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Dear readers,

Although May has arrived and thus we can imagine a lot of "May" themes, our Monthly carries a spirit of digitalisation, innovation and research and development.

These are notions which will fill the world's media in the coming years and affect not only developed countries. And this is not just about the often mentioned Industry 4.0, but the overall setting of regulations, rules and a set of measures which will promote flexibility of processes and increase productivity. A lot is happening in this area at both the national and EU levels. We bring you some of these initiatives and reports in this issue. And in the context of innovation I can't help but recall that it has been exactly a year since we released the EU News Monthly Journal in a new format.

We have already featured the investment package of Commission President Jean-Claude Juncker several times on the pages of our Monthly. This (so far purely European) venture may have interesting non-EU contributors. China is in fact the first country outside the European Union which has shown interest in participating in this package, which at the time of its launch calculated investments amounting to 315 billion euros. The amount of China's contribution would be between five and ten billion. In the event that the Chinese partner really becomes involved in the "Juncker package" with so many billions, it would become the largest participating player. And that is what counts.

On 28 April 2016 the Czechs made their mark, gaining European Parliament approval of the Commission's 2014 management of EU funds. Czech MEP Martina Dlabajová was in fact responsible for the discharge report. This was not an easy task, also evidenced by the nearly 370 comments with which the Budgetary Control Committee had to deal.

In addition to the approved budget management, another success for the European Commission under the leadership of Jean-Claude Juncker is the plans aimed at the digitalisation of European industry, the development of e-Government and the creation of a European data cloud which were presented on 19 April. You can read about which measures the Commission is proposing and what the plan promises in the EC's Column section on page 5.

Traditional sectors such as agriculture must also face changes – and not only at the level of the Czech Republic but throughout the EU. In 2017 European sugar quotas will end, therefore quotas on sugar production await the same fate as milk quotas - they were abolished from 1 April 2015 and thus the price of milk in the EU came under pressure. We present more in the Microscope section on page 7.

So that we do not leave out the already mentioned research, we have devoted this edition's Main Topic to this subject – concretely the expenditure of European companies on research and development. Within the EU 300 billion euros were spent on research in 2014 and as you might guess the amounts for individual member states vary widely. It can be said that this corresponds to the economic advancement of a given country.

I believe that even though the May weather is ideal for cycling trips, sitting in the garden or evening walks, you will also find a moment for our EU News Monthly Journal.

I wish you relaxing reading,

Tomáš Kozelský

# EU Events



In Austria the first round of presidential elections was held. - The EC's 2014 budget implementation has been approved. - China wants to contribute up to 10 billion euros to the Juncker package. - The thirteenth round of negotiations on the TTIP trade agreement took place in New York. – Boiler subsidies: there is more interest in gas, biomass and heat pumps than in coal.

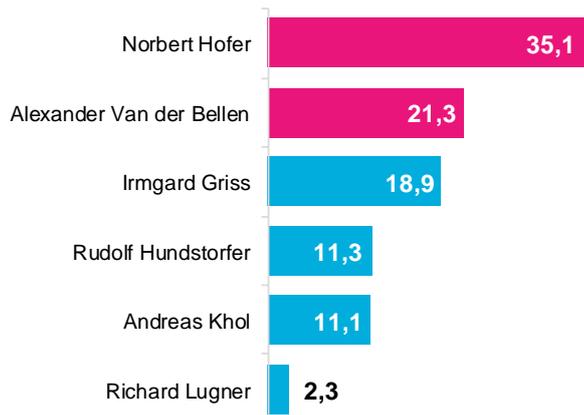
## POLITICS

### In Austria the first round of presidential elections was held

In the first round of the Austrian presidential elections, which took place on 24 April 2016, the candidate of the right-wing populist Freedom Party of Austria (FPÖ) and tough opponent of immigration **Norbert Hofer** won with a significant margin. In the battle for the presidency on 22 May he will compete with Green Party candidate Alexander Van der Bellen, who won just over 21% of votes. Regarding voter participation, 68.5% of voters took part.

