liberal exchange control regulation, a competitive banking sector and efficient financial and capital markets. As such, it offers a broad range of financing instruments to foreign investors, which can efficiently fund and manage financial flows related to their investments in the Czech Republic. ■

The Czech Republic: a converging economy with opportunities

Due to lower initial starting conditions, the degree of economic development in the Czech Republic measured by GDP per capita in purchasing power standards is still somewhat lower than the European Union average. However, the Czech Republic, thanks to its higher average growth, has been converging towards EU levels and, in terms of GDP per capita, it has already overtaken several older EU and euro-area member states. The country's growth potential is expected to remain strong for the foreseeable future.

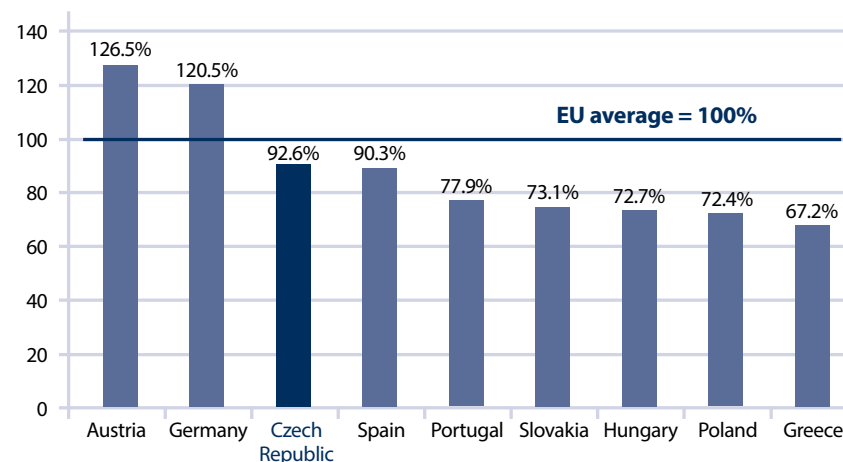
The Czech Republic has benefitted from its membership in the European Union and from its close economic integration with the euro area. The share of trade with the euro area is around 65%; the country's largest trading partner is Germany, followed by Slovakia. Skilled and competitive labour is one of the comparative advantages of the Czech economy, along with political stability and geographical and cultural proximity to its euro-area trading and business partners. The Czech economy has therefore attracted a sizable regular inflow of foreign direct investment. Close ties with German manufacturing create strong demand for the quality of Czech production and have contributed to rapid technological advances.

The Czech economy's potential is supported by its economic policies. The country's independent monetary policy proved an advantage in the economic crisis and its aftermath. The central bank's clear strategy of inflation targeting has proven effective in steering inflation expectations in the economy towards healthy levels.

While the figures on general government debt are worsening throughout Europe due to the COVID-19

pandemic, the Czech Republic is likely to keep its position near the low end of spectrum, reflecting a long-term tendency toward a relatively disciplined fiscal policy. The ratio of government debt to GDP is expected to peak below 55% in the mid-2020s and then decline thanks to economic growth.

GDP per capita (in purchasing power standard, EU15=100)



Sources: European Commission, 2019

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Get the best out of **European funds**

Foreign investments involving EU funds are broadly supported by the administrative authorities in the Czech Republic. Banks and other entities offer wide range of products for uninterrupted project financing with regard to the EU subsidies schedule.

It is crucial to correctly manage the EU subsidy application process so that the drawing of subsidies and project financing are smoother and the related costs are minimised. It is recommended that potential applicants:

- i. Regularly monitor opportunities to obtain investment incentives.
- ii. Communicate in a timely manner with the respective authorities regarding the conditions for obtaining investment incentives and prepare the given project so that it properly fulfils the stipulated conditions.
- iii. Establish and coordinate with a team of local tax, legal and other advisors to ensure smooth project implementation and coordination with the authorities.
- iv. Ensure co-financing of the project.
- v. Observe the project's ongoing compliance with the conditions for obtaining investment incentives while it is being drafted.

EU funds

For the programming period 2014-2020, EUR 24 billion has been allocated from the Funds to the Czech Republic, providing financing through ten programmes supporting more than 241,889 projects. The post-2020 programming period is currently being discussed. The possibility to use European funds in this period will persist until the end of 2023 due to delayed negotiations regarding the provision of funding.

Other investment support opportunities

The Czech Republic also supports foreign investments such as investment incentives, preparation of industrial zones and other support from governmental

agencies such as CzechInvest and CzechTrade. Banks in the Czech Republic offer products intended for additional funding of projects with EU subsidies.

Banks provide

- i. Loans for pre-financing of EU subsidies - offer financing to cover the time gap between the immediate need for funding to implement a project and the drawing of a subsidy from EU funds.
- ii. Loans for co-financing projects - serve to cover project expenses not covered by subsidies from EU funds.
- iii. Loan commitments - enable aid applicants to provide evidence of full project financing.

Public entities

If the aid recipient is an organisational unit of the state administration, a state contributory organisation, a legal entity engaged in the management of school and educational facilities, a territorial self-governing unit, the City

of Prague including its contributory organisation, a public university, a research organisation or a private entity engaged in public-benefit activities, EU aid can be used to cover 85% of the eligible costs of a project in less developed regions and 50% of the eligible costs of a project in the City of Prague without exception.

Private entities

With respect to other entities, whether or not state-aid conditions have been cumulatively fulfilled within the particular project must be taken into account when determining whether a given project is eligible for EU support. State aid applies in cases where (i) support is provided by the state or via public funds; (ii) support is selectively provided preferentially to certain enterprises or sectors; (iii) competition is/will be disrupted; and (iv) there is an impact on EU member states' trade. Generally, if the drawing of funds by the recipient does not fulfil the state-aid conditions, support at the EU level reaches 85% of eligible costs in less developed regions of the Czech Republic. If the drawing of funds by the recipient fulfils the state-aid conditions, EU aid is further reduced based on the size of the enterprise. The purpose of this article is to provide basic information regarding the use of EU funds in the Czech Republic. ■

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ATTORNEYS AT LAW

Guide to all grant programmes for the period 2021-2027

Operational Programme Technology and Applications for Competitiveness (OPTAC)

Allocated funds: CZK 80 billion (approx. EUR 3 billion)

Focus: This programme focuses on the support for innovation, research and development, digitalisation, technological equipment, energy-saving solutions, and other activities that will increase the competitiveness of Czech small and medium-sized enterprises.

Technology Agency of the Czech Republic

Allocated funds: CZK 4 billion/year (approx. EUR 150 million)

Focus: An independent programme of the Czech government that targets research and development projects in industry, energy, transport and the environment.

Just Transition Fund (JTF)

Allocated funds: CZK 45 billion (approx. EUR 2 billion)

Focus: Funding for the development and transformation of coal-producing regions (Ústí nad Labem, Karlovy Vary and Moravia-Silesia) and greater diversification of the economy in these areas. Subsidies go to development, innovation, digitalisation, renewable energy sources and decontamination and regeneration of traditional industry.

Modernisation Fund

Allocated funds: CZK 150 billion (approx. EUR 6 billion)

Focus: Similar to the Just Transition Fund, the Modernisation Fund focuses on landscape transformation and therefore supports sustainable technologies and the use of renewable resources.

National Recovery Plan (Recovery and Resilience Facility, RRF)

Allocated funds: CZK 182 billion (approx. EUR 7 billion)

Focus: This fund was established to help part of the business sector damaged by the COVID-19 pandemic. In the coming years, it will distribute money to projects of affected companies, especially in the fields of digital transformation, education, development and innovation.

React-EU

Allocated funds: CZK 27 billion (approx. EUR 1 billion)

Focus: A European equivalent of the National Recovery Plan, which, however, focuses primarily on health care in the public and private sectors. The funding will support the development and modernisation of ICU, AR and operating rooms, the development of laboratory capacities of health institutions and hospitals, and the development of care for particularly vulnerable patients.

According to the approved European Union budget, nearly CZK 1 trillion will go to Czech companies. New programmes for the period 2021-2027 are ready and are just waiting for the agreement to be signed. Let's explore all of the financial possibilities for your company.

In addition to the equivalent of the established programmes that provide subsidies for development, innovation or energy-saving solutions, the European Commission has also prepared programmes to support companies affected by the COVID-19 pandemic and regions affected by the downturn in heavy industry and coal mining. Now look at the individual programmes in more detail and get an idea of which projects and investments your company could receive a subsidy for. Small, medium-sized and large companies with more than 249 employed persons, including companies with their registered offices in Prague, can get money in the new subsidy period. This is the largest budget in the history of the European Union, but it is also accompanied

by new methodologies, grant application systems and methods of their evaluation. In addition to a well-prepared project, businesses will have to orientate themselves in all available programmes, evaluate which is the most advantageous and consider how to possibly combine the programmes in order to obtain a subsidy. "A fundamental change since 2021 is the extraordinary variety of funds available. In addition to the conventional EU funds (ESIF), completely new tools are emerging, primarily created in response to the crisis caused by the COVID-19 pandemic. This brings significantly more money for Czech companies, as well as new areas of financing. For example, some of the new funds will also be available for Prague and Prague-based companies that were neglected in the past," says Jiří Kvíz of enovation. ■

New programmes = new application procedures

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Czech discoveries and inventions



Electron microscope

Czech physicist Armin Delong introduced the first Czech electron microscope into production in 1949, which later led to the fact that the city of Brno is considered to be the global centre of electron microscopy.



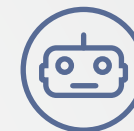
Beer

The first pilsner-style beer was produced in Plzeň in 1842.



Sugar cubes

This common form of sugar was first produced at a sugar mill in the town of Dačice in 1843.



Robot

The word "robot" was coined by Czech writer Karel Čapek.



Lightning rod

The lightning rod was invented by Czech inventor Václav Prokop Diviš in 1754.



Semtex

The plastic explosive is named after Semtín, where it was first manufactured in 1964. The plant was later renamed as Explosia, a subsidiary of Synthesia. Semtex was invented by Czech chemist Stanislav Brebera.



Soft contact lenses

Czech inventor Otto Wichterle designed and produced the first soft contact lenses in 1961.



Blood types

Czech neurologist Jan Jáněský discovered the four basic blood types in 1907.



Laws of heredity

Moravian scientist Gregor Mendel discovered the basic laws of heredity and was the first to use biostatic methods in his work, the results of which were initially presented in 1865.



Tatra

Established in 1850, the Czech company Tatra is the third-oldest car manufacturer in the world. One of the world's oldest factory-made cars is the Tatra Präsident, which was first produced in Kopřivnice in 1897.



Polarography

Physical chemist Jaroslav Heyrovský invented polarography in 1922 and is considered to be the father of electroanalytical chemistry. He received the Nobel Prize for chemistry in 1959.



AIDS drugs

Drugs developed by Czech chemist Antonín Holý are part of the most effective available medications for fighting AIDS, as well as shingles, viral infections of the ocular mucous membranes and hepatitis B.



Kaplan turbine

In 1910-1912, Czech scientist Viktor Kaplan invented the Kaplan turbine, which became the most significant type of turbine used in large hydropower plants around the world.

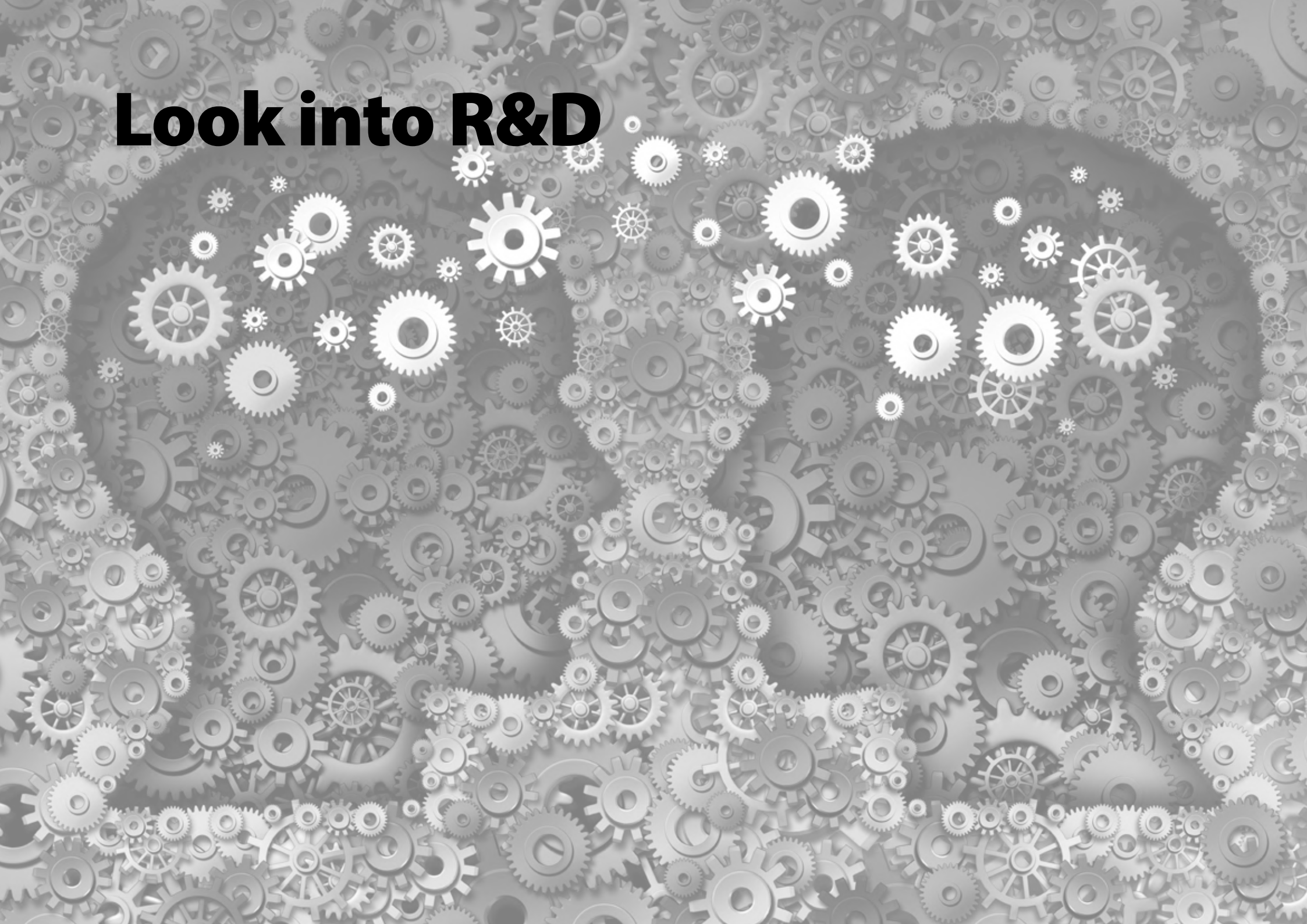


Screw propeller

The inventor of the maritime screw propeller, Josef Ressel, was from the Czech lands. Ressel had a ship-propulsion system comprising a steam engine and screw of his own design patented in 1827.



Look into R&D



The future of the Czech Republic lies in innovation.

Our research makes collaboration attractive for businesses

Innovation in industry and other sectors of the Czech economy is an increasingly important driver not only for the many companies operating in the Czech Republic, but also for research institutes and universities that work with business. In this respect, the Czech Republic's research and innovation potential has strengthened significantly in recent years.

Bilateral cooperation between the business sector and researchers, with effective government support, is becoming one of the pillars of the Czech economy. Not only have we succeeded in increasing private sector expenditure on research, we have also stabilised public spending. The public administration uses the results of the research sphere in exercising its competence. A long-term plan to increase the institutional component of research funding by 4% year-on-year has been adopted. The Czech Republic offers to both domestic and foreign researchers a high-quality network of scientific infrastructure facilities whose construction was financed in the past through European funds. **In terms of the number and quality of its research centres, the Czech Republic is one of the EU's leaders.**

In 2020, the Government Council for Research, Development and Innovation began closely monitoring information on **the involvement of research organisations in combating the pandemic caused by the novel coronavirus SARS-CoV-2** and currently stresses the role of research in addressing crises having an impact on society as a whole. In the current context, the Council will therefore continue to give its full support to the stability and development of the R&D system, with a view to strengthening its capacity to respond appropriately to unexpected risks and threats. Subsequently, the National Research, Development and Innovation Policy 2021+ was adopted, including the new Action No. 27, which enables flexible financial support for specific research programmes aimed at addressing defined threats with a global impact.

In the Czech Republic, the RD&I environment has been developing vigorously in recent decades. Total expenditure on research and development has increased over the long term; in 2019, a record EUR 4.23 billion was spent on R&D.

Businesses invested nearly EUR 2.64 billion in research and development in 2019, mainly in in-house R&D. In 2019 statistics, EUR 53.59 million was spent in domestic public funding. However, the main objective in funding is to create conditions for business expenditure to be at least 1.5% of GDP in 2025 and to reach 2% of GDP by 2030.

The involvement of respected foreign scientists in Czech research institutions is one of the most important forms of international cooperation that we have been able to develop recently. With ongoing support from the government, the Council is reinforcing its emphasis on scientific diplomacy with the aim of presenting the Czech Republic in selected regions as a country supporting public-private cooperation, including support for foreign investment. **Research is now an important employer in the Czech Republic.** At the end of 2019, almost 117,100 people (head count) worked in R&D, of whom 54.4% were researchers.

Furthermore, a government-approved change in the methodology for evaluating research quality in accordance with international standards (Methodology 2017+) became a key step in strengthening effective cooperation between the research sector and business. In line with the state investment policy, only those companies whose activities are linked to R&D will receive investment incentives in the Czech Republic.

Innovation Strategy: The Country for the Future

All of the aforementioned achievements of Czech science policy are supported in the current **Innovation Strategy of the Czech Republic 2019-2030**.

The strategy is ambitious in identifying the weaknesses of the Czech system and remedial measures, together with the objectives to be achieved over time. If all of its objectives are met, **the Czech Republic should rank among the global leaders in research and innovation within the next decade.**

Cooperation between companies (including SMEs) and research organisations has already become commonplace in the Czech Republic. It is now a matter of efficiently combining these strengths, including improving the quality and efficiency of Czech RD&I. At the same time, science and research is one of the declared priorities of the government (evaluation and funding of research comprise the first pillar of the Innovation Strategy).

Traditional Czech industry must take advantage of the challenges of, among other things, IT, robotics, cybernetics and biotechnology, and strengthen its competitiveness on the international scale by introducing new technologies. Connection to the **digital**

economy, where most private-sector R&D expenditure is already heading, can help in this respect, as can existing support for the growth of **the national start-up and spin-off environment**. The automotive sector has the largest share of Czech industry and its exports; this is also reflected in its R&D.

Inducements for foreign scientists

Today the Czech Republic can boast numerous excellent research organisations and research teams at universities, which are beginning to have a significant impact on the quality of research.

Currently, the aim of research centres is to be able to generate top-level results over the long term, to employ top foreign scientists and to be attractive to private innovation firms, which should also increasingly participate in their operation and financing. Research facilities would then complementarily provide technological expertise that keeps step with the advanced international environment. Research infrastructure facilities and centres thus offer a suitable opportunity, for example, to form consortia with international participation or other forms of cooperation where larger and smaller companies will join together with research institutes and universities. ■

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Digital and innovations - An opportunity for investors

The Czech Republic is creating a sustainable and consistent national digital ecosystem. Based on the main strategies (e.g. Digital Czechia, the National AI Strategy, the Innovation Strategy 2019-2030 and the 5G Strategy), the plan is to interconnect all of the main stakeholders in the field of digital technologies (e.g. AI, HPC, quantum-computing and cybersecurity) and to help the economy to combat the consequences of the COVID-19 pandemic.

The Czech Republic recognises the importance of digital technologies and their increasing impact on our everyday lives. Major opportunities for their deployment should be based on European values, e.g. focus on the security and safety of citizens, which is the very

precondition for the true implementation of fundamental human rights.

COVID-19 reflections

Despite the obvious negative effects on the economy, it is necessary to point out that the coronavirus pandemic is accelerating the implementation of inno-

vation and new technologies. The Ministry of Industry and Trade (MIT) responded in the spring during the first wave and prepared programmes to help entrepreneurs in a record short time. It launched the "nursing" programme for self-employed people, as well as the COVID – Rent and COVID – Culture programmes. Support was provided most rapidly for research, development and innovation in the Czech Rise Up and other programmes. The MIT continued its support during the second wave and has launched or participated in a number of programmes directly aimed at supporting innovation and technology transfer and providing progressive investment incentives.

The leading role of artificial intelligence (AI) and other new and emerging technologies

Based on the National AI Strategy and other documents, the Czech government is committed to significant funding of investments aimed at boosting innovation in the economy, especially in SMEs. The AI agenda is included in the EU budget for 2021-2027. The Ministry of Industry and Trade is the national coordinator of the new Digital Europe Programme, which is focused on the creation of a sustainable digital/innovative ecosystem. Therefore, the MIT is heavily involved in building an interconnected and sustainable network of European digital innovation hubs together with the European Centre of Excellence in AI.

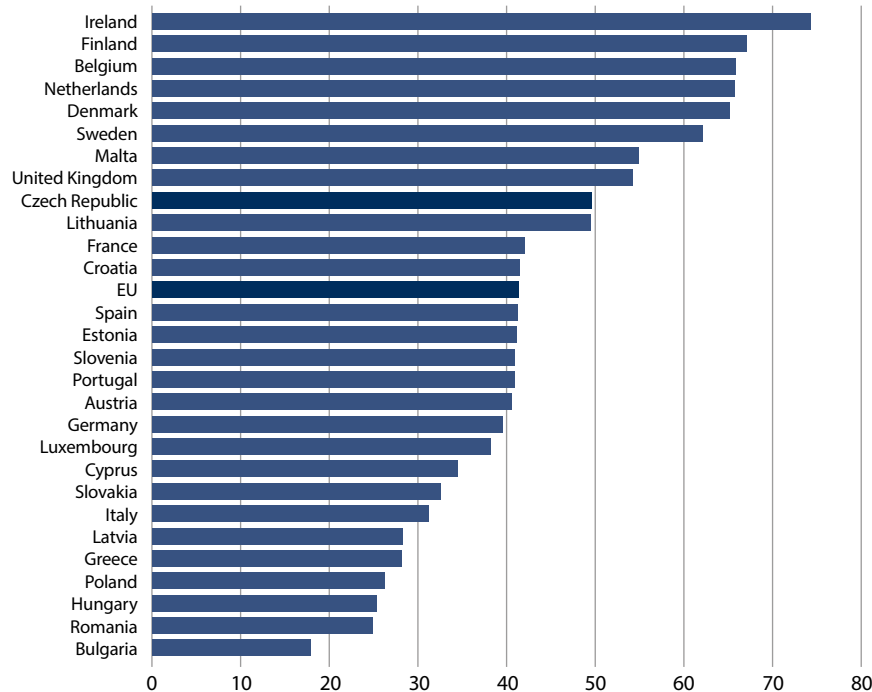
Leading Czech universities are launching a project of the European Centre of Excellence in Artificial Intelligence

The Ministry of Industry and Trade issued a call focused on supporting the preparation of institutional structures of the European Centre of Excellence in AI for a safer society including international cooperation, financial instruments for technology transfer, and non-specific support for AI research and development. A consortium of three universities (Czech Technical University in Prague, Charles University and Masaryk University) launched their project to build such a centre.

Digital Europe Programme and European Digital Innovation Hubs – how to digitalise SMEs

To support the deployment and use of the digital capacities that underpin innovation in areas of public interest and business and recognising the importance of digitalisation during the COVID-19 pandemic, the European Commission has prepared the new Digital Europe Programme, which is focused on the development and deployment of new technologies such as AI, HPC and cybersecurity. One of the most important implementation tools comprises the new European Digital Innovation Hubs, which are intended to provide necessary services for the digital transformation of SMEs and public administration. ■

Integration of digital technology



Source: Digital Economy and Society Index Report 2020, European Commission

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MINISTRY OF
INDUSTRY AND TRADE

How TA CR funds science and research

The Czech Republic has always been a country of innovation. The sectors in which we truly excel include laser technology, electron microscopy, materials and nanotechnology.

Czech industry invests heavily in research and innovation actively used in digital manufacturing models that include AI, IoT and robotics. Even though Industry 4.0 is currently a key initiative in our country, Czech industry is also developing advanced technologies in other areas including autonomous mobility, pure mobility, cyber security, optoelectronics and many more. The Technology Agency of the Czech Republic is the main provider of state funding for research and innovation. Its objective is to promote cooperation between research organisations and businesses in order to ensure that practical uses are found for the results

Main TA CR programmes

GAMMA 2 - funds the verification of R&D results in terms of their practical application and subsequent commercial or societal use.

THETA - focuses on new technologies and key trends in the energy industry.

BETA 2 - aims to satisfy the research needs of the public administration and helps ministries and other institutions carry out research that should improve the functioning of the state.

National Centres of Competence - ensures efficient collaboration between research organisations and businesses through virtual research centres focused on progressive disciplines that are crucial for increasing the Czech Republic's competitiveness.

The main TA CR programmes and programmes managed by TA CR for ministries help to achieve the aims of the Innovation Strategy of the Czech Republic – The Country for the Future.

Programmes managed by TA CR for ministries

As the main provider of state funding for research and innovation, TA CR also administers the programmes of individual ministries.

TREND programme of the Ministry of Industry and Trade, which aims to increase the international competitiveness of enterprises through new products, manufacturing processes and services.

Ministry of Transport's Transport 2020+ programme aims to modernise transport while emphasising sustainability, safety and social needs.

Environment for Life programme of the Ministry of the Environment is aimed at creating a healthy environment and promoting the sustainable use of natural resources.

of applied research. State-funded projects generate unique products, patents and other outputs that make it possible to quickly apply the results of research in practice. We help to increase the competitiveness of the Czech economy, which is growing thanks mainly to innovative domestic and foreign companies.