No candidates from the parties of the present governing coalition formed by the People's Party (ÖVP) and the Social Democrats (SPÖ) led by Chancellor Werner Faymann made it to the second round of the elections.

#### Results of the first round of presidential elections (in %)



Source: Bundesministerium für Inneres

<http://www.aehl16.bmi.gv.at/>

## ECONOMICS AND EURO

### The European Commission's 2014 budget implementation has been approved

On 7 April 2016 the Budgetary Control Committee of the European Parliament approved the European Commission's budget implementation for the year 2014, when a **total of 142.5 billion euros** was spent. The discharge report was prepared by the Czech MEP Martina Dlabajová who had to deal with **367 comments** on which committee members

voted. The opinion of the members of the Committee on Budgetary Control (CONT) on the management of the EU budget in 2014 is one of the most important milestones in the process of granting a budgetary discharge (i.e. approval) to the European Commission and to a large extent usually determines the final vote in the plenary session.

Although the discharge procedure, as the whole approval procedure of "account closing" is called in Brussels jargon, is not among the themes that would fill the front pages of newspapers, its importance is not negligible. This is also confirmed by the fact that the EU institutions are usually quite occupied with it.

The European Commission, which **carries the responsibility** for EU budget implementation, has reason to be nervous. The European Parliament decides on whether the financial accounts will be approved, postponed or rejected outright, and several times in the past has indeed forced a discharge to be postponed or even rejected. Rejection happened twice in total - in 1984 and 1998.

In the latter above-mentioned example the Parliament did not pass the Commission's management of funds in 1996. The financial scandal of then Commissioner for Research, Innovation and Science Edith Cresson forced the collective demise of the Commission led by Jacques Santer.

Postponing a discharge is much more frequent by comparison. The Budgetary Control Committee has proposed that Parliament postpone a discharge five consecutive times to the Council and the European Council for example due to lack of cooperation in providing information.

This scenario did not occur, however, and on 28 April 2016 the European Parliament gave the European Commission's 2014 budget implementation the green light.

<http://www.europarl.europa.eu/news/cs/news-room/20160407IPR21704/EU-budget-management-Commission-and-Parliament-spending-for-2014-approved>

### China wants to contribute to the Juncker package

China will contribute five to ten billion euros to the European Commission's investment plan, known by the nickname the Juncker package. Beijing wants to connect to the investment plan **through its Silk Road Fund** which started operation in February 2015 and is intended to finance



infrastructure linking China with neighboring countries and Europe.

**China is the first country outside the EU** which has shown interest in participating in the investment plan. This information emerged in the summer of 2015. In September a working group charged with resolving the technical aspects of this idea was then created.

The backbone of the Investment Plan for Europe is the European Fund for Strategic Investments (EFSI). For its establishment a guarantee amounting to 16 billion euros was created from the European budget.

The European Investment Bank, which manages the fund, has supplemented this with 5 billion euros from its own resources.

Together these resources make up a guaranteed fund which thanks to this guarantee provides certainty to private investors and thus encourages investment in riskier projects.

According to the Commission's plans, overall it should mobilize at least 315 billion euros in private investment in the EU by 2018.

So far nine EU countries have joined the investment plan with their own funds. The last to do so was the United Kingdom which announced a contribution of 8.5 billion euros in July 2015.

Individual countries don't contribute directly to the EFSI however, but co-finance projects for which the fund provides guarantees. These are selected according to the criteria of the EIB, which countries cannot directly influence.

If it participates in the investment plan, **China will have to follow the same rules as private investors**. All European rules for public procurement, labour laws and regulations related to the environment will apply to projects funded with Chinese money. Chinese investment has aroused controversy in Europe in the past.

In Greece the Chinese shipping company COSCO was accused of paying workers only a fraction of European wages and not respecting European rules.

In other countries Chinese companies have brought their own employees which has raised questions about whether the Chinese presence in Europe benefits job creation.

If Beijing does actually contribute 10 billion euros, it will immediately become the biggest player involved in the Juncker package.