TA CR programmes aim to provide funding for research and innovation that responds to new opportunities on the market and societal needs. Projects supported by TA CR are closely related to the Smart Life principles and create an environment for the progressive development of new methods and technologies required for the implementation of the Industry 4.0 concept. Researchers and companies that wish to contribute to our country's development in any area with their unique solutions can submit their project proposals to individual TA CR programmes, each of which has its own functions and importance. TA CR's objective is to offer our support in research, development and innovation to as many partners as possible so that they can help us change the world for the better. TA CR is interested in cooperation with agencies and institutions developing international cooperation around the world in order to establish contacts, identify mutual priorities, exchange know-how and support joint applied research projects to ensure the development of innovation and the competitiveness of partners. "We recognise that international collaboration and shared knowledge are essential for research. That is why we have several tools for promoting bilateral and multilateral collaboration." ■

International cooperation support tools

DELTA 2 programme focuses primarily on cooperation with partners from outside the EU (Asia, North and South America).

KAPPA programme is financed from the EEA and Norway Grants and aimed at financing bilateral or multilateral cooperation of entities from the Czech Republic with partners from Norway, Iceland and Liechtenstein.

ERA-NET Cofund is a mechanism within Horizon 2020 which enables Czech entities to establish multilateral research cooperation in various thematic calls such as EnerDigit, CHIST-ERA, EuroNanoMed 3, ERA-MIn 3, M.ERA.NET 3 and AquaticPollutants.

TAFIE European network of innovation agencies gives TA CR the opportunity to share experience and information with partner agencies that also support research, development and innovation in various parts of the world.

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CzechInvest: Your port of entry for R&D-related investment and more

CzechInvest is a well-known partner of investors coming to the Czech Republic. However, it might be less obvious that it also provides considerable support in the field of research and development. These efforts are concentrated especially in the agency's Innovation Department, which provides, among other services, advice on issues such as funding, the legal and institutional framework, and successful matchmaking for R&D projects. It also organises missions and seminars that cultivate the Czech R&D scene.

CzechInvest bases its support for research and development on solid analysis of massive amounts of data. The agency makes use of public information about nationally funded R&D activities, analysing the register of research projects and identifying targeted actors. Furthermore, data on international cooperation is also used to track "who does what with whom and where," as the department commonly describes its monitoring activities. The data include joint publications with individual countries and participation in Horizon 2020 and other programmes of international cooperation in R&D. CzechInvest also proactively collects data, not only through continuous contact with Czech research facilities, but also through a unique internal database of excellent R&D entities in various fields ranging from information technologies to medicine, chemistry and other fields. Moreover, the database of these entities has been publicly available on CzechInvest's website in the form of an interactive map since the first half of 2019. Insight into this wealth of collected information about Czech R&D can also be found on the website at www.czech-research.com, which CzechInvest created to help foreign investors and other partners to navigate in the system of Czech research. The website serves as a gateway to specific domains of R&D, allowing interested parties

to find out who the key players of Czech R&D are, see the system's key main documents and become familiar with the institutions and companies that form the backbone of Czech research. These include, among others, 19 technical universities and universities with STEM-oriented faculties and the Czech Academy of Sciences with its 54 outstanding institutes, selected research organisations and an overview of new R&D infrastructure comprising eight top-notch European Centres of Excellence and 40 regional R&D centres that are actively building cooperation with international partners and industry. The information about the various entities provided on the website is complemented with relevant news from Czech R&D and calls issued within programmes

www.czech-research.com

The website was officially launched by CzechInvest in December 2016. It serves as a gateway to the Czech R&D system for potential foreign investors and anyone who would be interested in information about Czech R&D. Visitors will find not only how the Czech R&D system works, but also brief information about selected excellent R&D players, details about funding in the Czech Republic and, of no less importance, news, events and articles about key sectors and trends in applied research.

that financially support international research cooperation. The official partners of the website are the Ministry of Education, Youth and Sports, the Czech Academy of Sciences, the Technology Agency of the Czech Republic and the Ministry of Foreign Affairs of the Czech Republic. Apart from providing information services, CzechInvest also supports the internationalisation of Czech R&D. The agency has a long history of organising technology missions to foreign countries, thereby bringing Czech firms and institutions together with partners in specific fields, primarily in applied research. Since 2005, more than 60 outgoing and incoming missions of this kind have been carried out and have resulted in valuable endeavours and projects. The concept of technology missions involves a very hands-on approach, where selected researchers and innovative companies along with universities embark on a "door-to-door" roadshow and visit carefully selected foreign

partners, thus enabling practical discussion and establishment of new partnerships. CzechInvest then complements these efforts with activities in the Czech Republic, such as local seminars and conferences on relevant technologies and trends in research. In this way, CzechInvest bridges the gap between the industrial sector, academia and government, and facilitates dialogue between all of the parties involved in R&D. The Czech Republic offers a sea of excellent R&D that is gaining great recognition for its world-class quality. CzechInvest is continuously mapping this sea in order to facilitate collaboration between foreign companies and researchers on projects with high value added. Therefore, if you are interested in sailing off into Czech R&D, do not hesitate to contact the experts at CzechInvest, who will provide their services to you free of charge as part of the Czech government's business support measures. ■

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Large research infrastructures of the Czech Republic

Research infrastructures – **relevance, importance and significance**
Research infrastructures are one of the **key pillars of the research, technology development and**

innovation systems of the EU member states, the European Research Area as a whole and other world macro-regions and clusters. They represent the principal backbone for conducting **cutting-edge R&D, developing state-of-the-art technologies and introducing breakthrough innovations**, as they bring together **top-class knowledge and expertise, unique experimental devices, and robust data collections and data sets**. Research infrastructures facilitate **“frontier” research** in fundamental and applied scientific fields, as well as development of **innovative products and services** with a high value added. From the point of view of industrial companies, research infrastructures offer exceptional opportunities on several levels. Procurements for the **production and supply of experimental equipment** stimulate companies to produce the most advanced technologies, while newly learned production methods can also be applied in other areas of their production. In addition, companies can use research infrastructures either directly, commercially or as primary users; more frequent, however, is the **use of advanced know-how arising from research carried out in research infrastructures** in subsequent stages of the innovation cycle, when industrial enterprises, in cooperation with users of research infrastructures from the public research sector, enter as partners in collaborative R&D projects. In general, the knowledge generated in research infrastructures is applied in follow-up R&D and innovation projects that take place outside of the research

infrastructures, but feed directly from the research infrastructures’ expertise. Such projects make it possible to **address grand socioeconomic challenges through knowledge-based solutions. Stakeholders use knowledge, technologies and data arising in research infrastructures**, regardless of the sectorial field they come from.

Beyond the potential to enable the achievement of knowledge-based solutions in response to grand socioeconomic challenges, research infrastructures are a **catalyst for macro-regional development** in terms of offering highly qualified scientific, technical and administrative jobs, creation of science and technology parks, and development of the transport, technical and civil infrastructure. Thus, research infrastructures also have a direct and secondary impact on regional development, including impact on related regional strategies. They induce changes in the approach to education and **change the cultural attitudes in society**. Regionally anchored research infrastructures have major impacts on the structure of local economies, generate a need for related services, and have a positive impact on regional employment.

Operation of research infrastructures in line with the principles of the **transnational open access policy** allows their users from around the world to achieve results that would be very difficult to obtain by individual researchers and innovators, using solely their own institutional capacities and capabilities. In this respect, research infrastructures **increase the efficiency of public spending on research, technological development and innovation** by making the most up-to-date technologies available to broad user communities and by **preventing research funding organisations and beneficiaries of public funding from fragmenting resources and duplicating efforts**.

Policy approach to large research infrastructures in the Czech Republic

The Czech Republic has responded to the increasing importance of research infrastructures in the European Research Area and worldwide, and has taken a number of steps aimed at **providing them with a stable legal framework and predictable financial environment**. In 2009, Act No. 130/2002 Coll., on Support of Research, Experimental Development and Innovation from Public Funds, introduced a specific legal instrument for financing the “large research infrastructures” of the Czech Republic, and entitled the **Ministry of Education, Youth and Sports** to become the Czech national policy-maker and public-funding provider in this field.

The very first edition of the **Roadmap of Large Research Infrastructures of the Czech Republic** was issued in 2010, and subsequently updated in 2011, 2015 and 2019. The Czech Republic’s road-mapping procedure is fully aligned with the pan-European approach, which is coordinated within the framework of the **European Strategy Forum on Research Infrastructures (ESFRI)**, including international peer-review assessment and monitoring exercises, which are organised on a regular basis as an expert input for the informed and evidence-based political decision-making processes. The Ministry of Education, Youth and Sports has developed a **multi-source model of public funding** of the large research infrastructures of the Czech Republic by **combining state budget expenditures with European Structural and Investment Funds (ESIF)** in a synergic and complementary way. While the operating costs of large research infrastructures are covered by state budget expenditures, their investment costs are funded by use of the EU Cohesion Policy instruments (currently the Operational Programme Research, Development and Education). In a number of cases, these investments have enabled major upgrades of the technical equipment of existing large research infrastructures. Brand-new facilities of national, macro-regional and even worldwide importance (e.g. **ELI Beamlines**) have been constructed as well. Furthermore, apart from financing large research infrastructures based in the Czech Republic, the Ministry of Education, Youth and Sports has introduced mechanisms for the participation of Czech large research infrastructures in international R&D facilities located abroad, including **in-kind**

deliveries of experimental devices to those facilities (e.g. European Spallation Source in Lund, Sweden, Jules Horowitz Reactor in Cadarache, France, etc.).

Internationalisation of large research infrastructures of the Czech Republic

In recent years, the Czech Republic has been a very active player in the area of **internationalisation** of large research infrastructures. Besides being a **member state of eight international R&D organisations** (CERN, EMBC, EMBL, ESA, ESO, JINR, VKIFD and ITER) founded under international public law, the Czech Republic has become a **member state of 14 European Research Infrastructure Consortia (ERIC)** established under the legal framework of the EU and participates in a number of other international single-sited, distributed and virtual research infrastructures founded under the national legal frameworks of their host countries in Europe and the United States. From the ESFRI perspective, Czech large research infrastructures are involved in a total of 28 pan-European research infrastructures included in the latest 2018 update to the **ESFRI Roadmap**, 23 of which are ESFRI Landmarks and five ESFRI Projects. The Czech Republic will also become a member state and the host country of the statutory seat of the **ELI ERIC** consortium, which will operate the **Extreme Light Infrastructure**.

Large research infrastructures of the Czech Republic – overview

The research and innovation community of the Czech Republic gathers a broad portfolio of knowledge and technical expertise, which has enabled the construction and operation of various large research infrastructures in the fields of **physical sciences and engineering, energy, environmental sciences, biological**

Extreme light infrastructure – the “CERN of lasers”

The Extreme Light Infrastructure (ELI) is the world’s leading laser-based research infrastructure, and will serve for cutting-edge basic and applied research in physical, chemical, material and medical sciences, as well as breakthrough industrial innovations. Implementation of ELI Facilities, including ELI Beamlines in the Czech Republic is nearing completion with commissioning well under way and initial operations with early users. The European Research Infrastructure Consortium (ELI ERIC) will be established by the European Commission to start operations in 2021 to manage the ELI Facilities’ operations for the benefit of international academic and industrial users. The establishment of ELI ERIC, which will bring together the countries of the major ELI user communities and enable them to access the world’s most intense and shortest-pulsed lasers for research and innovation, will ensure long-term sustainable operations, as well as further technological development of ELI as an international flagship research infrastructure initiative. ELI ERIC will provide environments for the collaboration of thousands of leading scientists from around the world and enable high-tech industries and innovators to be involved in the development of state-of-the-art technologies. From the macro-economic point of view, the ELI Facilities situated in Central and Eastern Europe increase cohesion within the European Research Area by bridging the innovation divide in the EU.

and medical sciences, and social sciences and humanities, supported by an **e-infrastructure**, providing both research infrastructure operators and users with high-quality and adequately scaled ICT services. The large research infrastructures of the Czech Republic follow good-practice examples of user access policies and, therefore, are open to scientists and innovators from both Czech and foreign/international research organisations. Besides enabling researchers and innovators to carry out experiments of a unique nature and technology level, the large research infrastructures of the Czech Republic also offer great job opportunities for world-class managers, excellent scientists, skilled technicians and qualified administrators in high-tech fields and attractive international environments.

The Czech Republic – and the Ministry of Education, Youth and Sports in particular – has been an **active player in the field of research infrastructures internationally**. The large research infrastructures of the Czech Republic are networked within the European Research Area and worldwide, and thus have significant international overlap and impact. The appointment of Dr Jan Hrušák as the ESFRI Chair proves that the Czech Republic is also able to provide extraordinary personalities in the area of research infrastructures strategy-making. The **latest news** concerning the large research infrastructures of the Czech Republic is available on the dedicated website:

www.research-infrastructures.cz/en ■

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LARGE RESEARCH
INFRASTRUCTURES

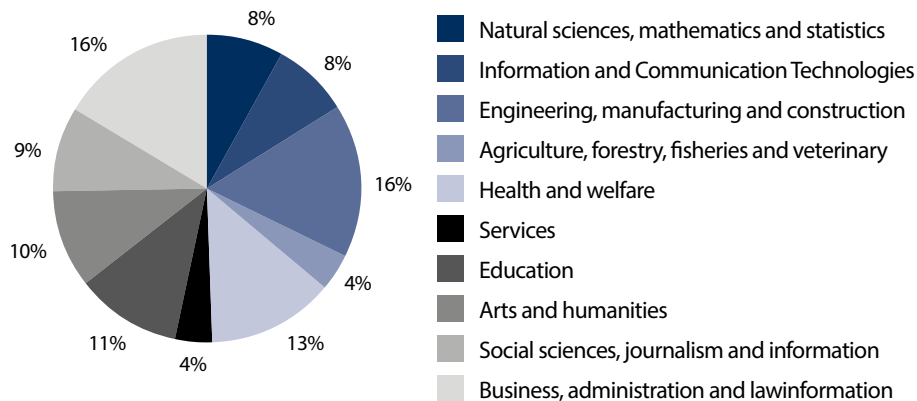


MINISTRY OF EDUCATION,
YOUTH AND SPORTS

Higher education in the Czech Republic

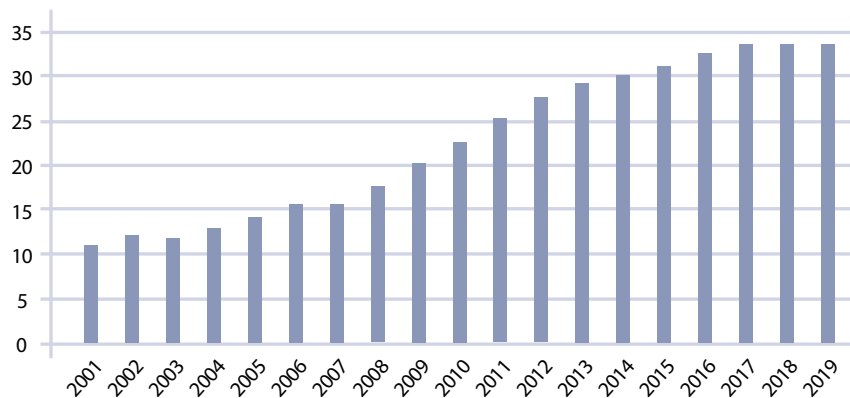
The Czech Republic is proud of both the long history and dynamic present of its system of higher education. Charles University, the largest institution of higher education in the Czech Republic, was established in 1348 as the first university in Central and Eastern Europe, which makes it older than any university in Germany, Austria or the rest of the region.

Field of study at public institutes of higher education in 2019



Source: Ministry of Education, Youth and Sports, 2020

Percentage of 25-34 years olds with tertiary education



Source: OECD, 2020

Since then, higher education has spread throughout the country. With its nearly 700 years of academic tradition, the Czech higher-education system consists of more than 60 institutions in over 20 cities, of which 26 are public, 33 are private and two are state institutions. The Czech Republic is also home to 17 branches of international universities and colleges. At least one institution is located in almost every regional capital, stimulating regional development and providing local industries with good access to skilled labour. Three Czech universities feature in the top ten and eighteen in the top 300 institutions and of the QS EECA University Rankings® 2020 – a dedicated ranking of top universities in Emerging Europe and Central Asia – and nine are included in the QS World University Rankings® 2020.

Current trends in Czech higher education

Access to higher education has been expanding rapidly over the past two decades in the Czech Republic, delivering a significant boost to the country's innovation capacity. Currently, there are almost 300,000 students at public, state and private higher-education institutions. Roughly 90% of students attend public higher-education institutions. Almost 50% of students are enrolled in engineering programmes, IT, natural sciences or business.

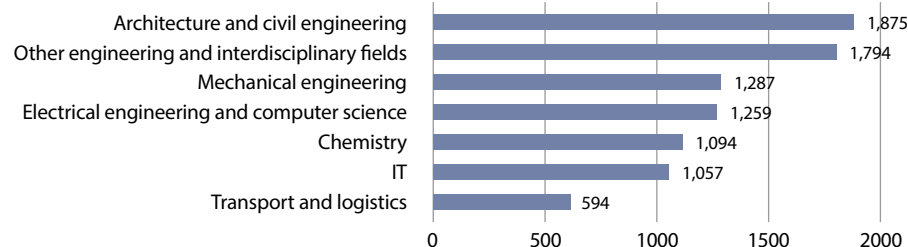
Engineering and business are the most popular fields, each of them accounting for 16% of students, followed by health and welfare and educa-

tion. Every year, six to seven thousand new, skilled master's-level engineers and experts in natural sciences enter the labour market, together with over 300 PhD graduates in the same fields. Among master's-level graduates in engineering fields, architecture and civil engineering is the most popular discipline, followed by significant numbers of professionals in chemical engineering, mechanical engineering, electrical engineering and computer science. In addition to traditional disciplines, a substantial number of experts graduate every year from emerging and interdisciplinary programmes such as security engineering, process engineering, environmental protection and biotechnology, as well as from programmes teaching various field-specific applications of informatics. Today, the Czech Republic is also an attractive destination with progressively increasing popularity for international students. There are currently about 48,000 international students enrolled in full degree programmes, a 23.7% increase since 2010. About 16,000 students choose to study in the Czech Republic in exchange or short-term study programmes every year. International degree students can choose from 1,000 diverse accredited bachelor's, master's and doctoral programmes in English and other foreign languages. More than 150 offered programmes are joint or double degree.

Innovation and collaboration with industry

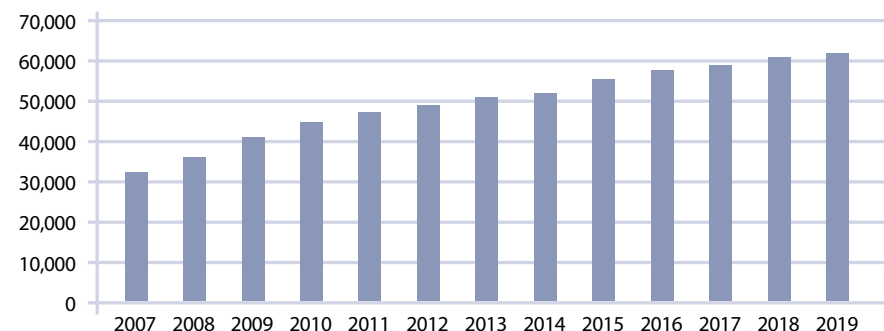
Universities play an important role in research and development. Their success in this field can be seen in, for example, new treatments for cancer

Graduates in engineering fields in 2019



Source: Ministry of Education, Youth and Sports, 2020

Foreign students in degree and exchange programmes



Source: Ministry of Education, Youth and Sports, 2020

and haematological and urological diseases, the development of new construction technologies and advanced materials, and cooperation on international projects (e.g. in collaboration with CERN and the Joint Institute for Nuclear Research in Dubna). The Czech Republic has achieved international renown in areas ranging from Egyptology to high-tech fields such as non-woven nanofibers; Nanospider, a unique nanofibre production technology, is now sold all over the world. European Union funds are also helping to further develop the country's university-based research infrastructure, including the construction of centres of excellence in research focused on the development of laser systems, biomedical and materials science, energy research and complex mathematical modelling in the natural, medical and technical sciences. The Czech government recently introduced the new Innovation Strategy of the Czech Republic

2019-2030. With its new strategy titled The Czech Republic: The Country for the Future, the country aims to become an innovation leader in Europe. The strong focus on science and innovation is illustrated by current projects of Czech scientists and companies, such as nanotechnological coatings to improve air quality, a system for effective harvesting of water from desert air, capacitors for Mars rovers, operation of the most powerful laser in the world and the emergence of a local superhub for artificial intelligence. The Strategy Framework agreed on by the Academy of Sciences, universities, company representatives, science institutions and ministries includes a complete innovation chain ranging from support of basic research and applied research and development to industrial applications and support for enterprise innovation. Applied research focused on specific needs of industry is supported extensively by the Technology Agency of the Czech Republic, which

was established in 2009. In 2018, more than EUR 0.89 billion in public subsidies was provided by the agency to universities, public research institutions and private organisations in order to stimulate innovation, technological development and knowledge transfer. The agency's programmes cover all levels of the innovation chain and a broad range of disciplines, from materials science, transportation and IT to social challenges and public policy. Almost every public university has established its own infrastructure supporting innovative start-ups and projects, such as the INQBAY incubator at the Czech Technical University in Prague, the xPORT Business Accelerator at the University of Economics, the Technology Innovation Transfer

Chamber at the Brno University of Technology and Point One at the Czech University of Life Sciences. Spin-offs and technology transfer are further supported by an established network of regional innovation centres and industry associations. Collaboration with industry in teaching and learning received a significant boost from a recent amendment of the Higher Education Act, which opened up a lot more space for professional programmes and promotion of internships. A successful mechatronics programme developed through collaboration between the University of South Bohemia and the German technology giant Robert Bosch GmbH can serve as an example of this development. ■

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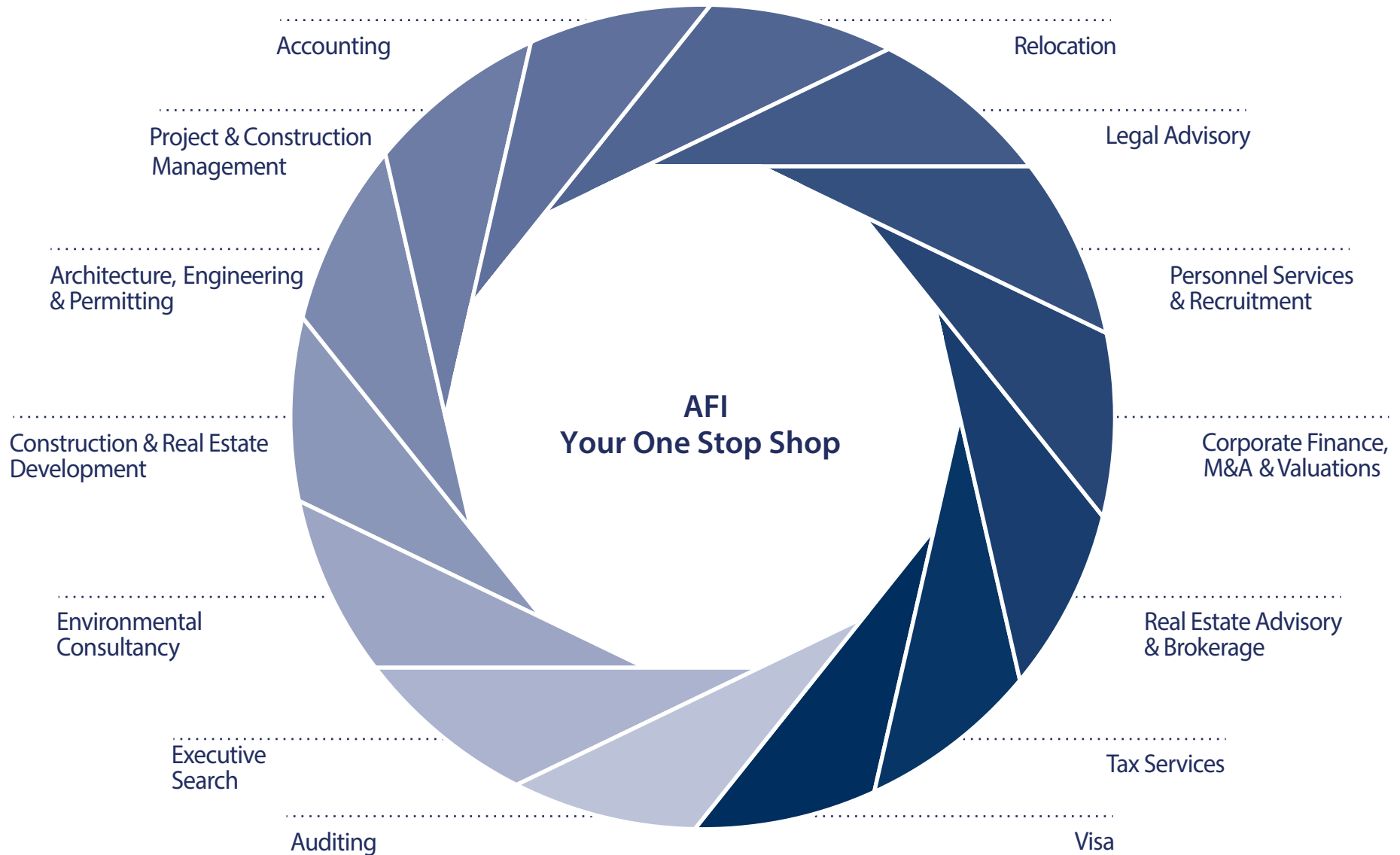
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Sustainable development of industrial real estate is a clear priority

By adopting a number of strategic documents, the Czech Republic has committed itself to actively implementing a range of sustainable policies.

Even the area of industrial development did not escape the trend of taking an environmentally friendly approach. The horizon of sustainable development used to start and end with buildings' energy consumption. Over the past 10-15 years, however, the progress we have made in the area of industrial development in the Czech Republic is comparable to that found in residential development. Modern industrial facilities are equipped with recuperation, utility network meters, intelligent control systems, LED lights with motion sensors and other smart devices.