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[http://europa.eu/rapid/press-release\\_IP-15-5723\\_cs.htm](http://europa.eu/rapid/press-release_IP-15-5723_cs.htm)

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## FOREIGN TRADE

### Further negotiations on TTIP have taken place

Starting on 25 April in New York **the thirteenth round** of negotiations took place on the TTIP trade agreement, which the United States and the European Union want to enter into.

Both sides have exchanged proposals in almost all the negotiating chapters and thus expanded the number of chapters, creating a joint text which will be the basis for continued negotiations.

**Another round** will take place in July 2016 and after that only the most controversial political issues should remain unresolved. So far import of American food into the EU is among the most problematic subjects.

The EU and US would still like to conclude the agreement by the end of 2016. However strong public criticism against it can be heard, for example because the negotiations are said not to be transparent.

Secret documents which the German media obtained from Greenpeace will probably contribute to the **criticism**. They reportedly show that during the negotiations the United States is putting a lot of pressure on Europe and trying for example to break through the European defense against genetically modified food and meat with growth hormones.

A study was also published outlining the **possible impacts of the pending TTIP agreement on the Czech Republic**.

According to the results these should be positive, even though the agreement should not have too large an impact on the Czech economy given the low volume of trade with the US.

The TTIP agreement could bring the Czech Republic:

- a long-term increase in GDP of nearly 1%;
- an increase in the affluence of households in the Czech Republic by 900 million USD;
- an increase in the real wages of workers by 0.9%;
- up to an additional 800 million USD for the Czech trade balance with the US.

Sectors which are important for the structure of Czech industry such as manufacturing, the pharmaceutical industry, production of transport equipment and engineering could particularly benefit from TTIP.

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<http://trade.ec.europa.eu/doclib/events/index.cfm?id=1479>

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# EU Events



In New York the ratification process for the global climate agreement which countries negotiated in late 2015 was launched. – The commissioner responsible for the Digital Agenda published a set of measures on 19 April 2016 aimed at the digitalisation of European industry, development of e-Government and creation of a European data cloud.

## ENERGY AND TRANSPORT

### Boiler subsidies: there is more interest in drawing funds for gas, biomass and heat pumps than coal

According to data which the Czech Gas Association (ČPS) gathered from seven Czech regions, when replacing boilers people have greater interest in gas and biomass than coal. The data is based on applications for the so-called boiler subsidies, which are designed to promote the **replacement of non-ecological boilers** used for heating homes. The money for this comes from OP Environment 2014-2020.

In the Hradec Kralove, Zlin, Moravia, South Moravia, South Bohemia, Plzen and Pardubice regions people have submitted nearly **2,200 applications** for grants for condensing gas boilers according to the ČPS data. There have been approximately the same number of applications concerning both biomass boilers and heat pumps. At the same time until now interest in coal-fired boilers been approximately half.

So far the data from the region thus indicates that the Czech Republic is following **the European trend of a gradual shift away from solid fuel boilers** and moving towards more environmentally friendly forms of heating.

According to the law on air protection, from the year 2022 use of about 75% of coal-fired boilers will be prohibited subject to a penalty of 50 thousand crowns. In the Czech Republic the first stage of boiler subsidies is currently in operation, in which a total of up to 9 billion crowns can be distributed. Three billion crowns have been earmarked for the first stage.

Applicants may obtain **70 to 80% of the costs** for the replacement of boilers from a maximum amount of 150 thousand crowns, while the amount of the subsidy is graduated according to the type of boiler. In the eighth region submission of applications in the first stage has already been stopped because the number of applications exceeded the allocated funds.

[https://www.cgoa.cz/homepage/pdf/doc/TZ\\_Kotlikove\\_dotace\\_udaje\\_z\\_kraju.pdf](https://www.cgoa.cz/homepage/pdf/doc/TZ_Kotlikove_dotace_udaje_z_kraju.pdf)

## AGRICULTURE AND FISHERY

### When will the EU ratify the Paris agreement?

The global climate agreement that nearly two hundred countries around the world negotiated in December 2015 in

Paris is going through the ratification process. This was launched on Friday 22 April 2016 in New York with a ceremonial signing of the agreement.