Water management is a major topic today. We are building rainwater drainage and retention tanks and planting greenery designed to retain water in a given locality. In order to eliminate heat islands, roofs are painted almost exclusively in light colours so that they reflect heat rather than absorbing it. In recent years, so-called hygiene of the indoor environment has also become a trend, and many local developers are big fans of this concept, as it beautifully illustrates the motto: "let's protect nature, but let's not forget that we are part of it". This area addresses the comfort and health of employees, such as plenty of light, fresh air and even social contact.

The international BREEAM certification has become the standard of sustainable industrial construction in the Czech Republic. BREEAM is the world's

leading sustainability assessment method for master-planning projects, infrastructure and buildings. It recognises and reflects the value in higher-performing assets across the built environment lifecycle, from new construction to in-use and refurbishment.

BREEAM does this through third-party certification of the assessment of an asset's environmental, social and economic sustainability performance, using standards developed by BRE. This means BREEAM-rated developments are more sustainable environments that enhance the wellbeing of the people who live and work in them, help protect natural resources and make for more attractive property investments.

The main output from a certified BREEAM assessment is the rating. A certified rating reflects the performance achieved by a project and its stakeholders, as measured against the standard and its benchmarks.

The rating enables comparability between projects and provides reassurance to customers and users, in turn underpinning the quality and value of the asset.

BREEAM measures sustainable value in a series of categories, ranging from energy to ecology. Each of these categories addresses the most influential factors, including low-impact design and reduction of carbon emissions; design durability and resilience; adaption to climate change; and ecological value and biodiversity protection.

A nice example of a BREEAM-certified project is the main distribution centre of the German online retailer Real Digital, which has recently been certified as the most environmentally friendly industrial building in the world according to the latest BREEAM 2016 New Construction Standards. At the same time, the project was the first in the Czech Republic to receive the Outstanding mark and a record score of 90.68%. ■

BREEAM ratings

The BREEAM ratings range from Acceptable (In-Use scheme only) through Pass, Good, Very Good, Excellent to Outstanding and are reflected in the number of stars on the BREEAM certificate.

- ★ ≥ 30 % PASS
- ★ ≥ 45 % GOOD
- ★ ≥ 55 % VERY GOOD
- ★ ≥ 70 % EXCELLENT
- ★ ≥ 85 % OUTSTANDING

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 PANATTONI

The beauty of brownfields

Situated at the intersection of European trade routes, the Czech Republic was exposed to two world wars and endured a forty-year period of totalitarianism under the former communist regime. Each of these periods was reflected to a significant extent in the development of the country's industrial production. What is now the Czech Republic was once the manufacturing base of the Austro-Hungarian Empire prior to the First World War. Following the establishment of the independent Czechoslovak state, manufacturers such as Baťa, Škoda and ČKD grew into major industrial players. The country was ruled by a totalitarian communist regime from 1948 to November 1989. Natural industrial development was halted in favour of centrally planned production quotas, with priority given to heavy engineering and the defence industry, while the competitive environment was completely eliminated. The Velvet Revolution in 1989 brought forth a number of important changes. The democratic system was restored together with private ownership of property, the borders were opened and the market economy was reborn.

Benefits of brownfield regeneration

- Increase of economic activity in the regenerated area – business and trade, housing, services
- Inflow of foreign direct investments
- Decrease of unemployment through job creation
- Increase of competitiveness
- Increase of attractiveness of the given municipality and thus increase of tourism (brownfields are usually located within urbanised areas)
- Unlike greenfield projects, limited claims on agricultural land in line with the principles of sustainable development
- Improvement of the environment through decontamination of the given site
- Mobilisation of private capital
- Increase in property values within brownfield sites and the surrounding areas
- Positive influence on crime prevention and thus reduction of crime rates

This fact and the country's overall stability spurred the establishment of foreign-investment programmes, which are frequently supported by government incentives. Investors entered the country either through acquisition of Czech companies or by building their own production facilities. In the intervening years, a number of industrial zones have been established, some of which are still not completely occupied. Industrial zones allowed for the rapid development of the post-revolution automotive industry in particular (Škoda Auto, PTCA, Hyundai), as well as all auxiliary industries complemented by rapid development of extensive logistics facilities and shopping centres located conveniently next to the most important transportation routes.

In comparison with greenfield investments, regeneration of brownfields is a far more complicated process. The country's brownfields arose through the long-term disuse of facilities previously used for energy- and labour-intensive industries that are now in decline. A separate category of brownfields comprises former military facilities that were refurbished and converted for civilian uses following the end of the Cold War. However, brownfields are often found in strategic locations and thus offer opportunities for investments in new industries, IT, distribution, sales and leisure activities, as well as public-sector investment. Regeneration of brownfields with environmental contamination will also significantly improve the quality of the environment while being of real benefit for all activities in surrounding areas. ■

Examples of successfully regenerated brownfield projects

- **Smíchov railway station** – a new city district with apartments, offices and commercial outlets
- **Waltrovka (Prague)** – office centre and residential project located in one of the biggest former industrial sites in the city
- **Vysočany (Prague)** – a former industrial site turned into a multipurpose facility, shopping and social centre, including residential premises and service centres
- **Vítkovice (Ostrava)** – gradual transformation of former steelworks into a cultural, social and educational centre
- **TESLA Pardubice** – a transformation of a former manufacturing site into a residential quarter with services, shops and University of Pardubice laboratories
- **Šantovka (Olomouc)** – shopping and social centre on a former industrial site located in the city centre

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Czech commercial property market: confidence, stability, potential

Confidence, stability, potential. At first glance, this three-word summary of the Czech commercial real-estate market may seem like an oversimplification. Nevertheless, having a certain perspective is an important aspect in forming an objective approach to evaluating the market.

Whether we focus on the volume of construction activity, the number of new projects in various stages of completion, the investment activity of domestic and foreign entities or the fluctuating vacancy rate, the values of all these indicators do not leave observers in doubt that the Czech market is strong and highly attractive for investors. It is also necessary to include the local market's favourable conditions for bank financing, well-developed infrastructure and stable business environment.

Historical perspective: 1990s to present
Since the early 1990s, investment activity within the country has been primarily focused on the areas of retail and administrative premises. New projects began to arise on greenfield sites and existing buildings

were remodelled in order to meet the demands associated with interior-design trends. Further technological development in recent years has brought a new wave of investment in the office property segment focused on innovations, a modern approach to design and efforts to make buildings more environmentally friendly. Projects are being implemented on brownfields, which allow investors to take advantage of the genius loci of such locations while providing the benefits that come with being close to the city centre.

The pandemic has significantly impacted the real estate sector, especially administrative and shopping centres. The office market in the Czech Republic is undergoing a transformation and the use of office space is gradually being optimised. Nevertheless, several significant transactions were recently concluded on the Czech market, including sale of Churchill Square in Prague 2, which was purchased by Českomoravská Nemovitostní a.s. and Corporate Finance House Group. Other significant transactions include the sale of City West C1 and C2 in Prague 13 to Českomoravská Nemovitostní a.s.

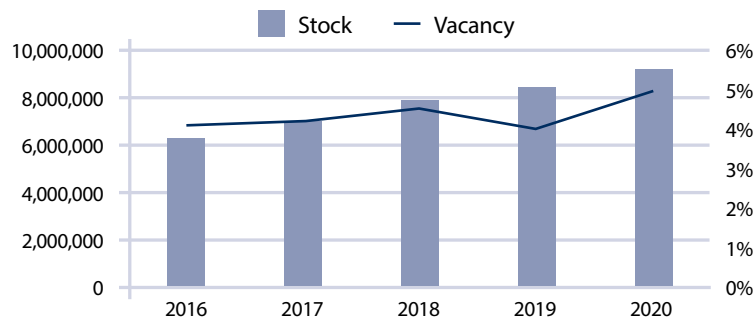
Transformation: Retail
The retail sector has suffered greatly during the COVID-19 pandemic. The future form of the retail

market will apparently be affected to a large extent by the shift of customers to the world of e-commerce, and online shopping will probably affect the occupancy of commercial space in the future.

Industrial boom
Current development is fully following global trends including environmental certification of modern warehouses, focus on maximum efficiency and new construction of "big box" projects. At the beginning of 2021, there are almost 9.2 million square metres of modern industrial space in the Czech industrial real-estate market. More than 70% of this space is covered by the four largest developers: Panattoni, P3, CTP and Prologis.

Conclusion
What conclusions can be drawn from this? The Czech Republic is currently a very interesting location for real-estate investors in the industrial market. Suitable conditions can be found in the Czech Republic for the implementation of major investment projects. In the case of industrial real estate, a very positive feature is the country's location within the European transport network, as well as its highly skilled workers and advantageous costs compared to developed Western European countries. ■

Stock and vacancy of modern industrial premises for lease, 2016-2020



Source: 108 AGENCY, 2020

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Establishing your business premises in the Czech Republic

Top criteria on successful finding office and industrial premises

-  Company approach to the workplace
-  Early search (12-24 months)
-  Clear definition of goals and needs
-  Total cost estimation
-  Accurate estimation of future needs
-  Timeframe and lease duration
-  Overall strategy
-  Core team

The COVID-19 pandemic has impacted our personal and working lives and needs. As we continue to deal with what will be long-lasting effects of the crisis, there is an understandable rush to define the new normality and how it affects our places of work.

Responses to the crisis will be slightly different for every company, but the fundamental aspects of searching for business premises remain the same. They will be based on the talent needs of the organisation, the importance of specific roles and positions, the levels of collaboration necessary to achieve the highest standards of service, and business locations, among many other factors. Thus the main principles of search and lease agreements have not really altered and some guiding principles should be followed.

Office premises

It is imperative to allow sufficient planning time so that all scenarios can be carefully analysed and costed. The recommendation is that a comprehensive study must be commenced at least two years before a new lease should start. This will facilitate a full appraisal of the future office pipeline and market opportunities. What is possible for the company budget? And what is achievable from the wider real estate market? These questions play a huge role in the given company's successful operation in the years to follow and independent, impartial advice is a key component of any major decision-making process.

Industrial premises

Leasing industrial space in unbuilt developments is complex and can be risky for occupiers. It is crucial to find an advisor who can achieve the best deal terms and ensure the right level of protection. Key steps to follow are studying the developer's design documentation and specification of building standards, agreeing on built-to-suit tenant modifications or negotiating changes and enforcing their implementation. Once the legal agreement is in place, the works need to be properly monitored throughout the construction process and until the point of building handover. ■

Industrial & logistics premises on a build-to-suit (BTS) basis | Project phases

- 1 Start of the project**
 - Understanding of the requirement and data collection
- 2 Requirement details**
 - Commercial expectations
 - Technical workshop
- 3 Request for proposal**
 - RFP definition and approval by client
- 4 Tender**
 - Delivery of RFP to all developers
 - Collection of offers
- 5 Comparison of offers**
 - Commercial and technical perspective
 - Cash flow
 - Building and planning permit
- 6 Contract negotiation**
 - Commercial and technical support
 - ASTI list and cost negotiation

Office and industrial & logistics premises on a build-to-lease (BTL) basis | Project phases

- 1 Needs identified**
 - Space and facility requirements
- 2 Needs defined**
 - Selection of premises and lease negotiations
- 3 Lease agreement signed**
 - Design and construction
- 4 Move-in**
 - Use of premises post construction
 - Improvements during occupancy

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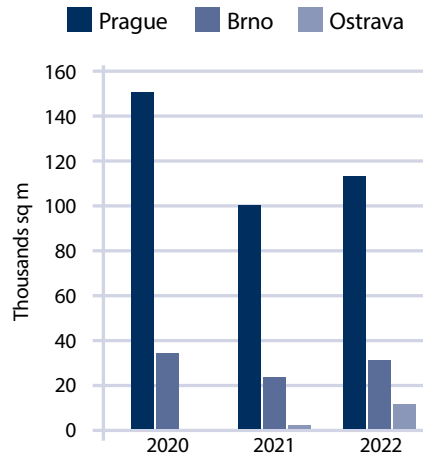
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CBRE

The best office and where to find it in the Czech Republic

Even during harsh times like in 2020, the Czech office market proved resilient and, despite changes in the perception of office space, market figures remain solid and the Czech Republic still has much to offer for companies coming to the local market.

Completions in 2020 & Planned Development



Source: Colliers International, Prague Research Forum, Regional Research Forum

Prague The office stock in the Czech capital grew to approximately 3.75 million m² with planned delivery of 99,600 m² in 2021. Although the pipeline under construction is smaller than in previous years, it should bounce back in 2022-2023 with many projects in early planning phases expected to obtain the required permits. Several developers have also switched from speculative development to a pre-lease policy and it is therefore crucial for tenants to start early with lease negotiations in order to secure their desired premises. Market activity in 2020 largely consisted of renegotiations and renewals of existing lease contracts as companies monitored the effects of the pandemic and subsequent uncertainty during the year. We believe this trend will continue for some time into 2021. Despite an in-

creasing trend for most of the year, the vacancy rate at the end of the year was a healthy 7%. Prime rents in Prague remained virtually unchanged with monthly prices per square metre ranging from EUR 22 to EUR 22.50 in the city centre and around EUR 16.50 in prime inner-city locations like Pankrác and Karlín.

Brno

Brno is the second largest office market in the Czech Republic and is also on the path of growth. Comparable to some of the larger Polish secondary cities in terms of size and quality of stock, Brno has become highly sought after by large IT companies and various R&D centres, mainly thanks to its stable supply of new talent from several universities. Similar to Prague, there are a number of promising projects in the pipeline that can bolster the city's A-class office stock and help the city with the redevelopment of old brownfield sites. The vacancy rate, of around 12%, is still healthy for an expanding city and the increase of prime rents, which range between EUR 15.00 and EUR 16.00, is evidence of the great interest in the South Moravian city.

Ostrava

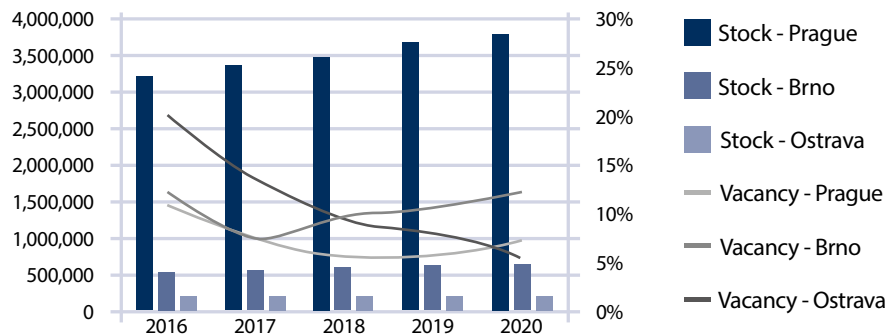
There are currently no new office projects under development in Ostrava, and the city currently

features a very low overall vacancy rate of 5.5%. Prime rents in Ostrava are in the range of EUR 11.50 to EUR 12.00. The city benefits mainly from its good location for transport of goods and is considered to be one of the most crucial locations for the logistics sector. Companies involved in supply chains should be able to find suitable office premises near logistics facilities. Unlike Prague and Brno, the office stock in Ostrava mainly comprises standalone buildings and specialised facilities, with only a few exceptions of truly modern office buildings.

Prognosis

All three of the country's largest office markets proved resilient during the very challenging 2020 and are expected to pick up rapidly as vaccines are rolled out and life starts to return to some level of normality. In addition, the Czech economy proved its adaptability throughout the year. Though 2020 surely took its fair share of casualties and defeats, those were matched by the incredible advancements in other sectors such as e-commerce and ICT. Although vacancy rates in major cities could increase for some time, we expect a general stabilisation of the markets with a cautious approach to the commencement of new developments over the next six to twelve months. ■

Stock & Vacancy in Major Czech Cities



Source: Colliers International, Prague Research Forum, Regional Research Forum

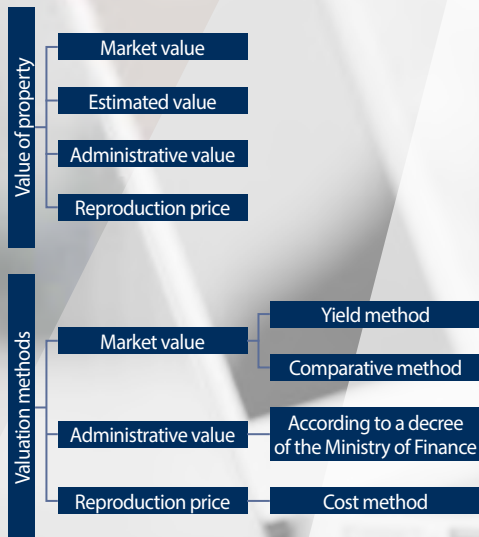
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Valuation of property in the Czech Republic

The value of property is a quantity that often affects the economic decision-making of investors. Each investor encounters the need to determine the value of assets. That may involve the valuation of real estate, machines, intangible assets and much more. We will take a closer look at real-estate valuation in the Czech Republic.



Factors

- Location
- Size
- Parking
- Equipment
- Transport accessibility
- Data network
- Construction
- Capacity
- Purpose
- Surroundings

Investors face the need for valuation when deciding whether to buy or lease premises for their businesses. The investor also encounters the need for valuations of various types of corporate transactions, investment decisions, loan drawdowns, pledges and tax calculations for the acquisition of immovable property.

Price of real estate

Every property has several different price categories which vary according to the purpose and the user of the valuation. The market value for the purchase or sale of property may be different from the estimated value for a bank considering financing the purchase of the property or for the purpose of securing the property as collateral for a loan, or from the administrative value for calculating the tax on the acquisition of immovable property. The property price with respect to the purpose and user of the valuation can be determined either by an expert or an appraiser.

Real-estate valuation methods

Several methods are used to determine the value of real estate. Determination of the market value is most often used for the valuation of a property for the purpose of ownership transfer. The most commonly used methods of calculating market value include the comparative method and yield methods.

The comparative method compares the realised prices of a number of similar properties. It is important that this is the price actually realised, not just the offer price. This method is also applicable in practice to determine the usual rental rates.

There are several types of yield methods of property valuation. Their common denominator is the valuation of the benefit deriving from ownership of the property as rent collected by the owner or landlord.

Factors influencing the value of real estate

The key factor that is common to almost all real estate is location, which is not only the geographic location, but also the prestige of the locality, transport accessibility and the surroundings. Specific factors that affect land prices are the land's area, shape and slope, as well as its orientation. When it comes to building land, the presence of utility networks, or the possibility and difficulty of building them, is also important. Specific factors that affect the cost of office buildings are the area of office space and its layout. The price is also influenced by the design of the building, number of parking places and the building's equipment, such as air conditioning, blinds and distribution of electrical and data networks. A particular factor for the price of production facilities and warehouses is their construction, including the height of the facility, the number of floors and

the load-bearing capacity of the walls and individual floors, as well as the possible uses of the facility. A specific requirement regarding location is accessibility for freight transport, particularly proximity to motorways or railways.

Specifics of real-estate valuation

A separate aspect of real-estate valuation is taxes. The basis for calculating tax on the acquisition of immovable property in the Czech Republic is the value of the property. This value can be determined either on the basis of the purchase price or on the basis of a target value according to a decree of the Ministry of Finance or an expert opinion. The rules that apply to prices are determined by the applicable laws.

Conclusion

Real-estate valuation has many specific details and the determination of a property's value depends on many factors that can affect its price. Therefore, when a real-estate transaction is being planned and a calculation of the property's value is needed, we always recommend contacting experts to help you determine the price in the most appropriate way. ■

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Modern trends in efficient building management

Remote technology and energy management represents significant savings

Some business entities in the Czech Republic are already able to offer foreign investors the latest services and technologies for building management. One such solution is, for example, the remote surveillance centre, which represents the effective building management due to the use of smart technology. The system comprehensively monitors the premises to ensure the smooth operation of the building, protects the client's property and reduces the costs of operation. It allows you to increase sales, extend the life of the building, increase the value of the real estate and minimise client losses at the lowest possible cost. It will also provide a thorough analysis of data to facilitate business decisions or help with the targeting of marketing campaigns. In addition to that, the remote surveillance centre allows you to manage the client's property non-stop and can connect with it from anywhere in the world.

IoT - wireless communication, multi-technology convergence and real-time analytics

In recent years, the importance of the Internet of Things (IoT), which is slowly becoming a part of our daily

lives, has also been growing. In addition to smart homes, the business environment of the Czech Republic is also beginning to prepare smart offices. IoT represents a new trend in the field of control and communication of commonly used objects between themselves and people, especially through the internet and wireless data transmission technologies. Devices interconnected in this way allow the collection of large amounts of data, which can be further processed and used in various fields such as logistics, energy, transport and meteorology.

Robotisation on the rise

The topic of robots is being intensively addressed not only at the global level, but also in the Czech Republic, and not only in connection with the lack of skilled labour. One of the biggest advantages of robots is the reduction in operating and production costs. For example, an electronic receptionist greatly helps with the streamlining of a building's administration. It is a smart technology that, thanks to advanced features, ensures smooth operation of the reception at a lower cost. Thanks to innovative technologies and advanced software, it can be used in any type of space, whether it is an office building, a hospital, a school, a museum or an industrial and logistics complex. ■

Benefits of remote technology and energy management



Increase sales



Increase the value of the real estate



Extend the life of the building



Minimize losses at the lowest possible cost

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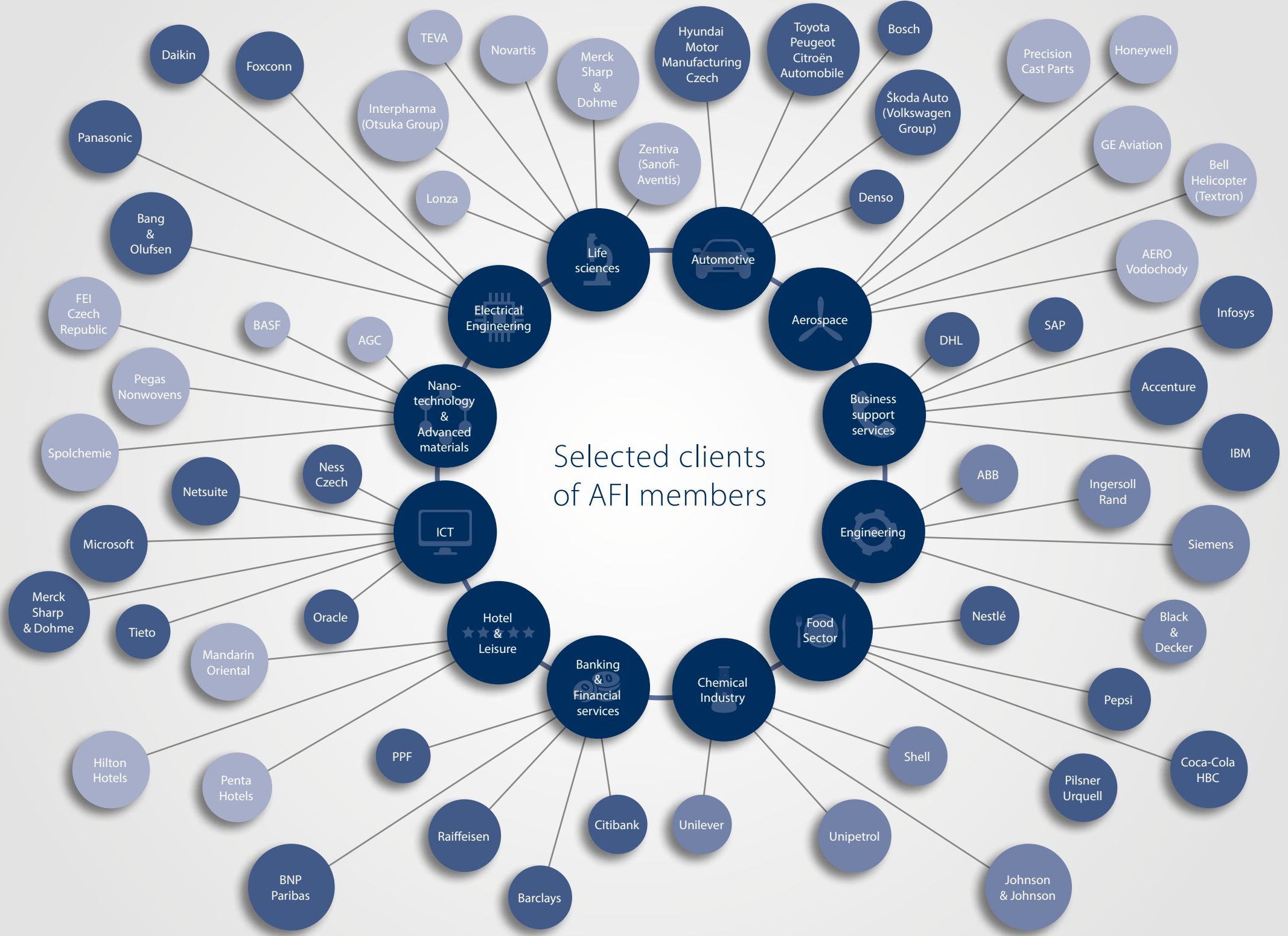
**We proudly fulfill the three pillars
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National Start-up and Spin-off Environment

Smart Investment

Smart Marketing





Handle the permit and construction processes



Permitting processes in the Czech Republic

If a company is planning a construction project in the Czech Republic, it should be aware of the complete approval process before the start of construction and the subsequent inspection process for construction use and operating agreements, which are strictly governed by the Building Act and other related regulations.

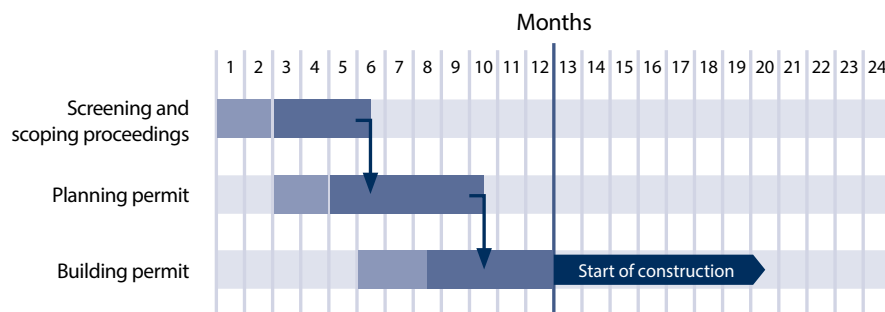
It is highly recommended that the services of an experienced consultant and construction company be used to assess the risks of the proposed project. Risk assessment is the process of collecting available information on a hazard or a set of hazards in order to estimate actual or potential hazards to persons or places close to the site. The risk assessment should be a standard step during the pre-acquisition process, as it can make a significant contribution to the decision-making process as a whole and reduce the cost of remedial measures. The first thing to find out is the current zoning plan of the area in which the project is to be placed. In addition to verifying that the proposed building complies with the zoning plan, it is necessary

to further assess the project in accordance with the Nature and Landscape Protection Act. Most new investment projects in the industrial sector are large-scale and, in most cases, require an assessment under the Environmental Impact Assessment Act. An environmental impact assessment (EIA) is thus, in addition to the assessment of the zoning plan of the site of interest, the initial phase of each construction project. The EIA assesses the effects of planned buildings or structures and installations on public health and the environment (effects on animals and plants, ecosystems, soil, rock environment, water, air, climate and landscape, natural resources, material property and cultural sites and their interactions and context). The whole assessment is public. The competent authorities and the public must be informed of all upcoming projects and may express their opinions. At the same time as the start of the environmental impact assessment, work on planning permit documentation can start. This documentation deals with the location of the building with respect to the surrounding land plots and the buildings on them and the connection of the building to the technical networks. In this documentation,

the opinions of all concerned authorities and utility providers must be stated in accordance with the legislation in force. After obtaining a valid decision on the location of the building, a building permit can be applied for. Once again, the documentation for the building permit is submitted to the relevant government authorities and to the owners of the public technical infrastructure for review. At the same time, the project is assessed from the point of view of integrated pollution prevention and control. Following the completion of construction, an inspection of the structure is carried out by all participating authorities. During such inspections, the investor must demonstrate compliance with the conditions specified in the building permit and obtained opinions. If all conditions are fulfilled, a permit for test operation shall be issued. Alternatively, if test operation is not required, it is possible to apply directly for approval. Currently, the process of approval of a new Building Act is underway at the government level. The new act is intended to significantly reduce the time required for obtaining a building permit and simplify, i.e. unify, the permitting process. ■

Permitting procedures in the Czech Republic

Standard procedure with short EIA



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Zoning permits and environmental impact assessments

Before the building authorities grant approval for any investment project, an environmental impact assessment (EIA) must be completed. In the Czech Republic, local authorities issue detailed zoning plans and conditions for land usage for the purpose of facilitating and regulating construction and development. These plans are developed with the aim of protecting a given area's value and character, as well as contributing favourably to the overall environment.

The four steps in the EIA process in the Czech Republic:

1. Development of EIA documentation

The investor appoints a specialised company or individual to prepare documentation identifying the environmental and public-health impacts of the project.

2. Fact-finding procedure

The competent authorities assess project documentation and conclude whether a project can be approved without any further evaluation or if further evaluation is required, often referred to as a "full EIA".

3. Full EIA

A full EIA primarily involves the obligation to provide additional details of the environmental and health impacts of the project, including an expert's independent opinion, as well as a public hearing on the project.

The amendment of the Building Act implemented in January 2018 allows authorities to issue joint EIA, zoning and building procedures, including the possibility of issuing a joint ruling for such procedures, in order to accelerate the permitting process.

Zoning permits define the conditions for obtaining building permits and allow commencement of the initial phases, such as creating service lines, testing soil layers and preparing the land itself. A zoning permit is valid for two years and is a prerequisite for obtaining a building permit. The statutory period for completing the zoning-permit procedure is 60 to 75 days excluding the time needed for an environmental impact assessment (EIA), if required.

4. Consequences

The environmental impact assessment process is completed and the project is either rejected or accepted. In the case of an unfavourable statement, the investor may submit a revised project that may, for example, use more eco-friendly technology or relocate the project to a more suitable location.

The overall time for obtaining the permit is usually 9 to 12 months.

Prior to submitting a zoning-permit application, an EIA is required. There are two options:

- A fact-finding process with no need for a full EIA, which takes between 6-8 weeks.
- A full EIA may require 4 or 5 months.

Environmental impact assessment

In general, the purpose of an EIA is to implement a strategy of sustainable development and to allow officials and all concerned citizens to understand the likely consequences of a development plan. The EIA process is ultimately a compromise between the economic interests of an investor and the priorities of the environment and public health.

An EIA looks into the impact of traffic, pollution,

noise, utilities shortages, rain water, wastewater connections, change of agricultural land for industrial use, top-soil removal, landscape disturbance, etc.

Practical advice

To reduce delays, we recommend investing in the planning stage and providing as much detail as possible regarding the environmental impacts of your project. Well-prepared documentation is generally better accepted both by the authorities and by the affected public.

The better the communication from the investor, the better the chance that your EIA process will run smoothly and quickly. Discussing the project in advance with the authorities before submitting the documentation may allow comments to be incorporated into the documentation in advance, thus preventing months of delay. ■

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Cost planning: The first step

No two building projects are the same and clients have varying priorities; this is as true in the Czech Republic as it is in the rest of the world.

The client could be a manufacturer requiring a new facility in which to operate its core business or a developer whose core business is generating return on investment by adding value to an existing asset. Each project is defined by a unique combination of factors and determining what, where, when and how allows us to determine how much.

What

Most clients who come to the Czech Republic have a precise idea of the scope of their project. Local knowledge will highlight the opportunities for added value through the use of local materials and the tailoring of the design for a given location.

Where

Some industrial zones have pre-approved permitting processes for appropriate projects, thus enabling commencement of site works in a very short time. Other locations may require a comprehensive planning service including zoning changes and environmental impact assessments.

When

The timeline of a given project depends greatly on its location and the stage that the client has reached in the development of the project documentation. Time constraints may also influence how the project is implemented.

How

The most common contractual arrangements in the Czech Republic are contracts based

on a bill of quantities (BOQ) with a guaranteed maximum price (GMP), engineering, procurement and construction (EPC) and engineering, procurement and construction management (EPCM) contracts.

Experience in the Czech Republic shows that the following conclusions can be drawn: The EPC/GMP approach reduces risk and the administrative burden for the client by placing responsibility for project delivery with the contractor. The downside of this, however, is that the project costs will be higher, as this risk is factored into the price and it is often not possible to finalise detailed specifications for the works prior to appointment of the contractor. Once the contract is awarded, the contractor controls the detailed design and construction process and will aim for the minimum compliant standards with a natural tendency to select the cheapest subcontractors.

With the EPCM approach, the project is divided into several trade packages and the packages are awarded to specialist companies. This system gains time for the design process, thus allowing

for the production of more comprehensive project documentation, especially for later packages. This in turn yields benefits for the management of the budget, with savings on early packages adding to reserves and potentially allowing for upgrades to the later packages. The downsides here are that more risk lies on the client side and with more contractors to manage, project management is more complex and more expensive. However, the client maintains tighter control over the design and budget, and in our experience the overall costs can be 5% to 10% lower compared with procurement via a general contractor.

How much

Whatever the procurement route, it is important to maintain control of costs at all stages of the project.

Typical cost structure

The costs of project implementation can be divided between labour, services and materials (direct costs) and the intrinsic costs associated with the project (indirect costs). ■

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What expats say about the Czech Republic



Bert Hesselink

Research & Data Management Director
CTP Invest

The Czech Republic offers the perfect conditions for enjoying a comfortable family life and having plenty of exciting opportunities at work and in business.



Clare Sheils

Managing Director
CBRE

As a mother, I mostly appreciate safety and good healthcare. The Czech Republic is definitely a great place to live and work.



Blake Wittman

Director
GoodCall

The Czech Republic was once considered Eastern Europe, but in the past ten years, I've watched this country surpass many Western European countries in any number of areas, from safety to services to general quality of life.

The Czech Republic is a great place to have a business. People have very strong technical skills, are motivated at work to do new things, and have great language skills. And the Czech Republic, being the heart of Europe, is close to many other potential markets. I have thoroughly enjoyed living and working here for the last 20 years!



James Fitzgerald

Director, Head of Industrial
Real Estate Czech Republic
JLL

The Czech Republic has really surprised me – great working conditions, excellent access to the outdoors and the natural environment, and a safe place to live for my family.



Sándor Bodnár

Managing Director -
Czech Republic & Romania
Hays

I always enjoyed coming to Prague for business in past years. As life has now brought us here permanently, we have had the chance to more thoroughly explore the city and the country, and I must say the experience has become even better. It has been strange with all the lockdowns, but we have probably spent more time exploring the fantastic countryside in the Czech Republic than we would have done otherwise.



Mike Jennings

Partner
PricewaterhouseCoopers
Česká republika s.r.o.

Hire people



The Czech Republic: **Increasing skills in a competitive labour market**

Salary levels on selected job roles

Sector / position	Min.	Max.	Average
Finance			
Financial Accountant	1,509	1,887	1,698
Senior Accountant	1,698	2,453	2,075
Senior Controller	2,453	3,208	2,830
Business Analyst	1,887	3,019	2,453
Construction & Property			
Site Manager - General Contractor	1,321	2,264	1,887
Project Manager Development	2,642	5,660	3,774
Property Manager	2,075	3,396	2,566
Asset Manager	2,264	3,396	2,642
Business Services - Finance AP/AR			
Junior	1,321	1,509	1,434
Specialist	1,434	1,698	1,660
Senior	1,698	2,075	1,887
Team Leader	2,075	3,208	2,453
IT / Telco			
Cloud engineer	2,264	4,151	3,396
Developer / Java, .NET	2,264	5,283	4,528
DevOps engineer	2,264	5,283	4,528
IT manager	2,642	7,547	4,906

Currency: Euro (EUR 1 = CZK 26.5)

Source: Hays Czech Republic's Salary Guide 2021

The economy of the Czech Republic slowed down in 2020 as a result of the COVID-19 pandemic, with an expected 6.6% decline in economic results. For 2021, however, experts expect a recovery and GDP growth of 3.9%. The unemployment rate stabilised at 3.7% at the end of the year and is still one of the lowest in Europe. The number of job vacancies in the country continues to exceed 300,000.

Recruitment slowed down but did not stop

As in other countries across the world, the COVID-19 pandemic was the key factor affecting the labour market last year. It affected individual sectors at different levels, some of which did not avoid redundancies, though business indicated a clear intention to retain their key professionals and talents. Companies continued to look for new staff, with a more significant recovery in recruitment taking place in the second half of the year. Some areas of IT and life sciences sectors have seen growth and continue to actively seek experienced professionals for their projects.

Remote working and the hybrid team model: a new reality

Lockdowns hit the world of work twice in varying degrees of intensity. Moving quickly from the workplace to home office wherever possible has been a major challenge for many companies. Remote working and the rise of hybrid teams has thus become a new reality, although adapting to this new style of work has been a real challenge for many companies and individuals. Data protection and cybersecurity are becoming a priority, given the number of workers in this mode and the overall higher online activity

of the population. The need for digital skills is growing significantly, which affects the requirements of employers in the labor market. Digitalisation and automation are present in all sectors and business areas and the advent of the pandemic has accelerated their development even more. New roles will continue to emerge, while others will adapt to meet new expectations and business needs of companies. This is especially visible in the areas of online marketing and e-commerce, where experts in these fields are in high demand. In the IT sector, companies are strengthening their teams focused on machine learning and cloud and IoT solutions. As cost optimisation becomes one of the key priorities in most businesses, companies tend to hire skilled financial controllers, analysts and accountants to support them in this area.

Wage and benefit trends

Wages mostly stagnated across sectors last year. A slight increase of 3%-10% was evident mainly in roles with high demand and niche roles, or as a result of urgency on the part of the employer. Applicants thus address other aspects beyond salary, such as the attractiveness of the job content itself, the possibility of growth, the offer of courses and other opportunities for further education, and flexibility. Overall, they pay more attention to benefits than in previous years. Companies are either narrowing the range of benefits in order to reduce their costs or, conversely, they revived their offer of benefits and adapted them to the current situation. Currently, benefits such as paid testing for the presence of COVID-19, financial compensation for remote working online psychological consultations etc. can be found more often. ■

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HAYS Recruiting experts
 worldwide

Being an employer in the Czech Republic

Insurance, support and assistance are the ingredients of a just social system for everyone. They are also the responsibility of employers, employees and the social-security administration in the case of unemployment, sickness, disability, care or emergencies in the Czech Republic. What costs must be calculated when hiring employees? This article outlines the computation of wages and elements thereof, benefits and mandatory contributions in the Czech Republic.

Example of salary calculation

Gross salary (monthly)	CZK 36,000 / EUR 1,359					
	Employee			Employer		
Health insurance						
Health insurance (4.5% / 9%)	4.5%	CZK 1,620	EUR 61	9%	CZK 3,240	EUR 122
Social insurance						
Sickness insurance (0% / 2.3%)	0%	CZK 0	EUR 0	2.1%	CZK 756	EUR 29
Pension insurance (6.5% / 21.5%)	6.5%	CZK 2,340	EUR 88	21.5%	CZK 7,740	EUR 292
State employment policy (0% / 1.2%)	0%	CZK 0	EUR 0	1.2%	CZK 432	EUR 16
Social insurance total (6.5% / 24.8%)	6.5%	CZK 2,340	EUR 88	24.8%	CZK 8,928	EUR 337
Insurance contributions total						
Insurance contribution (11% / 33.8%)	11%	CZK 3,960	EUR 149	33.8%	CZK 12,168	EUR 459
Tax relief						
Employee relief		CZK 2,320	EUR 88			
Child tax credit:						
2nd Child tax credit		CZK 2,884	EUR 109			
Income tax						
Monthly taxable salary		CZK 36,000	EUR 1,359			
Income tax deposit	15%	CZK 5,400	EUR 204			
Tax if income exceeds CZK 139,340/EUR 5,268	23%	CZK 0	EUR 0			
Tax deposit after deduction of tax reliefs		CZK 196	EUR 7			
Net monthly salary		CZK 29,504	EUR 1,113			
Salary cost to the employer		CZK 48,168 EUR 1,817				

Source: Adecco, 2020

Social-security system
In the Czech Republic the social-security system is implemented through three main tools, namely social insurance, state social benefits and social assistance and services. Contributions to social insurance are mandatory under the law. Czech social insurance is divided into the following systems: sickness insurance, accident insurance, health insurance and pension insurance. In other words, social insurance helps people prepare for possible life situations, for example, unemployment – citizens of the Czech Republic contribute to the Employment Policy Fund, which is actually an unemployment benefit fund; ill health – citizens contribute to the health-insurance system; short-term disability – citizens pay sickness-insurance contributions; long-term disability – pension-insurance contributions; and work-related accidents – personal-injury insurance. **Health insurance** contributions fund basic healthcare. All employees and self-employed people as well as individuals without taxable income residing permanently in the Czech Republic are obliged to pay contributions. Part of the insurance is paid by employees themselves and part is paid by their employer. Health insurance covers medical treatments, medical devices, medication, etc. It does not cover some drugs and services

that are not part of basic healthcare. These are paid for by patients.

Payroll accounting

Payroll accounting is part of employers' accounting and it is one of the basic sources of information about the financial situation of a company. Payroll accounting includes HR and payroll data, salary calculations, social and health-insurance deductions, taxes, garnishing of wages and other salary deductions. HR and payroll administration are essential for mandatory reports and summaries sent to social-security bodies, health-insurance companies, the Tax Office, the body responsible for statutory employer insurance, the Labour Office and other institutions. Payroll and HR administration can be outsourced and in the Czech Republic these services are provided by a great number of companies.

Salary tax

Since 2021, the gross wage has been used in the calculation of personal income tax. It comprises the employee's basic salary and other non-cash income. The net wage is equal to the employee's gross wage for the calendar month minus income tax plus tax relief minus social-security premiums (6.5% of the gross wage) and health insurance premiums (4.5% of the gross wage). ■

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Hiring senior managers

It is a real challenge to find qualified, senior and professional workers today. According to a survey conducted by the recruitment agency Advantage Consulting, companies use four recruitment channels on average. However, not all of them bring forth the desired candidates. The recruitment channels vary greatly depending on the type of position.

When looking for candidates for top management and senior management positions, companies most often use recruitment agencies that specialise in executive search (headhunting).

Why executive search?

Qualified candidates are usually employed and thus not actively looking for a job.

In order to access such candidates, recruitment agencies use direct-approach methods – direct marketing, identification of similar companies, targeting of groups and establishment of personal contacts – which enable them to reach candidates who are otherwise inaccessible using ordinary techniques such as advertising and searching in databases of CVs or on the internet.

How does it work?

The headhunter's target candidate is usually an employed person, in many cases a very important or key employee. The hiring process must be carried out discretely, in a strictly confidential manner and with the utmost respect for the candidate's privacy. Recruitment specialists for executive search firstly do market research and then initiate and maintain contact with the appropriate candidates. The client receives regular reports with information from the market containing details about the candidates. The recruitment agency specialists then find out the needs and motives of the selected candidates as well as what they lack in their current job. This information is of key importance for formulating an offer that will not be rejected. ■

Single steps:

- 1 The recruitment agency works closely with the client to specify the profile of an eligible candidate. A list of requirements regarding the future employee is agreed upon.
- 2 The research team examines interesting companies relating to the position and according to the requirements (e.g. field, expertise, region). The list of selected companies is then discussed with the client.
- 3 Brief phone calls with the selected candidates are made to find out whether the target persons are interested in further information and are willing to change jobs. If so, the next communication will be held outside of work. Because this phase tends to be very sensitive, a very high degree of professionalism and thoughtfulness in every step is needed.
- 4 The recruitment team shares with the client information only about those candidates who have expressed interest and given their explicit consent. Maximum confidentiality must be guaranteed. Thanks to the complete documentation of all work steps, activities and information obtained, it is ensured that all steps of the process can be followed up on later.
- 5 The support from the recruitment agency does not end with the hiring date. There is a guarantee period, during which the recruitment agency guarantees that it will undertake a search for a new employee if the appointed candidate leaves the company within the specified period.

The most frequently used sources for recruiting specialists for mid- and lower-level positions are:

- job portals,
- ads on your own website,
- building your own database of jobseekers,
- recommendations from your own employees.

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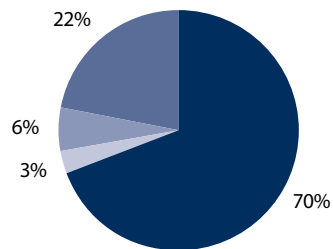
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**ADVANTAGE
CONSULTING**

Employment agencies and recruitment of blue-collar workers in the Czech Republic

Did companies employ workers or manual labourers from countries other than the Czech Republic in 2020?



- Yes, they did employ foreigners
- No, but they had planned to
- They used to employ foreigners, no longer did
- No, and they did not plan to

Source: Hofmann Personal Monitor Survey, 2020

The Czech Republic has been experiencing a declining trend in unemployment since 2010. In 2020, there were no massive layoffs even during the coronavirus crisis, which was in part due to the introduction of government support measures, for example in the form of “kurtzarbeit”, thus keeping the Czech Republic unemployment rate at 2.8% at average. Czech employers are still bothered by the lack of applicants for their vacancies, they lack mostly professional technical employees and manual workers, particularly production-line operators. There is also long-term demand for qualified craftsmen.

A recent trend consists in the interest of companies in employing foreign workers. Before the pandemic, up to 70% of large manufacturing companies employed foreign workers. Thanks to mutual satisfaction, companies are now gradually addressing their return and re-employment. Employers especially praise the willingness of foreign workers to work and adapt in shift planning, for example on weekends and holidays and in relation to overtime. Despite the language barrier, according to HR professionals, foreigners have no problem fitting into companies' teams. The main disadvantage mentioned is extensive and demanding administration. However, this problem can be solved by using an employment agency, which will ensure all actions connected with the search for candidates abroad, visa processing and their arrival in the Czech Republic.

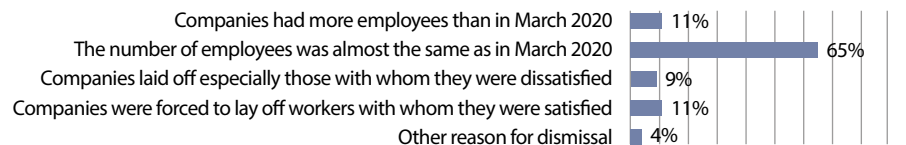
The latest trends in recruitment of blue-collar workers include extended cooperation with employment agencies, a comprehensive system of corporate benefits and special methods of selecting new employees.

The role of employment agencies in recruitment

The COVID situation has not yet brought about the much-anticipated layoffs and people are less willing to change jobs due to general concerns about the situation and possible loss of employment. That is why the majority of jobseekers on the Czech labour market are passive (only approximately 10% of jobseekers actively engage in a job search several times a week). These statistical figures also apply to blue-collar candidates. The latest trend in this area consists in the ever-greater use of employment agencies during the start-up stage of companies. When cooperating with an employment agency, value added lies primarily in the following aspects:

1. Time savings during the recruitment process.
2. Flexibility – coverage of sudden fluctuations during holidays or illness, coverage of seasonal peaks, quick help in case of increased production.
3. The complete personnel and payroll agendas are secured, including interviews, training, medical examination, provision of protective equipment, wages, advance payments, pay-slips processing and distribution etc.
4. The demanding induction training stage may be conducted through the agency.
5. 24/7 support and services.
6. Arrangement of transport/accommodation for employees.
7. Personnel/legal consultancy, know-how transfer.
8. Possibility of a fixed trial period including the possibility of hiring a proven worker as a permanent employee. ■

Personnel status in companies in October 2020 compared to March 2020



Source: Hofmann Personal Monitor Survey, 2020

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Understanding shifting motivations as the key to talent management

A competitive market place, rapid development of new technologies and changing employee expectations, accelerated by the COVID-19 pandemic, mean that businesses in the Czech Republic must re-evaluate how they attract and retain staff in 2021. The recruiter's role in the talent selection and management process has changed. The days when a recruitment company's expertise lay solely in reviewing candidates' experience and knowledge - with workers driven only by salary and working hours - are gone. Recruiters are now matchmakers between candidates' motivations and employers' culture.

Employee motivation and needs

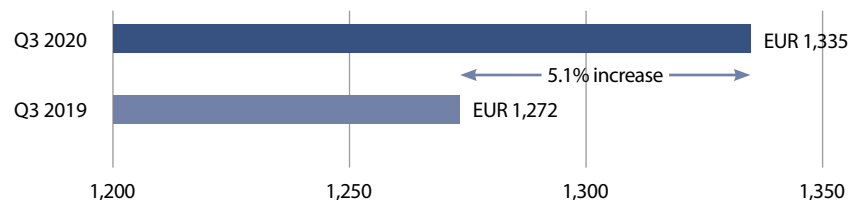
Employees are no longer motivated to work solely by remuneration. They also value other factors including work environment, flexibility, work-life balance and career development. Workers now expect employers

Most valued employee benefits:

- 64% Flexible working hours
- 62% Possibility to work from home

Source: Reed Czech Republic, 2021 Salary Guide Survey

Average wages



Source: Czech Statistical Office, 2020

to cater specifically for their needs, as well as providing them with bespoke career development plans and desired employee benefits. It is no longer enough for employers and recruiters to identify hard, technical skills and previous experience. As well as a shift towards softer skills, researching employee motivation and whether a business can satisfy their needs is critical for talent retention.

The rise of talent management

Companies in the Czech Republic now understand the importance of retaining key employees and developing processes to assist with this. Talent management has become a fundamental aspect of the role played by HR teams and recruiting managers.

Talent management professionals not only rely on recruitment companies identifying potential employees, but also analysing and understanding their needs. This is where recruitment experts provide a link between the employer and candidates, matching candidates' wants and needs with employers' talent management schemes.

Talent management in the Czech Republic

The Czech Republic has talent management practices comparable to those in Western European countries. Most international companies have established performance and succession processes which include talent management tools.

This is critical, as the Czech Republic's low rate of unemployment makes it difficult to attract and retain top talent.

The Czech Republic had an unemployment rate of 2.9% in Q3 2020, the lowest in Europe.

Source: Czech Statistical Office, 2020

Nationally, there are still factors that are threatening companies' ability to remain competitive and offer the experience employees demand. Chief among them is the outflow of experienced, skilled workers, combined with the simultaneous influx of less experienced graduates.

Businesses must also account for wage growth. In Q3 2020, consumer prices grew by 3.3% and as a result wages increased by 1.7% in real terms. Companies must be prepared for valued employees to look for salary increases, or else look to move to other businesses who will pay them more.

According to the Reed Czech Republic 2021 Salary Guide Survey, only 55% of the Czech workforce is satisfied with their wage. The majority of those not satisfied believe that they could be paid more elsewhere (28%) or did not receive the expected pay rise they wanted (20%).

Talent management is becoming ever more crucial in determining business success. The battle for talent sits alongside the race to innovate. Managers who that recognise this and respond accordingly will have an unprecedented opportunity to help themselves to the cream of the crop. This will enable them to become leaders in the new working world. ■

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Addressing the dynamic challenges of workforce planning

Optimising workforces in a dynamic environment

Workforce planning is an increasingly essential component of business strategy especially during uncertain times.

The Total Workforce Index™ (TWI) allows companies to gain deeper insight into talent trends and workforce composition data in order to enhance workforce planning and decision-making. The annual analysis of the TWI scores 76 global workforce markets based on over 200 unique factors. From the TWI data, ManpowerGroup Talent Solutions develops country and regional profiles based on how markets score in each of the four categories (Availability, Cost Efficiency, Regulation and Productivity).

Availability: A relative comparison of the current skilled workforce in each market and the likely sustainability of that workforce based on emerging and ageing workforce trends.

Cost Efficiency: A relative comparison of wage, benefits, tax and operations metrics to suggest potential cost efficiency.




Regulation: A relative comparison of how restricted the terms and practices of workforce engagement are based on a standard set of regulations.

Productivity: A relative comparison of the potential productivity of a workforce based on the number of hours for which an employer can compensate a worker at base pay.