On behalf of the EU, European Commission Vice-President **Maroš Šefčovič** signed the document, according to which the EU will be part of the first wave of countries to ratify the Paris agreement. The Dutch Minister for the Environment Sharon Dijksma, whose country holds the current EU presidency, signed with him.

**The document will enter into force** 30 days after ratification by at least 55 countries which in total emit a minimum of 55% of the total volume of greenhouse gas (for the EU this is about 12%). The climate policies of individual countries will then have to be managed in accordance with this agreement from 2021, when the second period of the Kyoto Protocol will end. The Commission estimates that the EU should complete **ratification within one or two years**. In July 2016 it will introduce the document to be ratified and also propose the important "Effort Sharing Decision", which will divide the European target for reducing greenhouse gas emissions in sectors outside the emissions trading system among EU member states.

According to the agreement of the EU presidents and prime ministers from October 2014, emissions in these sectors – which include agriculture, transport and buildings – should be reduced by 30% by 2030 compared with 2005. The target should be divided among the member states according to their GDP per capita. The decision will be important for long-term policy planning in member states and will be an important signal for investors.

Nevertheless due to negotiations on the Effort Sharing Decision the EU ratification process could become tied up and according to non-governmental organizations could stretch into 2019 or beyond.

Individual member states have reportedly said they do not want to accept the climate agreement until they are clear about their own commitments.

**The decision must also go through the traditional approval procedure**, during which the majority of member states and the European Parliament must agree on its final form.

The Paris agreement itself will have to be ratified by the European institutions on one hand - again the member states in the EU Council and the MEPs in Parliament - as well as by the individual countries of the European Union. The contracting parties of the document are both the individual EU countries and the European Union as a whole.



**Until all member states have ratified it, the EU-wide ratification will not be valid.**

If the agreement enters into force before the EU ratifies it, this would mean that the EU could not participate in shaping some important implementation rules resulting from the Paris document, because for some time it would only have observer status. These details, which will be filled in with specific content within the framework of the Paris agreement, will in fact be negotiated between the signatories.

<http://www.consilium.europa.eu/en/press/press-releases/2016/04/22-paris-agreement-global-climate-action/>

## INFORMATION SOCIETY

### Digitalisation of European industry

One of the key priorities of the Commission of Jean-Claude Juncker – the creation of a Digital Single Market in the EU – has been outlined more clearly. The commissioner responsible for the Digital Agenda in fact **published a set of measures on 19 April aimed at digitalisation of European industry, development of e-Government and creation of a European data cloud.**

The newly introduced package is **comprehensive** and should help not only European consumers and businesses, but also researchers and public services to make the most of the opportunities that new technologies offer. The Commission has proposed several communications with measures to support digital development in the EU.

The first of these will fully **kick start the digitalisation of European industry** and align the strategies of the individual member states. Some of the EU countries already have their own plans for the development of so-called Industry 4.0. In the Czech Republic this is the National Initiative Industry 4.0, prepared by the Ministry of Industry and Trade (MPO). Moreover the MPO is currently preparing an action plan that should help the government in implementing the strategy.

In its communication the Commission plans to coordinate the national strategies of individual member states in order to prevent fragmentation of markets. It wants to achieve this through a regular European-wide dialogue with participation of all concerned parties, such as representatives of countries and industry. The Commission also wants to financially support the digitization of industry.

It would set up **a network of digital innovation hubs** in the EU, for which it wants to invest a total of 500 million

euros. The centres would primarily help businesses which could receive advice and be able to test their digital innovations. In total from these plans the Commission promises to mobilize 50 billion euros of public and private investments which will support digitalisation of industry in the EU.

The second communication presented plans to create **a European cloud** and to promote an economy based on the use of big data.

So-called big data is produced continuously and created by humans or generated by machines. This includes for instance weather information, GPS signals and digital images which help enterprises streamline business processes, find target groups of customers and offer them tailor-made products.