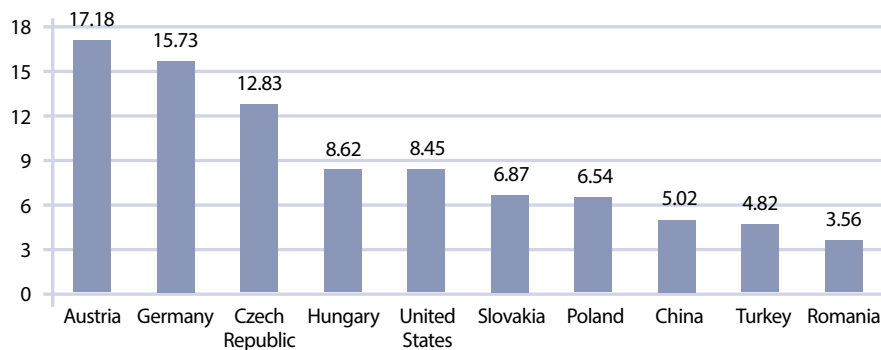
Czech Republic strengths

The attractiveness of the Czech labour market lies primarily in the combination of relatively low business costs and a high level of qualifications among the population. The former emphasis of the economy on the manufacturing industry is rapidly transforming into production and services with high value added. This transformation is greatly aided by the country's long tradition of technical education, which is reflected in the above-average share of highly qualified workers and employees in research and development. On the one hand, the country is characterised by low costs, while also being highly attractive for foreign workers, which together with high labour market efficiency and digital literacy leads to an inflow of foreign investment in research and development, international shared-services centres, technology centres and logistics centres.

Czech Republic strengths

-  Research and development
-  Highly skilled workforce
-  Cost efficiency

Ratio of R&D workforce to every 1000 in workforce



Source: ManpowerGroup, 2020

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Increased productivity, reduced costs and **happier employees**

Flexible planning as the key to increased productivity and reduced costs

A committed, professional and cost-efficient workforce is an important factor in the success of any company, especially where there is a large proportion of temporary employees. Ensuring that employees have the right work at the right time and at the right place is not an easy task. One of the solutions is **Inhouse Services**, a concept developed for companies with a strong demand for flexible personnel. This model offers a complete tailor-made solution specialised in providing a large amount of skilled, flexible labour

Inhouse Services = workforce management solutions with the purpose of:

- Increasing workforce retention and reduce attrition.
- Reducing absenteeism and lost productivity through effective absence management.
- Increasing worker productivity and satisfaction.
- Reducing overtime costs.
- Reducing labour and material waste.

Inhouse Services can be measured by these benefits:

- Total personnel cost savings of 1% to 7%.
- Higher delivery speed.
- Shorter familiarisation times.
- Lower personnel costs.
- Reduced workload of the personnel department.

When to apply Inhouse Services:

- In the case of a large production facility, call centre or logistics operation.
- Between 50 and 1,000 flexible employees are regularly needed.
- The number of required employees is subject to strong seasonal fluctuations.

and is specifically designed to help companies with high-volume staffing needs in the logistics, manufacturing, warehouse and contact centre environments.

How it works

Inhouse Services provide a total workforce management solution aligned with a company's operational objectives and staffing needs, which can increase the productivity of existing workers, help decrease attrition and absenteeism and generate cost savings. It delivers the complete HR process from recruitment, selection, introduction, planning and management of workers (local or foreign) to provision of detailed management reports. It is provided onsite, so all processes can be customised to specific needs. Working with a strategic onsite partner brings savings by reducing overtime, absenteeism, turnover and idle time, while improving overall workforce utilisation. It also helps to achieve measurable improvements in productivity, quality and operating efficiency.

Tailor-made solutions

Inhouse Services does not operate based on a "one size fits all" approach. Each of the onsite delivery models is designed specifically around the client's organisational culture, vision and operational objectives. A dedicated account team works exclusively for each customer

and has its workplace onsite directly at the customer's place of business. This team thinks and acts like internal HR employees. It cooperates closely with the customer, together creating a talent pool made up of flexible and permanent staff. The pool works in the same way as a reservoir. It compensates perfectly for any over- or under-capacity and provides exactly the right number of employees, who are available at all times, thus reducing unnecessary personnel costs and lowering the fluctuation rate and absenteeism. The account team is supported by workforce analysts and other experts. Workforce analysts work with their clients at the operational level in order to truly understand their needs. When examining the client's business, the workforce analysts first conduct a detailed onsite analysis within the company. They meet with all levels of management and training, H&S and HR teams in order to gain an understanding of the client's business. This enables them to recommend relevant actions and activities to drive efficiencies and cost savings. The aim is to identify solutions for the removal of waste, both production and time, and improve efficiencies in the workforce using skills-gap analysis, skills clustering, process improvement, onboarding and training improvements. Every step is carefully planned and ongoing reporting/metrics are provided to rigorously analyse staff utilisation. ■

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Alternative recruitment - Rent a recruiter

Most managers think of only the obvious solutions to hiring challenges, but there is an alternative way to recruit people that may be more cost-effective and efficient for companies starting to operate in the Czech Republic.

The typical view of the workforce has been one mass of full-time, in-office permanent employees delivering all the tasks and services we require to run our businesses. Yet the world has changed, even before the COVID-19

pandemic. A more relevant perspective would see companies and service providers as fluid places of knowledge, able to access gig workers, contractors and part-time and full-time employees, as well as strategic partners and remote workers – all using or capitalising on the technology and modern tools that exist today.

To hire people into your company, you also have a few options. You can advertise your jobs, you can pay a recruitment agency a success fee, or you can hire a full-time talent acquisition specialist. Obviously, many companies would love to have their own fully employed talent acquisition person, believing it would optimise costs and allow them to conduct multiple recruitments without having to pay a job board or agency such enormous fees. But what about headcount approval, what about the permanent employment costs, and how are you going to find a good recruiter? Most importantly, have you started asking the critical questions? Do we really need a full-time recruiter? How many new positions do we need to fill and in what time period? An experienced recruiter can make 4-6 hires per month. Do we need two of them or just one part-time?

A more future-proof solution may be to simply rent a recruiter instead. This service is offered by leading recruitment firms as an alternative to the typical success-fee structure to alleviate the stress of working with such a fully external partner. In the recruiter rental model, the person works for you, quite often bringing best-in-class experience from outside, which can be

a major boost for the organisation. The person will bring added value as an advisor and expert in areas such as employer branding, candidate experience and best practice for recruitment processes.

The recruiter will typically:

- Be experienced in HR/sourcing/recruiting.
- Be trained and certified in the latest methodologies.
- Come with technology – LinkedIn, ATS, etc.
- Offer exclusive coverage on job boards or mobile apps.

Benefits

- Can stop and start as you see fit.
- No firing fee, no severance pay if the project ends early.
- Flex up or down as your needs change.
- Inject local market knowledge into the company/process.

What can they do?

- Compiling of a longlist of candidates and the client does the rest.
- Deep market sourcing and engaging, representation of your brand.

- Screening of already sourced candidates or CVs.
- Communication with internal resources, management, stakeholders.
- Entire recruitment process for junior or senior levels.
- Project management to kick off a recruitment drive.
- Building of an external talent pool.
- Running of community management for your existing candidates. ■

When to use it?

- You're starting up and need a recruiter to kick-start things.
- You want to hire a lot of people in a short period of time, then probably won't hire many after that.
- You need a project manager to lead some HR/recruitment projects.
- You're going through a transformation and need help to lead it and get people on board.
- You don't know how to hire but don't want to use agencies.
- You have a TA team but they don't have time for sourcing.

What structure can be used?

- 5-50 hours in total
- 1-5 weeks
- 1-6 months

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Best approach to large volume recruitment

Why mass recruitment – Mass recruitment efforts often isolate the activities of internal HR departments from normal activities and lead to mistakes

and procedural errors with respect to orientation in the labour market. The purpose of external mass recruitment is to establish a comprehensive procedure of management and process activities with the HR department and the production department in continuous qualified recruitment in terms of forecasting and FTE, as well as sustainable costs and internal control over the project within the outsourcing process.

Blue collar mass recruitment – A method of project and process preparation tailored to the customer. The project manager of the personnel company prepares a feasibility study of the labour market in the given region on the basis of job descriptions and summarises the opportunities within the local, regional and supra-regional recruitment. The HR department will set up a start-up unit of staff necessary for testing and training, and start-up unit would then be responsible for testing the selection of the most suitable candidates in cooperation with team leaders from the client.

White-collar mass recruitment – For many clients, the assessment centre method is quite often used for cooperation with leading experts in personality psychodiagnostics, either directly in the supplier's recruitment centres or online. Prior to such cooperation, the supplier will prepare a detailed study of the possible availability of the required jobs, competitive salary conditions and benefits, involvement of universities in the re-

ruitment process for graduates and the possibility of engaging expats through supra-regional recruitment. Upon completion of the assessment centre process, the playoff method is performed in cooperation with the client, which thus chooses the best of the best.

Headcount – This method is used mainly after the implementation of mass recruitment in order to maintain the cost of the headcount and, at the same time, to fulfil orders with respect to clients and the flexibility of a qualified workforce. From the perspective of cash flow and headcount, the client selects a certain percentage of employees who work based on the agency's employment contract under the same conditions as they have in the basic state and the agency temporarily allocates these employees while the client pays all overhead costs per employee. In return for its services, the agency is paid a certain percentage value of the total volume of wages.

Master vendor – The main contractor, which will supply temporary workers from its own workforce and manage the level of employment companies or employment agencies as needed in order to provide temporary workers with orders that it

is unable to fulfil itself. For the customer receiving the managed services, provision is seamless and the customer concludes contracts only with the main vendor and not directly with third-party employment companies or agencies. ■

Legal obligations of the employment agency:

- Company registered in the Czech Republic <https://or.justice.cz/ias/ui/rejstrik>.
- Permit from the Labour Office of the Czech Republic – pursuant to Section 13 (1) (a) (b) and (c) of Act No. 435/2004 Coll. www.epi.sk/zzcr/2004-435#cast2.
- Deposit – Section 60b of the Employment Act stipulates the obligation of a legal entity or natural person applying for a permit pursuant to Section 14 (1) (b) of the Employment Act to provide a deposit in the amount of EUR 18,900 (CZK 500,000).

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**Find out more
about taxes**



The Czech tax environment: Transparent and competitive

The Czech tax system is transparent and competitive, and offers a number of opportunities to investors.

For individuals

Income below 48 times the average salary (approx. EUR 64,000) is subject to a 15% tax rate; income above this limit is subject to a 23% tax rate. The final tax liability may be lowered by different tax deductions and forms of tax relief depending on the individual's personal situation.

Participation in the Czech social security and health insurance systems is generally required but can be modified by applying EU legislation or a respective totalisation agreement. The Czech social security system covers a wide range of state support including high-quality public medical care, pension, disability insurance, sickness insurance and unemployment benefits.

For businesses

Business income is taxed at a rate of 19%. A 5% rate applies to basic investment funds. There is no alternative minimum tax.

The corporate income tax base is determined in accordance with the Czech Accounting Standards with adjustments for tax purposes. The functional currency is the Czech koruna.

Withholding tax is applicable to limited types of payments to non-residents (e.g. dividends, interest and royalties); however, exemptions based on the respective EU directives and/or double taxation treaty can be obtained.

To support the business activities of domestic and foreign investors, new and existing benefits are available (see table below for more details).

Indirect taxes

For VAT payers performing taxable activities, VAT generally should not represent an additional cost.

The standard VAT rate is 21% and the reduced rates are 15% and 10%. Certain supplies are exempt. The Czech Republic implemented Directive 2006/112/EC on the common system of VAT and is thus generally in line with the principles applied within the EU. The transfer of goods within EU member states is generally not regarded as export or import. Goods imported

from third countries are subject to import customs duties, excise duties, VAT and other measures based on the EU customs tariff.

Other taxes

Several rather immaterial taxes such as property tax and road tax are applicable in the Czech Republic. ■

R&D deduction	<ul style="list-style-type: none"> Eligible costs can be deducted twice: once as operating costs and further as a special R&D deduction (a 110% increase for incremental eligible costs is available)
Investment incentives	<ul style="list-style-type: none"> Job creation and training grants Cash grants for strategic investments Corporate income and property tax relief
Tax loss deduction	<ul style="list-style-type: none"> Carry forward for five tax periods Carry back for two tax periods
Acceleration of tax depreciation	<ul style="list-style-type: none"> Abolition of tax amortisation of intangible assets (for assets acquired from 1 January 2020) Extraordinary tax depreciation of assets in the first and second depreciation groups acquired from 1 January 2020 until 31 December 2021 tax periods

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Paying corporate taxes in the Czech Republic

Corporate income tax **Rate:** There is only one corporate income tax (CIT) rate of 19% applied to the general CIT base. (As an exception, certain investment funds have a special CIT rate of 5% and pension funds a 0% CIT rate.) There are no state, municipal or other similar local income taxes. **Base:** The CIT base is calculated based on the accounting result determined according to the Czech accounting principles. The accounting result is then adjusted for non-tax-deductible costs and non-taxable revenues. If the CIT base is negative, the tax loss can be carried forward for five subsequent tax years or carried back to two preceding tax years (max. EUR 1.1 million). **Capital income:** Dividends from abroad are generally subject to a reduced CIT rate of 15%. Capital

gains from sale of shares is included in the standard tax base (19% CIT). Dividends and capital gains from EU subsidiaries can be exempt under the EU Parent-Subsidiary Directive. Dividends, interest, license fees and some other types of income paid to abroad are subject to a withholding tax (WHT) of 15%. The WHT can be reduced based on the applicable double taxation treaty or based on the EU Parent-Subsidiary or Interest/Royalty Directives.

Transfer pricing: The transfer pricing (TP) rules for transactions between related parties are compatible with the OECD TP guidelines. TP documentation is not obligatory; it is only recommended.

Tax incentives: Investment incentives in the form of CIT relief for ten years are available for certain new investments (manufacturing plants, technology development and shared-services centres). The maximum level of state aid is 25% of the costs of the investment. A generous tax incentive is also available for R&D activities; this incentive has the form of a double tax-deduction for costs incurred on R&D projects.

Value added tax

Value added tax (VAT) is charged by all VAT payers as part of the agreed price when supplying

most of goods or services locally. A customer that is a VAT payer may claim the input VAT back. In some cases, a “reverse charge” may apply, i.e. VAT is not charged by the supplier, but is self-accounted by the customer.

Rates: There are three VAT rates. The standard rate of 21% is applied to most goods and services. The first reduced rate of 15% is applied to, for example, public air transport, most food and construction works related to social housing. The second reduced rate of 10% is applied to, for example, accommodation, leisure activities and certain types of medication, books, newspapers, draft beer, etc.

There are also VAT-exempt goods and services, e.g. banking and insurance services, rent of apartments, education and health services, etc.

Tax-administration obligations: Besides the VAT return and EC Sales List (when EU sales of goods or services are carried out), a control statement (a Czech form of SAF-T) must be submitted by Czech VAT payers.

“Quick fixes” EU VAT legislation was implemented in the Czech Republic as of 1 September 2020. The new Quick Fixes VAT rules are applicable to EU sales of goods and are mainly related to VAT exemption of EU supplies of goods and the call-off stock simplification. ■

Illustrative comparison of VAT rates in the Czech Republic and neighbouring countries

	VAT rates			
	Basic rate	1st reduced rate	2nd reduced rate	3rd reduced rate
Czech Republic	21%	15%	10%	N/A
Slovakia	20%	10%	N/A	N/A
Poland	23%	8%	5%	N/A
Hungary	27%	18%	5%	N/A
Austria	20%	19%	13%	10%
Germany	16%	5%	N/A	N/A

Source: PwC online tool GlobalVATOnline which provides up-to-date information on VAT/GST rates, rules and requirements around the world.

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Paying personal income tax in the Czech Republic

Czech tax law recognises five types of individual income that are subject to tax and stipulates specific rules for calculating the partial tax base from each of them. The total tax base of an individual is then represented by the sum of these partial tax bases. Several changes in personal income tax come into effect in 2021. The personal income tax rate is progressive, with the first rate being 15% and the second, increased rate 23% applied to income over CZK 1,701,168 (EUR 64,195). Before 2021, individual income was subject to a flat income tax rate of 15% with a solidarity surcharge of 7%.

Calculation of tax liability from the aggregate tax base

- Aggregate tax base
- Deductions (e.g. deduction of paid mortgage interest, contributions made to a private pension scheme and/or private life-insurance account, charitable donations)
- = Tax base the nearest hundreds Czech korunas
- × Tax rate
- Tax allowances
- = Tax liability

For each activity, the maximum limits for lump-sum deductions are set as follows:

Lump-sum deduction
Maximum limit for the lump-sum deduction for the taxable period 2021
60% in most trade-license activities
CZK 1,200,000 (approx. EUR 45,000)
40% e.g. lawyers, tax advisors, architects, doctors, artists
CZK 800,000 (approx. EUR 30,000)

Tax residency
Czech tax residents have a duty to pay tax in the Czech Republic from their worldwide income. An individual is considered to be a Czech tax resident if he or she has a permanent address in the Czech Republic or spends here at least 183 days in total per year.

Types of taxable income

The following five general types of income are recognised in relation to individuals:

- employment income,
- business income,
- income from capital assets,
- rental income,
- other income.

Employment

Employment income is mainly income from performing work based on an employment contract or remuneration of statutory representatives of companies. Tax base is calculated as follows:

Tax base = gross salary and taxable benefits (i.e. employment income).

A maximum assessment base applies to social security. For the taxable period 2021, the limit is set at CZK 1,701,168 (EUR 64,195). However, there is no maximum limit applicable to health insurance.

Business income

The partial tax base (or tax loss) in relation to business profits is represented by the difference between earned business income and related business expenses. The in-

dividual may select the more convenient of the following methods of claiming tax-deductible expenses:

- paid expenses in the actual (documented) amount,
- lump-sum deduction.

Capital income

Income from capital assets mainly comprises received dividends, interest and income from pension accounts and life-insurance policies.

Rental income

This category includes income from leases excluding some exceptions. The mechanism for calculating the partial tax base (or tax loss) from leases is similar to that for business income (i.e. the individual may choose between claiming actually incurred expenses or claiming a lump-sum standard deduction, which is 30% with the maximum limit of CZK 600,000 (approx. EUR 22,000) for the taxable period 2021.

Other income

Any income other than that described above falls within the scope of the partial tax base, e.g. income from

the sale of property or movable assets including shares, from occasional activities and leasing of movable property, non-monetary income, etc.

Calculation of tax liability

An individual can also apply deductions and tax allowances, which are applied under the stipulated conditions available mostly to tax residents of the Czech Republic. The tax liability reduced by tax allowances is the final tax liability to be settled with the tax authority. The most frequently applied tax allowances are general annual allowance, allowances for students and children, and allowances for taxpayers with a low-income spouse.

Tax compliance

The obligation of an individual to submit a tax return arises if the individual has earned taxable income (not subject to withholding tax) in the annual amount of at least CZK 15,000 (EUR 566). If the individual has earned employment income, the related tax obligations are in most cases settled by the employer and no obligation to file a tax return arises. ■

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**Interested
in M&A?**



Specifics of acquiring Czech privately owned / family business

In November 2019, we celebrated the 30th anniversary of the Velvet Revolution. This milestone in Czech history brought not only political liberties, but also the freedom to conduct business. The first generation of Czech entrepreneurial pioneers will soon reach retirement age and are looking to hand over their businesses to their heirs or sell the businesses outside of their families. Conversely, acquisition of a Czech privately owned/family business has several specific aspects that one needs to take into account when weighing such a purchase.

Aspects of management

As a leader and visionary, the founder of a Czech privately owned family company is typically not only the sole shareholder, but also usually serves as the day-to-day business executive of the company. Professional management is engaged only in rare cases. This stems from the fact that founders had to manage their companies by themselves from the very start, as there were no qualified outside managers. A certain lack of trust is also present. It is necessary to take these unique management aspects into account, as the founder often possesses vital know-how vis-à-vis the company which is not easy to transfer to the new owner. Therefore, we would recommend a smooth acquisition model with (i) at least a one-year transition period and (ii) legal counsel with specific skills who can delicately handle any unusual elements stemming from the combination of heightened sentiment, high expectations, negotiation style, specific values and the given company's legacy.

Lack of experience with the M&A process

The sale of a company is usually the sole event during which the founder deals with the M&A process. Founders frequently hesitate to cooperate with upper-tier M&A advisors and lawyers and have a tendency to manage the transaction exclusively with the support of their day-to-day/commonly retained lawyer. This may lead to misunderstandings and disenchantment due to inadequate experience with the M&A process. From our experience, it is critical to explain to such sellers the purpose of an SPV, the workings of the due diligence process, the standard terms and conditions of an M&A deal and the structuring of the share purchase agreement. Moreover, it is probable that the company's internal management and the related rules will need to be rearranged or even established from the ground up.

The fine line between business and private life

Founders usually live for their businesses, which thus form an integral part of their lives. This may cause them not to appreciate the boundary between the business and private ownership. Eventually, companies may hold a great amount of assets not related to their core business. Moreover, companies usually hold cash from the profits of the preceding years be-

cause the owners pay dividends only in the amounts necessary to satisfy their needs. This cumulative approach results in the necessity of carrying out pre-transaction process carve-outs by experienced M&A advisors or lawyers.

Understandably, owners who have built up their companies over the greater part of their professional lives care about the future of their companies even after they exit. To avoid any misunderstandings, it is advisable to sit down with the owner and discuss future changes such as post-acquisition mergers, renaming of the company or relocation of the seat and back office and – perhaps most importantly – any resulting dismissals of employees. This emotional block might be even greater when the purchaser happens to be a foreign entity. In such a case, the presence of experienced M&A advisors is of the utmost importance.

Conclusion

Right now is the best time to acquire privately owned/family businesses. A large number of solid mid-size companies are or will be up for grabs as the first generation of founders/owners reaches retirement age and begins exploring their exit strategies. ■

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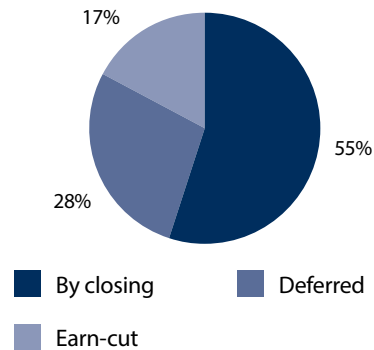
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Making informed investment decisions

Several studies indicate that investors identify sound due diligence as one of the most important factors in achieving a successful M&A deal. However, what elevates financial due diligence from a bare necessity to a critical success factor?

Timing of payment



Source: Deal making in the Czech Republic, Deloitte, August 2020.

Avoiding unpleasant surprises
It is vital to look for weaknesses in performance measurement, changes in cost structure, dissynnergies or creative accounting. A working capital analysis is not a checklist with several standardised tests. It is crucial for identifying oddities in working capital trends. Advisors attempt to calculate the expected impact of the transaction on working capital. Analysing net debt involves also finding risks that may not even be captured by financial statements. Underinvested fixed assets or unreported contingent liabilities may backfire if not identified prior to the transaction closing.

Interim performance reports of Czech SMEs are often affected by the limited scope of the monthly closing procedures. This may be misinterpreted as proof of an optimistic business plan. When dealing with long term contracts, proper revenue recognition should be considered due to the inherent limitations of the Czech Accounting Standards. Foreign investors should be aware of local accounting specifics. Such concerns are becoming more frequent with recent changes in IFRS.

Trends reshaping due diligence in the Czech Republic

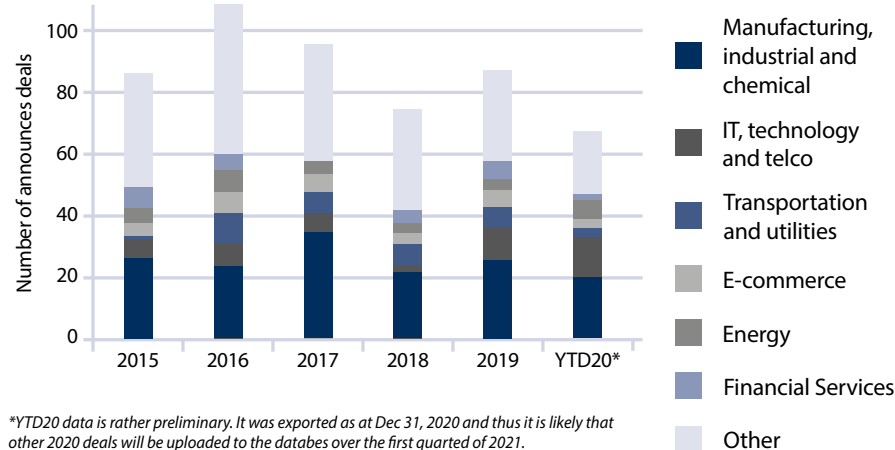
The M&A market in the Czech Republic slowed down with the first wave of COVID-19. The second wave's toll on M&A activity seemed to be less damaging, although it is difficult to assess the extent to which this improvement was driven by traditionally stronger M&A activity in the last quarter of the year. According to Mergermarket, the number of announced deals with Czech dominant targets dropped from 88 in 2019 to 68 in 2020. However, the actual decline is likely to be less severe, as a considerable number of deals may yet be reported (data for 4Q 2020 are only preliminary). With a 71% share in small to medium-sized transactions, closing accounts are generally the preferred

mechanism for determining prices in the Czech Republic. In the pre-COVID19 period, however, the locked box mechanism became more popular in the SPAs, as the Czech Republic became a "seller's" market, putting more emphasis on making the purchase price as certain as possible. However, the economic uncertainty due to COVID-19 restrictions calls for more flexible purchase price arrangements, such as earn-outs. These may often be the only way to overcome deadlock in negotiations, particularly when the gap between the sellers' price expectations and the bidders' risk appetite is too wide. Earn-outs may thus become more widely adopted than in the past (17% of transactions), although it is unclear whether this trend may last once economic/business stability is restored.

Not many changes in the origin of key bidders

Local deals comprised more than half of all deals. Despite a decline in the past two years, Germany regained its role as the most active investor in 2019. The presence of British bidders has been on a steady decline since 2017, quite likely due to Brexit. Investments from non-EU countries are still rather rare with an approx. 15% share in Czech acquisitions over the past five years.

Number of announced deals with target in the Czech Republic



*YTD20 data is rather preliminary. It was exported as at Dec 31, 2020 and thus it is likely that other 2020 deals will be uploaded to the databases over the first quarter of 2021.

Source: Deloitte, Mergermarket, 2020

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From preparation to operation

When making decisions in the process of preparing and implementing an investment in the Czech Republic, foreign investors have the possibility to use the services of consulting firms connected with resolving various construction-technical and organisational issues. This pertains to both new construction projects and brownfields. The services are offered to foreign investors based on the service providers' past experience gained particularly in the Czech Republic.

The character of provided services is fully dependent on the character of the given project. These services should minimise investors' risk associated with errors arising from a lack of understanding of the specific conditions and differences in construction-related legislation.

Technical screening

Investors are offered services consisting in collection and assessment of information required for making a decision on the given project's location. This involves assessments of the following aspects:

- Proposed location of the structure with respect to urban development documentation and possible risks.
- Transportation infrastructure with respect to not only the implementation and operation of the structure, but also to accessibility for employees.
- Utilities networks, especially with respect to their long-term operability, quality, capacity and loading.
- Climatic conditions in relation to transport, energy intensity, operating costs and the scope of facility management.

It is necessary to check the following:

- Quality of given building and its individual parts and the utilised construction materials from the perspective of the structure's anticipated service life.
- Determination of the extent of the building's compliance with the technical standards and regulations.
- Condition of equipment and the location of all necessary energy sources for flawless and economical operation.
- Condition of the fire-protection system and assurance of occupational safety.

Foreign investors commonly request this overview of analytical documents and information from consulting firms.

Preparation and implementation

In this part of the project lifecycle, the project and cost management services are as follows:

Recommendation regarding the specific professional competence of the project manager and management teams, with focus on thorough knowledge of the technical and organisational conditions of the construction process in the Czech Republic.

Assessment of materials for selection of a general contractor alerting investors to risks that may arise. A technical audit of the documentation for selection of the contractor carried out by a consulting firm is extraordinarily beneficial for investors. Assistance with the actual selection and evaluation of bids is a natural part of the offered services.

Management services with focus on the key milestones of the construction project, the basic links between the structural and technological works and a statement of significant risk areas. The process should be as follows:

Step 1:

The investor and consulting firm define the objectives and set up the time schedule and organisational assurance. Usually, a representative of the consulting firm explains to the investor all aspects of the agreed activities.

Step 2:

The consulting firm forms a team of specialists according to the agreed requirements with the objective of precisely specifying the preliminary actions to be taken.

Step 3:

The consulting firm's specialists verify individual areas and prepare partial reports including necessary documentation and recommendations.

Step 4:

The management of the consulting firm submits a final summary report to the investor. Within this report, emphasis is placed on a comprehensive solution for determining the status with a statement of the degree of importance of the determined facts.

The process of providing such technical due diligence services as described above is common practice and is always the result of the initial discussions and the requirements precisely formulated by the investor. ■

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Environmental due diligence – A cornerstone of new acquisitions assessment

Environmental due diligence (EDD), i.e. the ecological audit of industrial companies, administrative buildings or undeveloped land plots intended for further developments is an important element of making decisions about new property acquisitions.

The purpose of EDD is comprehensive evaluation of the given property regarding possible risks connected with the environment. The audit provides the client with an assessment of whether the property is in compliance with

the applicable laws, as well as a calculation of the possible risks and costs associated with remedial measures. Typical clients requesting EDD services include individual industrial companies and business chains, as well as important developers and companies providing facility management services.

As there is no specific EDD methodology in place in the Czech Republic and as most acquisitions involve foreign investments, most consulting companies provide EDD services according to the E-1527-05 ASTM-standard issued by the American Society for Testing and Materials (ASTM). This approach ensures easy orientation and fulfilment of foreign investors' expectations.

Environmental due diligence is performed in two stages according to the ASTM methodology.

The first EDD stage includes the evaluation of the site according to its compliance with legislative requirements. The current state of the site and all activities taking place there are assessed during an actual visit. Based on the available information, the following points are assessed:

- The historical use of the site with emphasis on uncovering old ecological burdens.
- The environmental impact of current activities (waste handling, use and storage of chemicals, technological operations, heating and cooling).

- Review of all available documentation (public registers and databases, documentation at the site).
- Particular consideration is paid to the assessment of waste, wastewater and handling of hazardous substances, as well as the amount of airborne emissions produced.

The guiding principle behind this approach consists in an attempt to establish links between a hazardous source and a potential receptor via an exposure pathway.

Risk assessment is the process of collating known information on a hazard or set of hazards in order to estimate actual or potential risks to receptors. Receptors may be humans, a water resource, a sensitive local ecosystem or future construction materials. Receptors can be connected with the hazard via one or several exposure pathways (e.g. direct contact). Risks are generally managed by isolating or removing the hazard, isolating the receptor or by intercepting the exposure pathway. Without the three essential components of source

(hazard), pathway and receptor, there can be no risk. Thus, the mere presence of a hazard at a site does not mean that there will necessarily be attendant risks. The **second EDD stage** is carried out in the case that the first stage defines the necessity of further specialised research for the purpose of making a qualified decision about the environmental state of the site. The most frequently performed activities during the second stage are research of asbestos occurrence and research and analysis of soil and ground water samples – the most frequent contaminant being petroleum products (hydrocarbons) or PCBs from the operation of old transformers and the like.

We can unambiguously conclude that performing environmental due diligence should be a standard step during acquisitions of properties, as it can significantly contribute to the decision-making process as a whole and reduce the costs of remedial measures. The most important approach is to have EDD done by a high-quality company that knows the local conditions and all related circumstances. ■

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Finding a trustworthy director in the Czech Republic

Nominee services are used when a nominee (fiduciary) looks after the assets on someone else's behalf and acts in their best interest. Such a person is usually nominated based on a contract between the client and a professional provider, which means the nominee is not someone from the client's staff.

The trust element

The nominee director service, which is probably the most common type of nominee service, is typically provided by independent trust firms or individuals. Clients recruit from various industries and business segments and use this service for different reasons. As the element of trust is of great importance in this relationship (which is why providers of such services are often referred to as "trust firms"), clients tend to look for reputable providers with a proven track record. Reputable trust firms serve as a sort of guarantor in this relationship, as they have adequate procedures in place ensuring that their directors will act strictly on the client's instructions only. This means that the client decides what contract to enter into and the director, in cooperation with the client's lawyers, tax advisers and other professionals, executes the client's wishes. It is for this reason that clients usually reach out to trust firms for this type of nominee service.

Why and when to use a nominee director

Why use a nominee director when many companies use their own staff? Why not use your own people when finding the right provider is not always an easy task?

To answer these questions, some commonly cited reasons for choosing this service are provided below.

Local management and control – If the client has its headquarters abroad, appointing

a foreigner as the director of a local company might lead to speculation with respect to where the real management and control are being executed. This risk is mitigated by appointing a professional local director who lives in the same country in which the company is registered.

Independence and responsibility – Having an independent trust firm with professional indemnity insurance and director and officers liability insurance appropriate to the size of its clients and which can also handle back-office management (accounting, payroll, compliance, etc.) is much more effective than using one's own employee, who not only has to deal with directorship tasks in addition to his/her primary duties, but may also go on holiday, become ill, leave the company unexpectedly or pursue his/her own interests.

Limited presence in the country – This is typical for inward investors who do not need many people locally and manage their investments in multiple countries from their headquarters

abroad. Having a local director with a proven track record who knows local legislation and the business community, can recommend local experts in other service areas and is used to daily operational matters such as how banks, the tax office and other governmental authorities operate saves the client time and resources and is more effective than having an expatriate dealing with these issues in multiple jurisdictions at once.

Cost – It is cheaper to outsource an experienced local director than to move one's own full-time employee with the required seniority and experience to a foreign country to serve as a director.

Summary

Nominee services are not a magic bullet that eliminates all concerns and problems associated with a new investment. However, if used in the right way and with the right partner, they can save a lot of time and financial resources and add an extra dimension of comfort and corporate governance. ■

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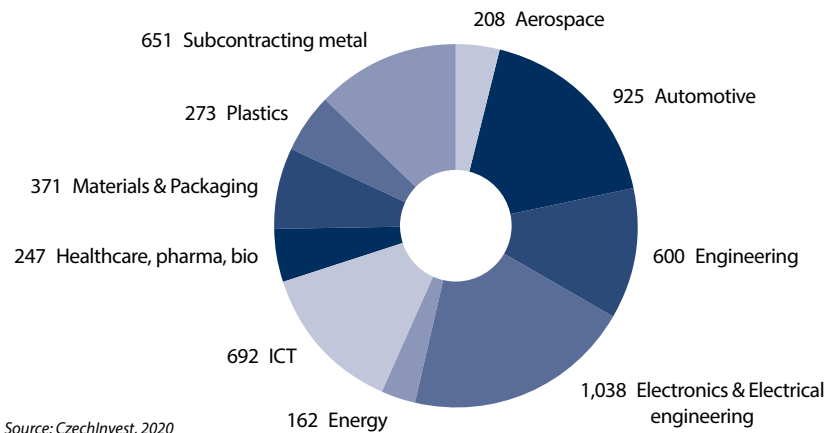
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VISTRA 

Sourcing and business partnership

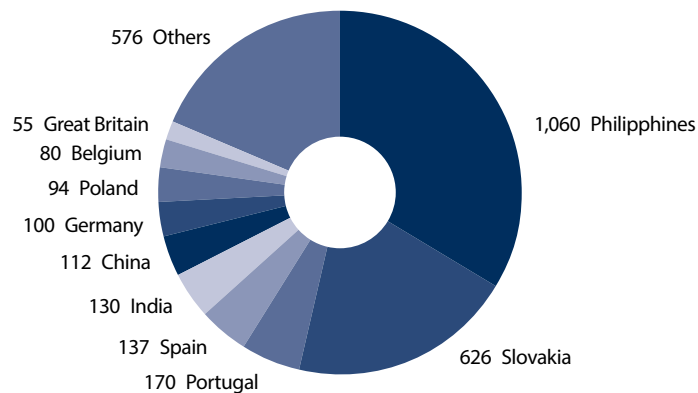
Are you looking for a suitable supplier or a joint-venture or acquisition partner in the Czech Republic? If so, CzechInvest's sourcing services are crucial for you.

Number of companies in the database by sector in 2020



Source: CzechInvest, 2020

Database accesses by country in 2020*



Source: CzechInvest, 2020

*not including the Czech Republic

CzechInvest's Sourcing Services

CzechInvest established its Sourcing Department 23 years ago with the aim of seeking out suitable Czech suppliers and joint-venture and acquisition partners to ease foreign investors' start of production in the Czech Republic. Sourcing is frequently used by manufacturing companies that are considering establishing or expanding their manufacturing activities through either a greenfield investment or an acquisition or joint venture. The Sourcing services are provided free of charge.

Supplier market screening

In 2020, sourcing specialists prepared 73 market screens of Czech suppliers for 43 clients from 19 countries. The strongest demand for supplier market screening was from German and Japanese companies, followed by South Korean and Czech firms. Market screens are prepared based on CzechInvest clients' specifications and contain valuable information such as maps of locations and revenue-per-employee ratio charts of selected suppliers, as well as detailed company profiles comprising information on, for example, quality certificates, specifications of products and technical equipment, and major customers.

Visit to Czech suppliers

Based on the market screens, foreign companies shortlist selected Czech suppliers. Sourcing specialists are prepared to help foreign companies organise visits to selected suppliers and assist them during such visits. Services include formulation of itineraries of business trips in the Czech Republic, interpreting and transport.

Sectoral database of suppliers

Czech supplier companies as well as companies that are seeking a partner or investor are listed in CzechInvest's sectoral database of suppliers. The database contains standardised profiles of more than 3,600 Czech manufacturing and ICT companies. Suppliers are classified into ten sectors (e.g. automotive, aerospace, engineering) and further sorted into subcategories. Typical supplier companies are common firms engaged in, for example, plastic injection moulding, metalworking, CNC machining or, mechanical engineering. Registration in the sectoral database of suppliers is available on CzechInvest's website and is free of charge. Investors and companies from all over the world use the database to find suppliers or JV partners that best fit their needs and to get an overview of supplier status concerning a specific sector. The database is used by global companies such as BMW, Boeing, Cisco, Microsoft, IKEA, DHL, Nikon, KPMG, Siemens and Jaguar Land Rover, among many others. ■

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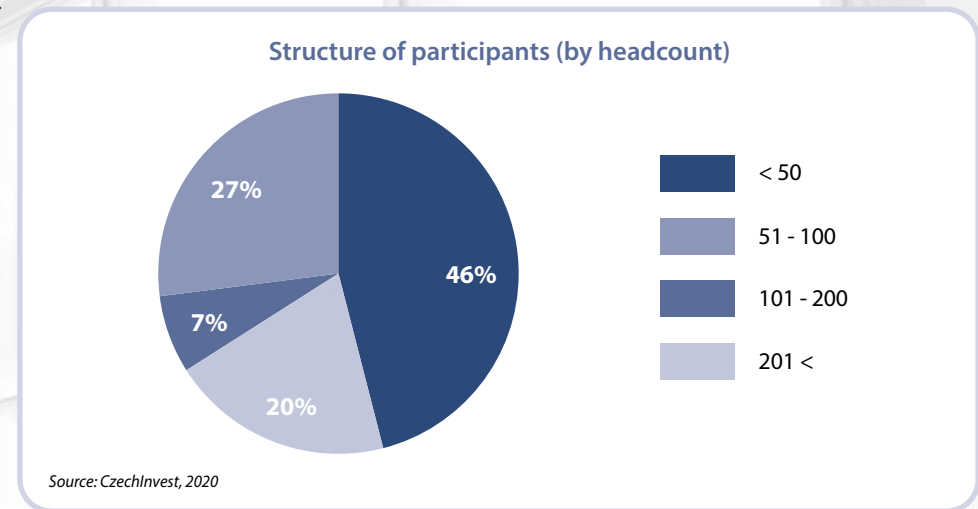


CzechLink: The easy way to find a **strategic partner**

CzechInvest's CzechLink project is intended for Czech companies that are seeking strategic or investment partners, while also offering investors a way to enter the Czech market through a merger, acquisition or joint venture.

CzechLink was initiated in response to the heightened demand among foreign companies for mergers with and acquisitions of Czech firms. The purpose of the project is to seek out suitable acquisition targets and to facilitate foreign investors' capital entry into Czech companies. CzechLink is most frequently used by manufacturing companies that are considering expanding their activities through an acquisition, merger or joint venture, as well as by investment funds and banks. Czech companies that are seeking a partner or investor through CzechLink must be headquartered in the Czech Republic and have at least a five-year history of operation in the country. They must also be financially healthy (i.e. they must not be in bankruptcy or subject to settlement). CzechLink helps firms to resolve problems with management succession and provides the opportunity to gain a strong partner for expansion. With respect to the project's conditions, the size of investment targets is in no way limited, though they are usually small and medium-sized enterprises annual income ranging from EUR 1 million to EUR 10 million and fewer than 150 employees. CzechLink is intended for manufacturing and ICT companies. Project participants are commonly firms engaged in software development, metalworking, plastic injection molding, the automotive sector and the textile industry. The current list of CzechLink participants is available on CzechInvest's website.

For every firm participating in the project, CzechInvest prepares an information sheet containing a detailed description of the given company (i.e. ownership structure, legal form, quality control, products, technology profile, top customers and main competitors, equity offer, etc.), as well as economic indicators of the compa-



ny covering the past three years. The information sheet also serves as an internationally comprehensible presentation of the firm's results. This sensitive information is provided to investors only after signing a confidentiality agreement with CzechInvest. Subsequently,

CzechInvest arranges introductory meetings between the potential partners. However, the actual structure of the transaction (financing and management audit) is exclusively at the discretion of the investor and the given firm. ■

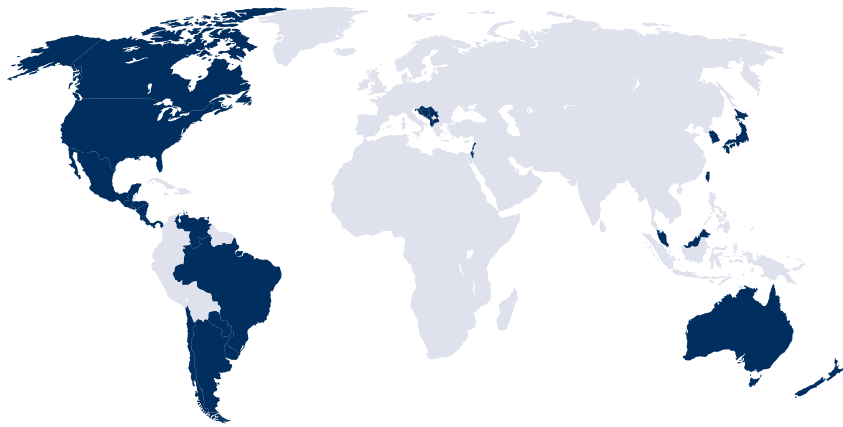
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Where to apply for Czech visa (ordinary passports)

Exceptions listed in the Ordinance



- * Albania
- * Andorra
- * Antigua and Barbuda
- * Argentina
- * Australia
- * Bahamas
- * Barbados
- * Bosnia and Herzegovina
- * Brazil
- * Brunei
- * Canada
- * Costa Rica
- * Croatia
- * Guatemala
- * Holy See
- * Honduras
- * Hong Kong Special Administrative Region of the People's Republic of China
- * Chile
- * Israel
- * Japan
- * Macao Special Administrative Region of the People's Republic of China
- * Macedonia
- * Malaysia
- * Mauritius
- * Mexico
- * Monaco
- * Montenegro
- * Nicaragua
- * New Zealand
- * Panama
- * Paraguay
- * Saint Kitts and Nevis
- * Salvador
- * San Marino
- * Serbia
- * Seychelles
- * Singapore
- * South Korea
- * Taiwan
- * United States of America
- * Uruguay
- * Venezuela

With focus on long-term visas and long-term and permanent residence permits

A foreign national is entitled to submit an application at the embassy of the Czech Republic in the country of which he/she is a citizen or, if applicable, the country that issued his/her travel document, or in the country where he/she has long-term or permanent residence. Ordinance No. 429/2010 Coll. ("Ordinance") provides exceptions and allows the submission of an application for a long-term visa or a long-term or permanent residence permit at any embassy of the Czech Republic by citizens of countries that are listed in the Ordinance. Regulation (EU) 2018/1806 of the European Parliament and of the Council ("Regulation") lists the countries whose nationals must be in possession of a visa when crossing the external borders of the European Union. These nationals are listed in Annex I of the Regulation. Annex II of the Regulation lists the countries whose nationals are exempted from the obligation to be in possession of a visa when crossing the exter-

nal borders for stays of no more than 90 days in any 180-day period. Prior to joining the European Union, the Czech Republic entered into several bilateral visa exemption agreements with several countries, whose citizens are subject to a special regime based on these treaties (e.g. Argentina, Chile, Israel, Malaysia, South Korea and others). The special regime applies only when staying in the Czech Republic and not in other EU member states. In practice, the legal framework provides that there are many countries whose citizens may enter the EU, including the Czech Republic, without a visa and subsequently apply for a long-term visa or a long-term or permanent residence permit at one of the nearest embassies to the Czech Republic, i.e. the Czech Embassy in Germany (Berlin), Austria (Vienna), Poland (Warsaw) or Slovakia (Bratislava). This gives foreigners time to arrange their private and practical affairs in the Czech Republic prior to starting work in the country after applying for and obtaining the relevant long-term visa. It is highly recommended that you consult with a professional regarding the current legal practice, especially due to COVID-19 restrictions. ■

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Visa support provided to foreign investors

Relocating a company to a foreign destination is always demanding administrative process. In this respect, CzechInvest can assist foreign companies coming to the Czech Republic. In addition to tailored consultation, CzechInvest administrates several programmes aimed at accelerating or enabling relocation.

Programme for Key and Scientific Personnel
 The Programme for Key and Scientific Personnel substantially eases the process of arranging residence permits for key employees of companies coming to the Czech Republic. Those eligible to register in the programme include newly established Czech business entities of foreign in-

vestors, start-ups, technology companies, research institutes and Czech entities of foreign investors with at least 50 employees in the country and 250 worldwide. The project is intended for statutory representatives, managers and key specialists who need to reside in the Czech Republic for longer than 90 days. The benefit of this programme consists in accelerated issuance of a residence permit within 30 days following submission of the application, which is a significant reduction in comparison with the standard time periods: up to 90 days to issue an employee card and up to 120 days to issue a blue card or long-term business visa. This programme also supports the relocation of employees' family members who apply for a visa for the purpose of cohabitation of a family. Individual applications of members of the same family are thus processed jointly. Within the Programme for Key and Scientific Personnel, companies can use two means of relocating their employees and statutory representatives. These are **internal transfer**, whereby a foreigner is transferred on the basis of a contract to work at a Czech branch while remaining in an employment relationship with the foreign investor, and **localisation**, whereby the transferred employee enters into an employment relationship with the Czech entity.

Where to apply for inclusion in the programme
 The programme is administered by **CzechInvest** for newly established company, start-ups, research institutes and technology company. Applica-

New company visa process

1 Incorporation

Employee

Member of a statutory body

2 Vacant position – Labour office

Commercial Register

Labour market test – 10-30 days

Work permit (optional)

3 Optional: Enter government visa programme

Key and Scientific Personnel *Only visa programme available for new companies*

4 Schedule appointment and submit application at the embassy

Employee card
Blue card

Long-term visa – Business

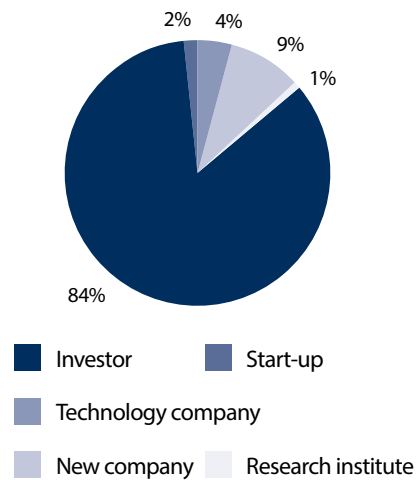
5 Application approved

- ✓ Collect entry visa
- ✓ Register with the MoI within three days
- ✓ Biometrics
- ✓ Collect employee card

- ✓ Collect visa
- ✓ Register with the Foreigners' Police within three days

tion of investor (over 1 year since incorporated, 50 employees in the Czech Republic and 250 employees in corporation worldwide) is administered by **Ministry of Industry and Trade**.

Programme for Key and Scientific Personnel



Source: CzechInvest and MIT data, 2020

How companies use the Programme for Key and Scientific Personnel

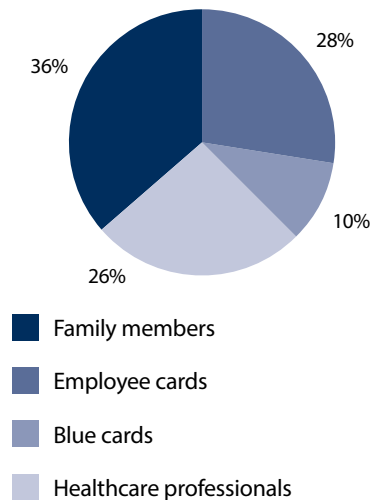
CzechInvest administered 125 applications of legal representatives, key specialists, managers and their family members from 15 newly established companies and start-ups.

Programme for Highly Qualified Workers

The Programme for Highly Qualified Workers enables applicants and future employees from non-EU countries and their family members to arrange appointments at embassies and consulates. In

addition to blue-card and employee-card applications, the programme enables, as of February 2021, also the inclusion of employees posted to perform work in the Czech Republic who are applying for a non-dual employee card or internal transfer card. Employer applies to the Programme at Ministry of Industry and Trade.

Programme for Highly Qualified Workers



Source: CzechInvest and MIT data, 2020

The Programme for Qualified workers

The Programme for Qualified Workers enables applicants from selected countries to arrange appointments at embassies and consulates that are otherwise not easily reachable. The **annual quota** for each of these countries is set by a government regulation. For more details see the chart below.

Quotas in the Programme for Qualified Workers

Country	Quota
Ukraine	40,000
Mongolia	1,000
Serbia	2,500
Montenegro (shares a quota with Serbia)	2,500
Philippines	2,000
Belarus	1,900
Moldova	600
India	600
Kazakhstan	300

Source: Government Regulation No. 220/2019 Coll.

This programme is aimed at employers with at least a two-year history and at least six employees in the Czech Republic in the areas of manufacturing, services or the public sector that are seeking to employ citizens of Ukraine, Serbia, Montenegro, Mongolia, the Philippines, India, Moldova, Belarus or Kazakhstan to perform skilled labour. The programme is mainly used by manufacturing companies such as Daikin Industries Czech Republic, Toyota Peugeot Citroën Automobile Czech and Foxconn etc.

Process of the Programme for Qualified Workers

Labour market test

10-30 days



Guarantors*

Inclusion in the project

3-5 days



Ministry of Foreign Affairs appointment

21-60 days**



Ministry of the Interior employee-card approval process

60-90 days

* CzechInvest is one of the guarantors together with other business associations.

** The waiting time for an appointment is country specific and can differ month to month.

Government visa programmes became very popular in 2020. Some restrictions on national borders are still in place due to the Covid-19 pandemic and the visa agenda at Czech embassies in many countries is limited. However, visa programmes enable labour migration even where the standard visa agenda is limited. ■

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Where Czechs excel

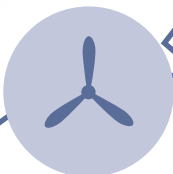
Cardiology and heart surgery

Thanks to the extraordinary development of heart surgery here, the Czech Republic currently ranks among the most advanced European countries in terms of both the number of surgeries performed and the quality of care.