The data in the European Cloud Initiative which was presented will first be made available to the scientific community already this year. Millions of European researchers who will be able to store, share and use large volumes of data across scientific disciplines in the cloud and across the 28 member states, will thus benefit from it.

Later a European cloud would also be established for the public sector and industry. The Commission calculates that realization of the European Cloud Initiative will require 6.7 billion euros.

Two billion should come from the Horizon 2020 programme and in the next five years the public and private sectors should also contribute an amount of 4.7 billion euros.

In addition to the digitalisation of industry and creation of a cloud the proposed measures are also directed at **the development of digital public services**. The Commission has developed an action plan for e-Government for the 2016-2020 period which contains a total of 20 measures. A single digital portal which will provide information and advice to businesses and European citizens should be established in the EU for instance.

At the same time **all business and insolvency registers** should be connected and a pilot project for European companies, which will be based on the "once-only" principle will be created.

Businesses will thus be able to submit documents in only one country, even when they also operate in other member states. For firms doing business across borders this will facilitate administration, which they will be able to handle electronically.

[https://ec.europa.eu/priorities/digital-single-market\\_en](https://ec.europa.eu/priorities/digital-single-market_en)

# Commission's Column



The European Commission Representation in the Czech Republic contributes to the EU News Monthly journal in the "Commission's Column" section. In the May issue this contribution focuses on the measures for the digitalisation of European industry which the Commission presented on 19 April.

## THE EUROPEAN UNION SETS OUT A PATH TO THE DIGITALISATION OF INDUSTRY

The European Commission has presented a set of measures which will support and link national initiatives in the area of digitalisation of industry and related services in all sectors also through use of strategic partnerships and networks which encourage investment.

The Commission has also proposed concrete measures to accelerate the development of common standards in priority areas such as 5G communications networks, cyber security and modernization of public services.



Traditional sectors (for example construction, agro-food, textiles and the steel industry) and SMEs are particularly lagging behind in their digital transformation.

Recent studies estimate that in the next five years digitising the products and services industry in Europe will bring more than 110 billion EUR revenue per year.

As part of this approach, the Commission will:

- Help coordinate national and regional initiatives on digitising industry through a continuous EU-wide dialogue with all actors involved;
- Focus investments in European partnerships between the public and private sectors and strongly encourage the use of the opportunities offered by the EU Investment Plan and European Structural and Investment Funds;
- Invest 500 million EUR in a pan-EU network of digital innovation hubs (centres of excellence in technology) where businesses can obtain advice and test digital innovations;
- Set up large-scale pilot projects to strengthen the Internet of things, advanced manufacturing and technologies in smart cities and homes, connection of cars and mobile health services;
- Adopt future-proof legislation that will support the free flow of data and clarify ownership of data generated by sensors and smart devices. The European Commission will also review the rules on the safety and liability of autonomous systems;
- Present an EU skills agenda that will help give citizens the skills needed for jobs in the digital age.

The plan should mobilize up to 50 billion euros over five years. Where will the resources come from?

- 37 billion euros to support digital innovation from European, national and private sources;
- 5.5 billion euros of national and regional investment for digital innovation hubs;
- 6.3 billion euros for the first production lines manufacturing the next generation of electronic devices;
- 6.7 billion euros for the European Cloud Initiative.

More information can be found in the press release on digitising industry: [http://europa.eu/rapid/press-release\\_IP-16-1407\\_cs.htm](http://europa.eu/rapid/press-release_IP-16-1407_cs.htm)

Within the framework of the plans the Commission will create a European Open Science Cloud, with the first objective of providing 1.7 million European researchers and 70 million scientific and technical experts a virtual environment in which a large amount of research data will be stored, managed, analyzed and re-used.

The Commission will introduce the European Cloud Initiative gradually through a series of measures, which include:

- As of 2016: creating a European Open Science Cloud by combining existing scientific clouds and research infrastructures and supporting the development of cloud-based services;
- 2017: opening up by default all scientific data produced by future projects in the Horizon 2020 research and innovation programme;
- 2018: launching a flagship-type initiative to accelerate the nascent development of quantum technology which is the basis for the next generation of supercomputers;
- By 2020: developing and deploying a large-scale European high performance computing, data storage and network infrastructure, including acquiring two prototype next-generation supercomputers of which one would rank among the top three in the world, establishing a European big data centre and upgrading the backbone network for research and innovation (GEANT).

More information is in the press release on the European Cloud Initiative: [http://europa.eu/rapid/press-release\\_IP-16-1408\\_en.htm](http://europa.eu/rapid/press-release_IP-16-1408_en.htm)

Our InfoService section outlines upcoming sessions of EU decision-making bodies accompanied by other significant events. Often agendas for negotiations by these important bodies are not ready until a few days before the actual meetings can be found at:

<http://europa.eu/newsroom/calendar/>  
<http://www.eu2015lu.eu/en/index.html>



# InfoServis

## Meeting of the key EU institutions

9. - 12. 5. 2016	Strasbourg, France	25. 5. 2016	Brussels, Belgium
- European Parliament plenary session		- Economic and Financial Affairs Council	
12. 5. 2016	Brussels, Belgium	26. 5. 2016	Brussels, Belgium
- Foreign Affairs Council		- Competitiveness Council	
17. 5. 2016	Brussels, Belgium	26. 5. 2016	Brussels, Belgium
- Agriculture and Fisheries Council		- Telecom council	
20. 5. 2016	Brussels, Belgium	26. - 27. 5. 2016	Ise-Shima, Japan
- Justice and Home Affairs Council		- G7 summit in Japan	
23. 5. 2016	Brussels, Belgium	27. 5. 2016	Brussels, Belgium
- Foreign Affairs Council		- Competitiveness Council	
24. 5. 2016	Brussels, Belgium	30. - 31. 5. 2016	Brussels, Belgium
- General Affairs Council		- Education, Youth, Culture and Sports Council	

Source: [www.europa.eu](http://www.europa.eu), [www.english.eu2016.nl/events](http://www.english.eu2016.nl/events), access as of 29<sup>th</sup> April 2016



## Overview of selected calls

Call	Call number	Receipt of applications	
		From	To
<b>Integrated Regional Operational Programme</b>			
Social housing	32.	06/16	12/16
Social housing (Socially Excluded Localities)	33.	06/16	12/16
Infrastructure of secondary schools and higher education institutions	36	06/16	11/16
Infrastructure of secondary schools and higher education institutions (Socially Excluded Localities)	37.	06/16	11/16
Development of social services	29.	05/16	10/16
Development of social services in Socially Excluded Localities	30.	05/16	10/16
Specific information and communication systems and infrastructure II	28.	05/16	12/17

Source: [www.edotace.cz/kalendar](http://www.edotace.cz/kalendar)



European and Czech agriculture have had to face a number of changes in recent years. Next year the European Union quotas on sugar cultivation will end, the purchase prices of pork are falling and the prices of milk products are suffering from an excess of this raw material on the world market.

## THE SITUATION IN THE EUROPEAN MILK MARKET

The development of milk prices in the EU in the past was not driven only by market principles. The first regulation was already created in 1964. Its aim was to ensure an adequate standard of living for milk producers in an environment of low world market prices for milk and dairy products. Since 2008 all legislation providing for individual EU schemes for milk and milk products has been incorporated into Council Regulation (EC) no. 1234/2007, which created a Common Market Organization (CMO) for the whole of the Common Agricultural Policy. Farmers producing milk also received a right to direct payments.

At the end of 2013 Council Regulation (EC) no. 1308/2013, which governs the common organization of the markets in agricultural products including milk, was issued as part of the reform of the Common EU Agricultural Policy. Support of milk prices and its producers at the present time using import tariffs and import quotas on products from third countries is within the framework of this regulation. In addition it is also used for issuing import and export licenses and (in periods of crisis) even for the possibility of granting export subsidies.