Ultralight aircraft

The Czech Republic is among the world leaders in the production of ultralight aircraft and is one of the biggest producers in Europe.



Musical instruments

Established nearly 150 years ago, the family-owned Czech company Petrof in Hradec Králové is the biggest European piano manufacturer.



Footwear industry

Baťa, a family-owned global footwear and fashion accessory manufacturer and retailer was founded in 1894 in Zlín, Moravia by Tomáš Baťa, his brother Antonín and his sister Anna. Today, the company has a retail presence of over 5000 retail stores in over 90 countries. Baťa has entered the Guinness Book of Records as the largest retailer and manufacturer of shoes in the world.



Automotive industry

With more than 1.18 million cars produced in 2020, the Czech Republic is the leading automotive producer in the CEE region. The most significant Czech carmaker is Škoda Auto, which has been in existence for over a century. Czech trams are also well known elsewhere in the world.



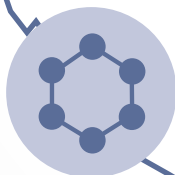
Plastic surgery

Czech physician František Burian laid the foundations of plastic surgery. In 1939, Czechoslovakia became the first country to recognise plastic surgery as a separate field of medicine.



Nanotechnology

In 2003 Oldřich Jirsak developed a reliable method of spinning fibres measuring 200 nanometres in diameter. Based on his patent, the Czech company Elmarco became the first supplier of industrial-scale nanofibre production equipment in 2004.



Defence industry

Already in the time of the First Czechoslovak Republic, the country was one of the world's biggest arms exporters. Nowadays, developed by the Pardubice-based company ERA, the Věra and Tamara passive radar systems are among the best in the world and can detect stealth aircraft.



Cyber security

The anti-virus software companies AVG Technologies and AVAST have become a symbol of success for the Czech ICT sector. Together these companies currently provide protection against cyber threats to more than 435 million users worldwide.



Top sectors for investment



The automotive industry



Despite the difficult economic situation, the Czech automotive industry remains a stable pillar of the Czech economy. It still accounts for nearly one-tenth of the Czech Republic's gross domestic product, one-fifth of the country's total exports, one-quarter of industrial production and more than one-third of investments in R&D in manufacturing. The importance of the sector for the Czech economy became apparent in the second half of 2020, when renewed production pushed the entire economy forward.

Strong and stable

Production of road vehicles, i.e. motor vehicles and trailers, exceeded 1.18 million units last year. This figure comprises 1.15 million passenger cars, over five thousand buses, 550 motorcycles and almost 26,500 trailers. In per-capita terms, the Czech Republic is still the world leader in bus production and ranks second in passenger-car production. In terms of the total number of cars, the Czech Republic ranks fourth in the EU and eleventh in the world. The Czech automotive industry employs more than 180,000 people directly and almost 500,000 indirectly. In 2020, total passenger-car production declined dramatically by 19.2% year on year due to the impact of the global pandemic. We have all been confronted with a situation unparalleled in our modern history. Despite the nearly 20% drop in production, it is necessary to highlight how companies managed to cope with the given restrictions. Car manufacturers have outstandingly shown their competitiveness, especially considering the nearly 25% decline in demand for cars across the EU by almost a quarter.

In passenger-car manufacturing, the largest share in total production was held by ŠKODA AUTO, a member of Volkswagen Group, accounted for the largest share in total production (65%), with 749,579 vehicles manufactured at its Czech plants. Hyundai Motor Manufacturing Czech produced 238,750 vehicles and Toyota Peugeot Citroën Automobile (ed. from 1 January 2021 Toyota Motor Manufacturing Czech) manufactured 164,572 cars. With its 89.1% market share, IVECO Czech Republic is the country's most important bus manufacturer, followed by SOR Libchavy. The traditional Czech brand TATRA reported its return to prominence with 1,180 trucks manufactured at its Kopřivnice plant. In 2019, the revenues of final manufacturers reached record levels, exceeding EUR 24.8 billion;

according to estimates, the overall performance in 2020 would be approximately 20% lower. Although carmakers are the most visible part of the Czech automotive industry, the majority of people employed in the sector are active in the supplier base, which is extraordinarily strong and stable in the Czech Republic and comprises one of the country's undeniable competitive advantages. The importance of component and accessory suppliers is documented in, among other things, data from the Automotive Industry Association (AutoSAP), a respected professional organisation associating most entities in the automotive sector. In 2020, AutoSAP member companies employed more than 135,000 people, two-thirds of whom worked for suppliers. Though these companies' total revenues are lower than those of the final manufacturers, they are still respectable, exceeding EUR 16.7 billion in 2019. Again, 2020 was very unusual from all angles and we will probably report a year-on-year decline of between one-fifth and one-fourth. Finally, one of the fastest-developing parts of the automotive industry, special purpose organisations (e.g. research facilities, laboratories, measuring centres), achieved revenues of EUR 955 million in 2019.

New decade, new opportunities

The entire automotive industry is undergoing a fundamental transformation induced by technological progress and pressure to decarbonise and green mobility and production. These new trends pose certain threats, but for many companies they represent an opportunity to strengthen their position within supply chains and move towards higher-value-added production. The year 2020 was when the European Union first started to count average fleet emissions of all new passenger cars sold across European markets and further pressure to reduce emissions from transport will continue to be a major

topic in the coming years. In addition, low- and zero-emission passenger cars comprised the only segment with rising customer demand last year. Besides the environmental aspect, the automotive industry faces new trends in the social area, e.g. the sharing economy, urbanisation and new ways of working, which have been accelerated by the comprehensive measures against the spread of COVID-19. As we could see last year, car manufacturers and all parts of the supply chain are very flexible and strong. In short, the industry is prepared for the new order. Together, these general points are directed towards the major trends and challenges that have been topics of discussion at AutoSAP for several years – zero-emission mobility, digitalisation and automation, connectivity and use of artificial intelligence, and the development of technologies for autonomous vehicles. The automotive industry is no longer only about automakers and their suppliers. Cooperation with players in other sectors – energy, IT and telecommunications – is crucial for the success of the Czech automotive industry, as is active cooperation with the government and other stakeholders in the country and at the EU level. The new trends require investments in the development of charging infrastructure, education and R&D, as well as accelerated adoption of legislative measures. The Czech Republic has no small ambitions for the future. Domestic firms, particularly those in the automotive industry, have been proving for many years that they are able to succeed on global markets. They are high-quality and reliable. It is apparent that an opportunity exists for the Czech automotive industry to develop into a sector focusing not only on vehicle manufacturing, but also on provision of comprehensive mobility services. If we work hard and act in synergy with each other, the Czech Republic has a chance to become an innovator and technological leader.

Bohdan Wojnar
President of the Automotive Industry Association

AI & Digital

The Czech Republic is one of the best European destinations for investments in information and communication technologies (ICT). This is confirmed by the strong inflow of projects with high value added from leading global companies in this area and the local tradition of outstanding technical fields. Successful foreign investors in the country, such as Microsoft, Skype, Tieto, Red Hat, IBM, Cisco and Oracle, are continuously being joined here by other global companies that are establishing new branches or enhancing their operations in the country. These include, for example, Wrike, Pipedrive, Outreach, Medallia and Workday, among others. In addition to standard information and communication technologies, new solutions using, for example, artificial intelligence, machine learning and vision, cloud technology and the Internet of Things are coming to the fore. These current trends are actively supported by numerous programmes, national strategies and outstanding research centres and universities. Such institutions include the Artificial Intelligence Centre, the Czech Institute of Informatics, Robotics and Cybernetics, IT4Innovations, the Research Centre for Informatics and the National Cybersecurity Centre, as well as supporting platforms such as AiCenter, prg.ai and AICzechia. These institutions achieve outstanding results and win awards in the area of ICT and annually turn out and support nearly six thousand creative, innovative and qualified students from ICT study programmes. In addition to foreign firms, a full range of globally known ICT companies of Czech origin operate in the Czech Republic, including Avast, GoodData, Y Soft, Seznam.cz and Socialbakers, among others. These successful, well-established firms are being joined by a large number of younger Czech companies, for example Neuron Soundware, Phonexia, Mycroft Mind and GoodAI, whose innovative technologies have enabled them to penetrate the global market. Thanks to investments in ICT infrastructure, other Czech regions outside of Prague are also becoming attractive. Brno, the country's second largest city, is considered to be the Czech centre of communication technologies, where companies' needs are met by qualified specialists from research and development institutes and the local advanced ICT infrastructure. In recent years, Ostrava has also gained international recognition thanks to projects such as IT4Innovations.

Michal Stroka
Specialist for AI & Digital
CzechInvest

Mobility

Thanks to its more than one-hundred-year history of precision engineering and its exceptional location, good infrastructure and highly skilled workforce, the Czech Republic plays a significant role in the automotive industry and related sectors. The country is home to three key automobile manufacturers, namely Škoda Auto, Toyota Motor Manufacturing Czech Republic and Hyundai Motor Manufacturing Czech. The Czech Republic also offers outstanding business opportunities for suppliers and is prepared to strengthen its position as one of the leading European centres for design and research and development in the mobility sector.

As one of the main current trends in this sector, clean mobility is on the rise also in the Czech Republic. Demand for electric vehicles rose significantly in the country in 2020 thanks to the expanding portfolio of brands and models, as well as to the country's growing charging infrastructure and broader awareness among customers. In comparison with the previous year, four times as many battery-powered electric vehicles were registered in 2020.

The Czech Republic is a competitive location for establishing research and development centres. Its technical universities and research centres routinely collaborate with global manufacturers and provide services in the area of research, development and testing. Valeo already has research centres for autonomous technologies here and BMW is currently constructing such a centre of its own.

Karolína Konicarová
Specialist for Mobility
CzechInvest



HealthTech

The Czech Republic has a rich history of discoveries in the area of medical sciences – from the laws of heredity formulated by Gregor Johann Mendel, through the first table-top electron microscope developed by Armin Delong and Otto Wichterle's invention of soft contact lenses, to pioneering antiviral drugs for treating AIDS, whose main compounds were developed by Professor Antonín Holý at the Institute of Organic Chemistry and Biochemistry of the Czech Academy of Sciences. Currently, the main areas of medical sciences are molecular genetics, development of cell and tissue therapies, diagnostics, medical chemistry and biochemistry, and bioinformatics.

Due to the requirements placed on healthcare systems and the ever-rising expectations of the public in the area of medical services, the government of the Czech Republic has set as one of its priority areas the development of new medications, diagnostic and medical devices, as well as development of human resources in the field of healthcare. In the past decade, the government has invested nearly EUR 3 billion of public funding in strengthening the country's research infrastructure. In Prague, Brno and Olomouc, new research centres have been completed and equipped with state-of-the-art technology, complementing the research capacities of the Czech Academy of Sciences and universities.

Czech research teams are recognised internationally thanks to their high-quality research in the areas of molecular genetics, immunology, analytical and medical chemistry and biochemistry, cardiology, neurology, metabolic disorders, diagnostics and, more recently, medical applications of nanotechnologies.

The development of this sector is currently supported also by effective patent protection, adoption of European GMP, GLP and GCP standards and government support for the transfer of knowledge between the science and business spheres. Furthermore, the Czech Republic's membership in the European Union guarantees a regulatory framework that is compatible with that of all other EU countries, which together comprise a consumer market of more than 450 million customers.

Thanks to the government's fiscal measures in combination with the results of science and research activities, the country's traditionally high level of education and healthcare, tax relief for R&D and investment incentives for activities with high value added, the Czech Republic has become an attractive location for cooperation in the field of healthcare-related research, development and production.

Examples of global companies operating in the pharmaceutical sector in the Czech Republic include, among others, Teva Pharmaceutical, Lonza, MSD, Johnson&Johnson, Gilead Sciences, Novartis, Otsuka and Zentiva. Significant representatives in the area of medical and diagnostic devices are Olympus, TermoFisher Scientific, Kavo Kerr, Smiths Medical, Teleflex and Beckman Coulter.

Hana Chlebná
HealthTech Specialist
CzechInvest

EcoTech

Due to the coronavirus pandemic, the global economy is in the deepest crisis since the end of the Second World War and the next several years are expected to be a difficult period. The European Union has decided to take the current crisis as an opportunity and to massively invest in the development of green technologies, which should help to fulfil the ambitious plan to make Europe the world's first climate-neutral continent. The Czech Republic has joined this climate and energy commitment and intends to transform these hidden problems into opportunities for businesses and investors.

According to Eurostat, the Czech Republic is the second most industrialised EU country behind Ireland. The Czech economy thus awaits a number of essential changes, whether the end of black-coal mining, construction of a new nuclear reactor, development of renewable sources of energy, an increase of the share of recyclable materials or construction of a functional system for effective recycling following a ban on landfills. The Czech economy is prepared for these challenges, as it possesses a highly skilled workforce, innovative SMEs and a robust science and research infrastructure.

At present, the Czech Republic is home to 67 universities, among which are significant research facilities focusing on environmental technologies. These include, for example, the Centre for Research and Utilisation of Renewable Energy in Brno, the SUSEN laboratory for nuclear energy research and the Institute of Physics of the Czech Academy of Sciences.

Of the companies operating in the field of environmental technologies, we can mention, for example, Nafigate Corporation, developer of the unique HYDAL technology, which is able to process used frying oil into biopolymers. Together with the Czech company ERC-TECH, the Swedish firm Skanska uses recyclable materials in the production of concrete, thus addressing the problem of declining stocks of primary resources.

Adam Podhola
EcoTech Specialist
CzechInvest

Aerospace and Defence/Space

The domestic aerospace segment has been successfully building up its reputation on the global scale since the founding of Czechoslovakia in 1918. A shining example of this is the company AERO Vodochody AEROSPACE, a manufacturer of jet-powered training and light combat aircraft, which was established only a year later and today is an indispensable part of the backbone of domestic aircraft production. In addition to that, we can definitely mention the Czech Aerospace Research Centre in Prague, which is the third-oldest institution of its kind in the world. After all, a number of global leaders that decided to establish operations in the Czech Republic or to utilise the capabilities of domestic entities have put their faith in the country's more than a century of tradition in aerospace and the corresponding quality of its industry professionals and products. Honeywell, Bell, GE Aviation and Safran are among those that took the opportunity to expand their activities in the heart of Europe. Thanks to the long and successful history of production of various aircraft parts, engines, avionics or hydraulic systems, the Czech Republic is also well integrated into global supply chains and is a traditional OEM of numerous civilian and military aircraft. Companies in this segment rely on experienced engineers and workers, as well as the key position of specialised secondary schools and universities. The domestic industry has transferred such scope of quality into, among other things, the production of light sport aircraft and ultralights, of which the Czech Republic has become one of the world's largest manufacturers.

In many respects, the defence industry identically mirrors the development of the country's aerospace tradition, with the first companies at the beginning of the 20th century, such as Škoda (Škoda Works), laying the foundation for subsequent development with their cannons and artillery. Today, the Czech defence and security industry can boast connections to global supply chains and its products can be found practically worldwide. Pistols from Česká zbrojovka in Uherský Brod and a series of aircraft from the aforementioned manufacturer AERO Vodochody AEROSPACE have earned a global reputation. At the same time, the broad product portfolio favourably corresponds to the complexity of international events and thus manufacturers of unmanned aerial vehicles, heavy equipment in the form of self-propelled howitzers and biological protection systems can be identified among the Czech companies with a worldwide presence in the area of defence.

Where space activities are concerned, the Czech Republic is progressively advancing to the highest level. Commitments toward the European Space Agency (ESA), of which the country has been a member since 2008, are constantly growing and Czech companies can proudly present their successes, which include, for example, production of components for the Ariane 6 launch vehicle. The Czech Republic is also home to an ESA BIC space incubator, which is managed by CzechInvest and has two branches in Prague and Brno. The country's significant position on the European scale is also illustrated by the Prague-based GNSS Agency (GSA) responsible for the Galileo navigation system, which will undergo a transformation in 2021 thanks to the European Union Agency for the Space Programme (EUSPA). The EUSPA will expand the GSA's agenda in the area of the EU's space activities and triple the number of specialists within its structure.

Michal Janečka
Specialist for Aerospace and Defence
CzechInvest

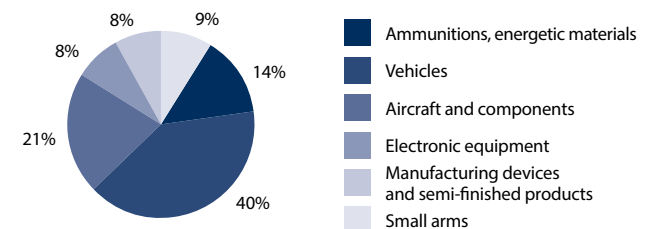
Defence industry

The Czech defence and security industry is well known for its long history, unique structure, high-quality products and strong innovation potential. Czech producers of military materiel have always struggled with the limited options of the domestic customer given by the small size of our country and its armed forces. Therefore, Czech producers of defence and security technologies had to constantly innovate their products in order for them to be competitive mainly on foreign markets, to which we export 90% of our production. The competitiveness of Czech products, the country's full range of defence and security professionals and the good name of the traditional Czech arms industry form the cornerstone of the Czech defence sector's potential. The Czech defence industry develops and manufactures some of the world's most unique and highly sophisticated technologies including passive surveillance systems, light combat aircraft and military jet trainer aircraft.

In comparison with the foreign competition, the Czech defence industry excels primarily in the area of high-tech innovations. Military technologies originating here are very sophisticated, whereas it is always necessary to adapt them to the needs of customers and their technical requirements, which often involves integration with existing systems. In this case, creativity is highly important and Czechs are masters of applying it. Thanks to thorough care for delivered products throughout their lifecycle, continual modernisation and a willingness to cooperate with local companies in export destinations, Czech defence companies win over their foreign competitors in tenders around the world.

Two-thirds of Czech defence companies are small and medium-sized enterprises that, with a few exceptions, are privately owned. Altogether, this creates an ideal environment for foreign investors to find success in the further development of this industrial sector, which is gaining more and more importance in today's world.

Sectoral structure of the Czech defence industry



Source: Ministry of Trade and Industry, 2019

Jiří Hynek
President
Defence and Security Industry Association
of the Czech Republic

Creative industries

Emphasis on building an economy based on innovations, highly skilled workers, business and creativity has recently become a global trend. Representing a combination of technologies, research and development, culture and business, the creative industries comprise a rapidly growing sector in the Czech Republic that is creating skilled jobs and supporting growth. The cultural and creative industries include design, fashion, architecture, advertising, software, gastronomy, film, television and radio, digital games, publishing and music. Regardless of the textbook definition, however, a significant role is played primarily by human skill, talent and creativity. Thanks to its strong historical and cultural background, offer of study programmes and expansive ICT infrastructure, the Czech Republic has a strong position in areas such as the gaming industry, virtual and augmented reality, design, architecture, the film industry and crafts. A number of Czech designers, particularly industrial and product designers, have won the prestigious Red Dot Award and have collaborated with such important domestic companies as LINET and Škoda Transportation. Where smart cities and public space are concerned, there are numerous countries around the world that have incorporated products from the Czech company Mmcité into their cities. Domestic companies such as Bomma, Lasvit, Preciosa, TON, Rückl and Moser, among many others, are renowned global exporters of Czech glass products. The Czech Republic has built itself a strong position in the gaming industry thanks to successful games such as Beat Saber (Beat Games), Kingdome Come: Deliverance (Warhorse), Euro Truck Simulator 2 (SCS Software), Machinarium (Amanita Design) and Arma 3 (Bohemia Interactive Studio).

Markéta Mentelová
Creative industries Specialist
CzechInvest

Advanced industrial technologies

The Czech Republic boasts unique know-how in particular technological fields within which it ranks among the technologically most advanced countries in the world. The mechanical-engineering industry has been one of the cornerstones of the Czech economy since the beginning of the 19th century. The country's stable economic environment, high level of technological advancement and outstanding research and development programmes contribute to the creation of an optimal environment for the establishment and further development of companies. This fact is recognised by global players that have invested in the Czech Republic, such as Siemens, ABB, Honeywell and Daikin. The most significant areas in which Czech companies are highly competitive on the global scale include, for example, manufacturing of advanced machines and tools, monocrystalline materials, electron lithography for holographic applications, wound healing and tissue regeneration, research of nanostructured and crosslinked polymeric materials and production of nanoparticles for special purposes. With a decades-long tradition in chemistry, electronics, textiles and materials science, the Czech Republic is also becoming a leader in applied nanotechnology. As a global supplier of equipment for the production of nanofibers, electron microscopes and monocrystalline materials, the country is now bringing innovative solutions to the market in the areas of nanomedicine and new types of batteries. The rising number of engineering students and the country's high-quality R&D infrastructure are also contributing to the development of the sectors applying know-how in practice.

Robert Keil
Specialist for Advanced industrial technologies
CzechInvest

Nuclear power and industry

The year 2020 marked the sixty-fifth anniversary of the first steps toward the peaceful use of nuclear energy and the establishment of the Faculty of Technical and Nuclear Physics of the Czech Technical University in Prague and the Nuclear Research Institute, thanks to which the Czech Republic (and the former Czechoslovakia) reached the peak of the nuclear-power industry in all of its aspects – operation of nuclear power plants, research and development, and nuclear engineering and services – as both a supplier and service provider.

Strong firms capable of delivering their products in practically the whole supply chain of nuclear facilities have been established and the Czech nuclear-energy sector possesses extraordinarily strong human resources and knowledge potential in all areas, from development to implementation of construction works. In connection with the necessity to continue in the nuclear programme within the National Action Plan for Nuclear Energy, this extraordinary potential is maintained not only through activities related to the operation of the nuclear power plants in Dukovany and Temelín, but also through the expectation of continued development of nuclear power and construction of new nuclear plants.

To support the development of nuclear power, the State Energy Strategy and the Action Plan for Nuclear Power Development were approved by the Czech government a few years ago. The government's decision related to the commencement of new nuclear builds was adopted in 2019. This decision outlines not only the principles, schedule and milestones for preparation and construction of new nuclear builds, but also the main features of the upcoming project. ČEZ (the biggest electricity supplier on the Czech market) is set as the builder and the development of the project is supported by a special contract between the state and ČEZ. The current approach places emphasis on the construction of one unit with 1200 MW installed capacity in Dukovany, with the option to further construct up to four units (Dukovany and Temelín). The activities of ČEZ and the Special Governmental Envoy for Nuclear Power are now focused on a notification from the European Commission and preparation of the terms and conditions of the tender. It is expected that the tender will be open to the strongest technology suppliers with the appropriate financial background. The discussion is also focused on the localisation of domestic industry and supplier/services companies.

Fulfilling the objective of the National Action Plan (two units in Dukovany and two units in Temelín by 2040 and 2060, respectively) will require an investment of at least CZK 600 billion (EUR 23 billion), which is absolutely the biggest investment in the Czech Republic and a major challenge for strong, world-leading companies. With respect to the indicated willingness to ensure the implementation of local projects with the greatest possible extent of domestic supplies, now is the best time to consider investment opportunities in both the areas of direct financing and improving the qualitative potential of Czech companies operating in the nuclear industry.

Jiří Marek
Director and Partner, JMM CS Ltd.
President of the Association of Nuclear Veterans

Chemical industry

The chemical sector is one of the most important branches of industry in Europe. Though the Czech Republic accounts for only approx. 2% of the EU's chemical production (NACE 20), chemicals play a key role in the Czech economy. In terms of sales, the integrated chemical industry is the second-largest industrial sector in the Czech Republic after the automotive industry.

The Czech chemical industry's products include inorganic and organic chemicals, fertilisers, basic petrochemicals, primary-form plastics, synthetic resins, synthetic rubber, paints, dyestuffs and pigments, agrochemicals, pharmaceuticals and cosmetics, soaps and detergents, chemical fibres and explosives. The main chemical clusters are in northwest Bohemia, north Moravia and central Bohemia incl. Prague, but plants can be found throughout the country. Several Czech chemical plants (Deza in Valašské Meziříčí, Lovochemie in Lovosice, Precheza in Písek, Synthesia in Pardubice) are owned by Agrofert, a domestic holding company focused mainly on fertiliser production, though foreign investors also play a significant role in the local chemical industry. Unipetrol, which is owned by the Polish-based Orlen Group, is engaged in oil refining. The Orlen Group has its own filling-station chain in the Czech market and is the majority owner of two other production complexes in Litvínov and Kralupy nad Vltavou (petrochemicals and refinery products) and Spolana in Neratovice (polymers and fertilisers). The Polish firm also owns another major plant near Prague, Synthos in Kralupy nad Vltavou (synthetic rubber). Traditional Czech companies play an important role in the country's chemical industry. For example, Spolchemie in Ústí nad Labem produces resins. Fosfa in Břeclav is the largest processor of yellow phosphorus in Europe. Another Czech company, Draslovka, is focused on production of cyanide-based chemical specialties. The Hungarian firm Borsodchem manufactures base chemicals at its plant in Ostrava, while Synthomer engages in acrylic acid production in Sokolov, and Synthon produces active pharmaceutical ingredients in Blansko.

There are numerous examples of successful foreign investments in Czech chemical industrial parks, such as those of Cayman Pharma (API production) in the Spolana complex, Eurosupport Manufacturing (catalyser production), Air Products in the Unipetrol Litvínov complex, Dukol (adhesives production) at the Borsodchem facility and Central Glass (electrolyte production) in the Synthesia complex in Padubice.

There are several main challenges ahead for the chemical industry, such as low/zero emission production, the rise of the battery business and digitalisation. The Czech Republic has tremendous potential as a destination for investments in the chemical industry thanks to its infrastructure and workforce, as well as the space that it has available for such investments, especially brownfields. The industry is a crucial supplier of raw materials for a number of downstream domestic industries. It also ranks among the industrial sectors with the highest innovation potential.

Martin Dittrich
CEE Area Chemical Market Leader
Business Development Director Czech Republic
Bilfinger Tebodin

Energy efficiency services

Progress in energy management systems opens up new opportunities for the further growth of energy efficiency approaches. Energy efficiency services lead to a situation in which the costs of the actual implementation of an energy management system are soon covered by non-investment measures. Moreover, M&T makes objective and accurate proof of saving possible, which applies to quite complex production processes as well. It can be stated that, due to this fact, utilisation of energy efficiency services could be considered a key-stone of the management of every industrial site.

The development of these systems has led to the creation of the ESCO scheme, which enables enterprises to finance the implementation of an energy management system by a third party, i.e. an energy service company (ESCO). The fact remains that the initial costs are often an obstacle preventing the implementation of modern procedures in the field of energy management, even though these costs are low in comparison with the savings potential. Companies focused on ESCO and related services (Energy Performance Contracting - EPC) are united in the Association of Energy Service Providers (APES). As of 2021, APES has 26 members. Formulation of the ESCO scheme was enabled by the development of standardised energy management systems. Czech companies that have implemented or are implementing an energy management system using the M&T approach include, for example, Plzeňský Prazdroj, Škoda Auto, Unilever, Kovohutě Příbram, Danone Benešov, Koramo Kolín, Mondí Štětí, Vishay Electronic and Eutit Stará Voda. M&T can be implemented in a small enterprise with simple technology or in a building, but its commercial use is best proven in the case of medium-sized and large enterprises paying quite a lot for annual energy consumption (at least approx. CZK 10 million, i.e. EUR 380,000). The system's good economic return (usually within a year) is due to the fact that implementation costs are relatively small compared to the achieved savings, which amount to a certain percentage of annual energy bills and can reach as high as 15%.

A significant form of support for the implementation of energy efficiency services consists in the inclusion of energy management principles in the ISO 50001 standard. As well as the actual economic benefits, the relevant legislation allows enterprises to supersede the mandatory energy audit by implementing the standard, and enterprises that have the ISO 50001 standard implemented enjoy preferential points when their applications for grants from the EU structural funds within the Operational Programme Technologies and Applications for Competitiveness are assessed. ISO 50001 certification is provided by all authorised companies operating on the European market, such as TUV, DNV and Bureau Veritas.

Jan Pavlík
Business Director
Enviros

Transport and infrastructure

It is well known that the transport industry is one of the main pillars of Czech industrial manufacturing. The Czech Republic is a highly industrialised country and produces most types of vehicles for road, rail and air transportation, with a strong presence of global brands such as Siemens, Bombardier, GE Aviation, Kapsch and Honeywell, as well as strong, Czech-owned industry flagships such as Škoda Transportation (trains and trams), Aero Vodochody (aircraft), SOR Libchavy (buses) and Bonatrans (rail stock components).

Currently, there are vast opportunities for foreign investors in the transport infrastructure sector, particularly in the areas of construction and development. Despite having a reliable and very dense transport infrastructure serving industrial manufacturers, the Czech Republic needs advanced rail and road infrastructure such as high-speed rail connections to major cities in neighbouring countries. The Czech government intends to implement projects that will connect Prague with Berlin, Vienna and Budapest. However, given the high capital requirements, it is expected that such projects would be implemented with the help of foreign partners. Therefore, in our opinion, private investors will have an opportunity to contribute to the pilot high-speed rail projects.

The forthcoming National Recovery Plan of the Czech Republic will have an important impact on infrastructure development. European funding is to be directed to six areas, primarily investment. The largest part of the total EUR 6.6 billion, approximately EUR 4.5 billion, is to go to the pillar called Physical Infrastructure and Green Transition, which includes improving transport infrastructure.

In the area of road construction, plans also include roads to be built with the help of public-private partnerships and the involvement of international equity, such as the recently awarded PPP project involving the D4 motorway. The PPP structure is being considered for another highway, the D35. You can also see below a few interesting greenfield projects in the pipeline (D11, D6 and D3) that may transition from the planning stage to the implementation stage in the short to medium term.

All in all, there are huge investments coming into the country's transport infrastructure, and opportunities for investors are coming along.

Type	Motorway			
	D11	D35	D3	D6
Estimated investment	EUR 970 million	EUR 2.1 billion (PPP under consideration)	EUR 1.63 billion	EUR 626 million
Number of km planned	41	120*	73.5	65.5
Start of construction	2022 (next section - 2025)	2022-2025	2023-2025	2022-2024

Source: Road and Motorway Directorate, 2021 * total km planned, privately financed part to be confirmed

Kamil Blažek
Partner, Kinstellar
Chairman, Association for Foreign Investment

Business support services

The Czech Republic has been one of the leaders in the shared-services sector in the region of Central Europe for almost 20 years. The country's stable financial and political environment together with the ceaseless development of internet connectivity and data stability encouraged many foreign companies to choose the Czech Republic as the final location for their Central European activities. According to the Association of Business Service Leaders (ABSL), over 300 shared-services companies currently operate in the Czech Republic, providing jobs for approximately 110,000 people. The shared-services sector has grown by an average of 15% per year, and over half of the companies in the sector are implementing automation and robotics in order to focus on higher-value-added activities. Services have shifted away from primary customer services toward more advanced knowledge-based jobs in IT services, finance and accounting, as well as HR.

The largest number of companies is located in Prague, Brno and Ostrava. However, smaller companies are placing their activities in other locations such as Olomouc, Zlín, Plzeň, České Budějovice, Hradec Králové, Karlovy Vary, Pardubice, Ústí nad Labem and Liberec. Operations outside of the main hubs account for 14% of all BSS activities. The list of existing captive and outsourced shared-services centres in the country includes those of companies such as Accenture, Computer Associates, DHL, ExxonMobil, Hewlett-Packard, IBM, Microsoft, Skype, Monster Technologies, SAP, Tieto, Infosys, Red Hat and Honeywell.

The year 2020 was defined by government-imposed safety measures against the novel coronavirus SARS-COV-2, which had a significant impact on the economy and business operations around the world. The shared-services sector managed this challenging period without significant losses and most of companies operating in this sector very quickly dealt with the consequences of the pandemic. The ABSL states that nearly all such companies adapted to the home-office concept, around 90% of SSCs continued hiring new employees and over 70% recorded stable or even higher productivity of employees working from home. The option of working from home was made possible by the nature of the work in this sector and the Czech Republic's high-quality infrastructure, which enables coverage of 12% of extra work from the Asia-Pacific region, where companies were not able to operate due to the pandemic and deficient local infrastructure.

The main reasons for placing SSCs in the Czech Republic are the strong potential of graduates and professionals, especially in terms of IT and language skills, the country's well-developed infrastructure and available high-quality office space, as well as its cosmopolitan society, which makes it an attractive place to work and live.

Tereza Huczalová
Project Manager for BSS and IT Projects
CzechInvest

Food sector

Food production is one of the traditional industrial sectors in the Czech Republic. The broad structure of the sector is based primarily on processing of domestic raw materials comprising primary agricultural production of plant and animal origin complemented with other foreign raw materials. The main segments are dairy products, meat processing and preservation, other food products and beverages. A major part of the sector's output is produced industrially. Digitalisation and automation have been introduced into the sector. The importance of the food production sector providing nourishment to the population is further emphasised by the current COVID-19 pandemic. For the Czech Republic, food safety has long been the number one priority. Even in the case of extending the quarantine to the entire Czech Republic, the supervision of food production by the supervisory authorities was ensured. Czech producers have also shown great readiness for increased production in the event of limited imports. The vast majority of companies have developed not only a contingency plan, but also food safety standards, which includes a procedure to be implemented in the event of an outbreak of a contagious disease in food production operations. Moreover, the COVID-19 pandemic demonstrates the importance of the degree of self-sufficiency in food production.

Food quality is another priority that is gaining importance both in the Czech Republic and in the EU. Food production and agriculture comprise one of the most promising sectors in the Czech Republic and thus represent a favourable investment opportunity here. The alliance of food producers and manufacturers of food-production technology dates back more than a century and is a key factor in the Czech food sector's good reputation abroad. Food and beverage production accounts for nearly 4% of GDP on its own and up to 15% in combination with related sectors.

The Czech Republic has long striven to further improve the food-supply chain and optimise it for consumers. Online grocery sales have been gaining in importance, especially these days in connection with the COVID-19 pandemic. The range of food is very wide, from fresh products with short consumption times to non-perishable food items. Organic food and farm-raised products are also available. Czech products are characterised by their high level of qualitative standards. Food safety remains the government's priority in this area.

Our government supports modernisation of production capacities in the food industry and innovative production processes, for which financial resources are drawn from EU structural funds and the national budget. One of the ways to achieve significant improvement in the sector is through foreign direct investments that bring forth not only technical solutions, but also new production and marketing methods.

The innovation process is a subject of intense interest in the research sphere and the government is striving to ensure the improvement of the process of putting research results into practise. Food waste is an important issue in both the Czech and European contexts and is thus a subject of the innovation process.

Besides traditional segments such as brewing, wine-making and sugar production, the Czech food industry also features modern production technologies including biotechnology and extrusion technology.

Consumer protection is also at a high level in line with modern trends. Furthermore, the local industry boasts a large number of registered trademarks and a generally high level of protection of intellectual property rights.

Miroslav Toman
Minister of Agriculture of the Czech Republic

Banking

The Czech banking sector is unique in many respects. Most of the sector is dominated by strong European financial groups and its activities are primarily focused on the Czech Republic.

Capital position

Czech banks remain well-capitalised in spite of the impressive growth they have shown over the past two decades and capitalisation is well above all regulatory requirements. With total capital adequacy of nearly 20% (in 2019), Czech banks are well-capitalised with limited use of Tier II instruments (the Tier I ratio is thus close to total capital adequacy) and have maintained a solid position amid the COVID-19 pandemic. High profitability and prudent management of both commercial banks and the central bank are to "blame" for these results.

Profitability

Czech banks are among the most profitable in Europe. With ROE above 11% in the past decade (and ROE of 14% in 2019 against the EU average of 8%), Czech banks have generated some of the most impressive returns for their shareholders in a global comparison. With net profit accounting for roughly 1.6% of GDP (2019), the Czech banking sector is among the most profitable when compared to the size of the Czech economy supported by the benign environment including a strong macro picture, prudent supervision and a friendly investment environment.

Profitability is being tested during the COVID-19 pandemic, which translates into contraction of the economy. Nevertheless, Czech banks are maintaining a strong position without any need for state support.

After record profit in 2019 (EUR 3.5 billion) a double digit decline of net profit is expected in 2020, reflecting COVID-19 pandemic, mainly in higher risk provisions and lower interest rate environment resulting from CNB interest rate cuts.

Efficiency

With costs between 45% to 49% of income over the past ten years, Czech banks are among the most cost-efficient globally. Apart from overall good cost control, banks benefit from the high market concentration (roughly 65% of total assets are in the hands of the five biggest players), which allows significant economies of scale.

Asset quality

The all-time highest asset quality is gradually deteriorating, which is a reflection of the COVID-19 pandemics. The share of non-performing loans remains fairly low at around 2% in the course of 2020. Provision coverage hovers comfortably above 60%. The currency split of loans in the Czech banking sector shows that if any foreign currency lending exists, it is mostly denominated in EUR and predominantly in the corporate segment. Therefore, unlike in the Hungarian and Polish markets, FX mortgages have not been an issue in the Czech market.

Opportunities

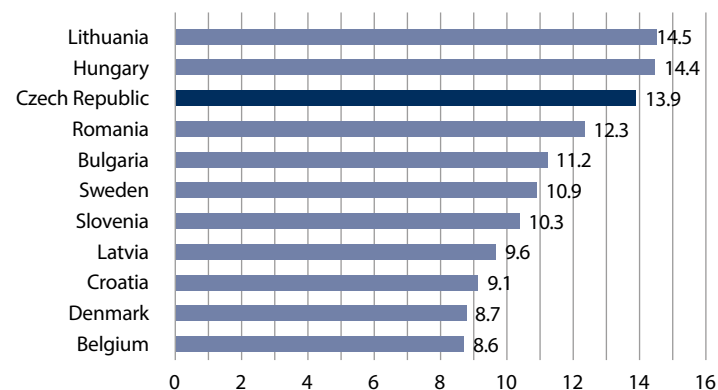
Further loan growth can be anticipated, as penetration still lags behind developed Europe; compared to other EU countries, the Czech market is still underpenetrated in both loans to households and corporate loans. In other words, the convergence story continues and there is still significant room to grow faster than the EU.

Czech banks are flooded with deposits and can benefit from a relatively cheap cost of funding as a source for future loan growth.

Given the high capital base and cheap funding, the banking sector is well prepared to support strong demand for lending. As households are becoming richer (e.g. nominal wages increased by 6% in 2019), banks can further support wealth growth by offering fee-generating products such as investment funds, life insurance and products in the pension area. This will bring prosperity to both the banks and their customers. The main risk remains uncertainty about future development with respect to the COVID-19 pandemic.

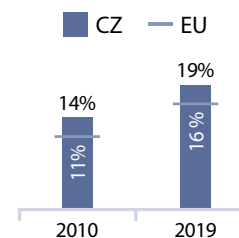
Pavel Marek
Head of Accounting, Controlling and IR
Česká spořitelna

Which banking sector is the most profitable?
ROE (%), 2019



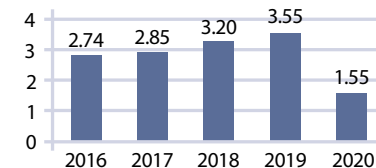
Source: ECB, 2020

Tier I ratio



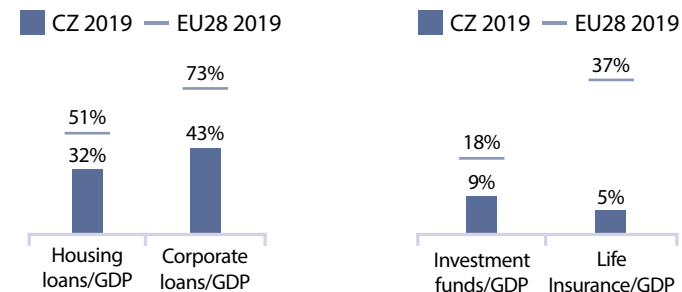
Source: ECB, 2020

Czech banks' net profit
in EUR bn (2020, estimated)



Source: Czech National Bank,
Estimate by Česká spořitelna, 2020

A lot to catch up with Western Europe



Source: Eurostat, 2020

Insurance

The insurance sector remained profitable and stable even during the period following the financial crisis of 2009 and it further remained stable and well capitalised during the COVID-19 pandemic in 2020. In addition, the insurance market has still significant room for further growth. In the Czech Republic, the combined share of premium billing in GDP was 2.9% for life and non-life insurance in 2019. This figure is approximately double in Western European countries.

Stability of the Czech insurance market

The Czech insurance market exhibits a high degree of stability and capital resilience. In comparison with the values for the EU as a whole, the Czech market consistently maintained a substantially higher solvency ratio in comparison to the minimal capital requirement defined by the regulator (solvency ratio for the Czech market results in approximately 330% of the minimal capital requirement, which in recent years has been fully comparable with the results of Europe as a whole due to an increase of capital adequacy in the overall EU data) until implementation of Solvency II in 2016. During the transition to the new Solvency II regime, no instability of the insurance market occurred. The market focused great attention on risk management in general and more specifically on adequate and prudent setting of technical reserves. The introduction of Solvency II in 2016 affected the solvency ratio figures and thus data for the period up to 2015 and figures starting after 2016 are not comparable, as the solvency calculation methodology was adjusted significantly, however the solvency ratio and overall capital adequacy are still at very prudent level and more than double the regulatory requirements. Moreover, regularly performed stress tests confirm that the Czech insurance sector remained solvent even under scenarios of significant economic recession connected with a high degree of capital market drop downs as well as the higher level of lapses of insurance contracts due to adverse economic developments. So far, there have been no substantial impacts resulting from massive lapses during the pandemic. The Czech insurance sector not only remained stable in terms of having sufficient capital, but also successfully dealt with the issues of remote working, continuity of providing all services to clients and business partners and acceleration of the digital transformation of its products and services in the new situation.

High profitability in comparison with the EU average

The Czech insurance market's profitability is constantly significantly higher, exceeding the European average multiple times over in both the ROA (return on asset) and ROE (return on equity) indicators. The Czech insurance market did not suffer a substantial decrease in profits during the financial crisis and recession of 2008-2009, when profits in the European market as a whole were minimized.

Claims performance of non-life insurance

The claims ratio in non-life insurance in 2017 and 2018 reached approximately 58% and 53% with smaller reduction to 55% in 2019 and 52% in first half of 2020, respectively. Despite the existence and gradual increase of the risk of its further growth in this area, these are still significantly lower claims ratio figures than those reached in the Europe-wide market, where this indicator for non-life insurance was approximately 65%-67% in the same period.

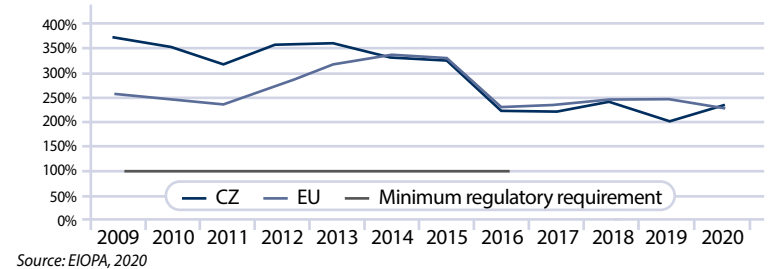
Even though there is potential for further growth in non-life insurance (the basic difference in non-life insurance penetration is connected with the minimal share of commercial health insurance and long-term care in the Czech Republic so far), the main imbalance in insurance penetration within the population between the Czech Republic and the EU as a whole is seen in the area of life insurance.

Potential for further development of the life-insurance market

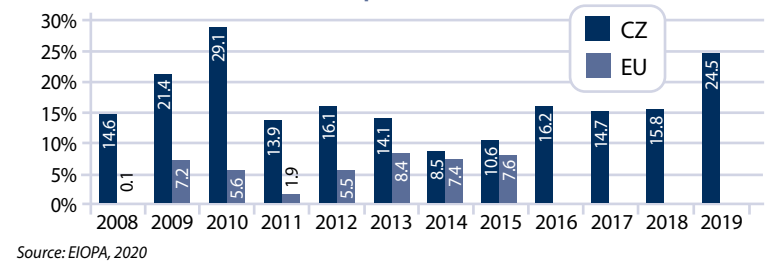
The average annual life-insurance premium in the EU is approximately EUR 1,296 per person. By comparison, this figure for the Czech Republic in 2019 reached EUR 200, as growth of the average life-insurance premium in the country practically stalled in 2010. There is a potential for its further growth if there continues to be improvement in the regulatory and self-regulatory sales culture and transparency of life insurance together with an increase in clients' awareness of the importance of this product both as adequate protection against risks and pension benefits, as well as in terms of investment, whereas the investment part of the product is now more frequently distributed also separately from risk cover.

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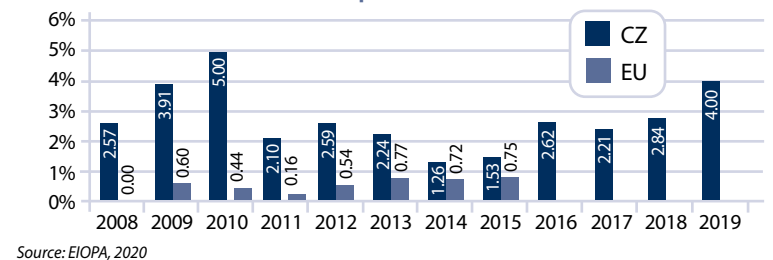
Share of available and required solvency



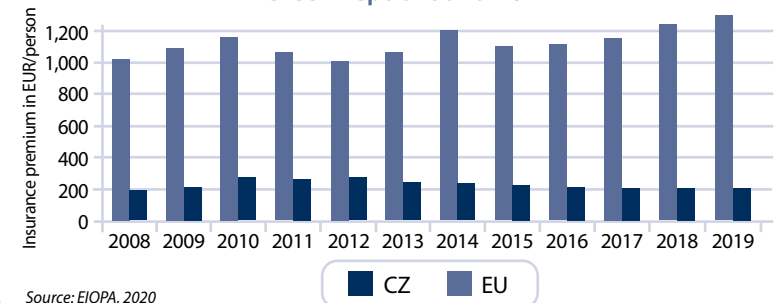
Comparison of ROE in the insurance industry – Czech Republic and EU



Comparison of ROA in the insurance industry – Czech Republic and EU



Comparison of life-insurance premiums – Czech Republic and EU



Czech industry has great potential to automate production

The Czech Republic is a country with a strong industrial tradition. After the establishment of Czechoslovakia in 1918, 70% of the industrial production of the former Austro-Hungarian Empire was located on its territory. During the period of communism, industry was the main sector in the expansion of the economy. Today the Czech Republic is the second most industrialised country in the European Union. The industrial sector accounts for 30% of Czech economic output, which is significantly more than in neighbouring Germany (24%) or far above the EU average (20%). Production of motor vehicles and their components holds the strongest position and dominates Czech industry, accounting for more than a quarter of total industrial revenues and one-fifth of total exports from the Czech Republic.

Industry 4.0 is on the rise, robotisation of production is accelerating

The industrial sector is currently undergoing major changes around the world. A frequently mentioned trend consists in the arrival of digitalisation of production and everything related to concepts such as Industry 4.0, the Internet of Things, big data, predictive maintenance and machine learning. Alongside this, a reduction in the prices of new technology, automated solutions and robotisation of production is occurring worldwide. The result is that the introduction of new robots into production is growing globally. Most of them are in the sectors that are also dominant in the Czech economy, i.e. in the automotive, electrical engineering and metalworking industries.

The number of robots in the Czech Republic is growing, the potential is still high

According to data from the International Federation of Robotics, 147 industrial robots per ten thousand employees were involved in production in the Czech manufacturing industry in 2020. Nevertheless, the Czech manufacturing industry's level of robotisation is still only one-third that of the advanced industrial nations Germany and Japan and one-sixth that of the global leader, South Korea. Therefore, there is still strong potential for the involvement of robots in the manufacturing sector in the Czech Republic.

Effective and attractive labour market

The rapid introduction of robotisation and progress in the digitalisation of production is therefore essential for Czech manufacturing companies in terms of raising their international competitiveness. Since the beginning of the 1990s, the Czech Republic has been among the European countries in Europe with low unemployment, which still holds true today, as the country currently has the lowest unemployment rate in the EU. This reflects the strong motivation of the Czech people to work, as well as the common sense that is typical of the key labour market actors. As the economic structure demands, the labour market offers a well-educated, trained and skilled workforce, mostly in technical professions. For example, the share of people employed in high-tech manufacturing in the Czech Republic is highest in the EU. This is an essential condition for further robotisation, as well as an advantage of Czech industry.

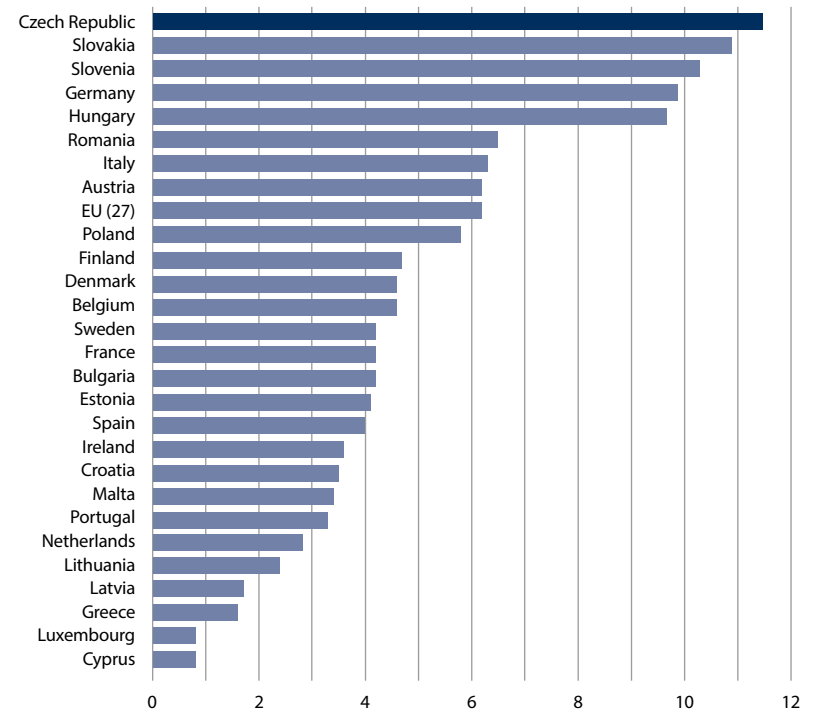
The payback period of robots is getting shorter

With declining robot prices and the increase in labour costs in the Czech Republic in recent years, automation of operations and robotisation of production are becoming more and more profitable for businesses. For the Czech economy as a whole, this represents a necessary shift from an economic model benefiting from cheap labour to production with high value added that relies on high-quality and skilled workers. Current changes in the state investment incentives system are also moving in this direction, where support will be given to applicants offering more high-skilled positions for educated employees who collaborate on innovation with research and higher-education institutions.

Tailored services thanks to robots

In addition to cost effectiveness, industrial robots also have other advantages. They can work 24 hours a day, do not need rest, do not go on strike, can handle heavy objects, make fewer mistakes and are more accurate than humans. Thanks to robots, companies can increase the quality of their products, shorten delivery times and provide more flexibility in their production, i.e. supply products and services tailored to the individual requests of clients. Cheaper technology also brings forth new business models in which, for example, machines are no longer sold, but only rented. On the other hand, there are still many work activities for which automation is not suitable or is too expensive. Companies should thus always pay attention to what a new technology will bring to them and their clients.

Employment in high-tech and medium high-tech manufacturing (in % of the total economy, 2019)



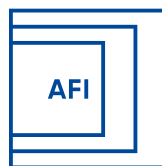
Source: Eurostat, 2020

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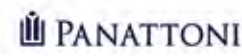
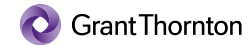


Title: Business Guidebook: Czech Republic – The Country for Investment in Challenging Times
Place and date of issue: Prague, March 2021
Publisher: Association for Foreign Investment
Address: Štěpánská 11, 120 00, Prague 2
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