Furthermore, the authorities responsible for the organization of the milk market in individual member states can proceed to intervene by buying butter and skimmed milk powder in order to ensure sales and stabilize the price of dairy products. Tools to promote milk can also be identified in programmes to promote milk consumption in schools (in the Czech Republic the School Milk Programme called *Mléko do škol* in Czech) to reduce the deficit of calcium in the population of children, to improve children's eating habits and ensure sales of milk for farmers. This is also a marketing tool to promote milk and milk products in the EU and in third countries. From 1984 the system of quotas on milk production, which aimed to reduce the overproduction of milk and milk products and thus stabilize their prices, was in operation in the EU.

From 1 April 2015 quotas were abolished however, and each country can now produce as much milk as it wants. Besides the above-mentioned measures on the common organization of the market, farmers breeding dairy cows are eligible for direct payments - the single farm payment plus payments under voluntary supply management which aims to support dairy farmers.

The price development of milk and dairy products is determined by the situation on the European and world

markets due to the integration of the European market and the activities of multinational chains. At the present time the price of milk in the EU is under pressure due to the large surplus. A combination of circumstances can account for this. When the milk quotas in the EU were abolished starting in April 2015, countries such as Germany, Italy, the Netherlands and Ireland increased their production. Moreover the continued prohibition on the export of milk and dairy products to Russia also matters. Currently the situation in New Zealand also has an impact on world prices. It has produced above-average amounts of powdered milk and supplies this to world markets. Increasing the number of cows due to the favorable price of milk in 2014 also played a significant role. Since 2014 world and European milk prices have therefore been falling rapidly.

Milk prices in the Czech Republic are also affected by European milk prices. The price of milk for Czech agricultural producers reached its peak in April 2014 when it amounted to 9.8 Kc. per liter. However since then it steadily declined to a level of 7.08 kc./liter in February 2016. According to farmers the prices of milk are therefore on the border of production costs and milk production will stop being economically viable. The Commission has assessed the short-term and medium-term outlook for the development of milk prices in the EU. According to its short-term outlook from early 2016 milk production in the EU will continue to increase in the first half of 2016. The US will also supply more milk on the world market and Australia a stable amount. On the contrary New Zealand's production should already be falling. More milk on the world market will continue to push its price down throughout all of 2016. In the Commission's view, this could lead to stabilization of supplies at the 2015 level and with this a halt in the decline in milk prices at the end of 2016.

In the long run according to the Commission this will lead to further growth in world milk production with both world and European demand for milk and milk products continuing to grow. In the opinion of the Commission the price of milk should thus once again return to a growth track in the next few years with a slight increase continuing. Even so the Commission expects that until 2020 the price of milk will be between 32 and 33 eurocents per kilogram. More significant growth should begin only after 2020.

*Radek Novák, EU Office / Knowledge Centre ČS*

The competitiveness of the European Union stands on its ability to create new technologies and use them for creating new products and innovative solutions. It's the only way we're able to successfully compete with the cheaper regions of the world. Primary research isn't sufficient for this – R&D must be mainly carried out by companies themselves.



# Main Theme

## THE PATH TO PROSPERITY: COMPANY EXPENDITURE ON RESEARCH AND DEVELOPMENT IN THE EU

### INTRODUCTION

Back in 1912, Josef A. Schumpeter, the best known economist born on Czech territory, wrote his book *The Theory of Economic Development* in which he said the only source of economic growth was the businessperson who through their own innovative activity tries to be better than their competitors. In his later work he then understood the central role of company research and development (R&D) – companies constantly try to develop better and more sophisticated products that better correspond to the needs and demands of consumers. And it's company expenditure on research and development in the European Union that is the theme of May's EU Monthly news.

Expenditure on research and development within individual member states of the European Union varies dramatically and correlates closely with the economic development of a given country. In the high income economies in western and northern Europe quality research and development is able to be financed not only domestically but also via foreign investment in other countries. On the other hand, in states where they are unable to fund innovative research there is often significant economic instability and the standard of living in these countries isn't very high. It's certainly not possible to say that merely increasing funds for research and development triggers substantial changes in the standard of living. But the fact that long-term and systematic work on effective research leads to economic miracles is

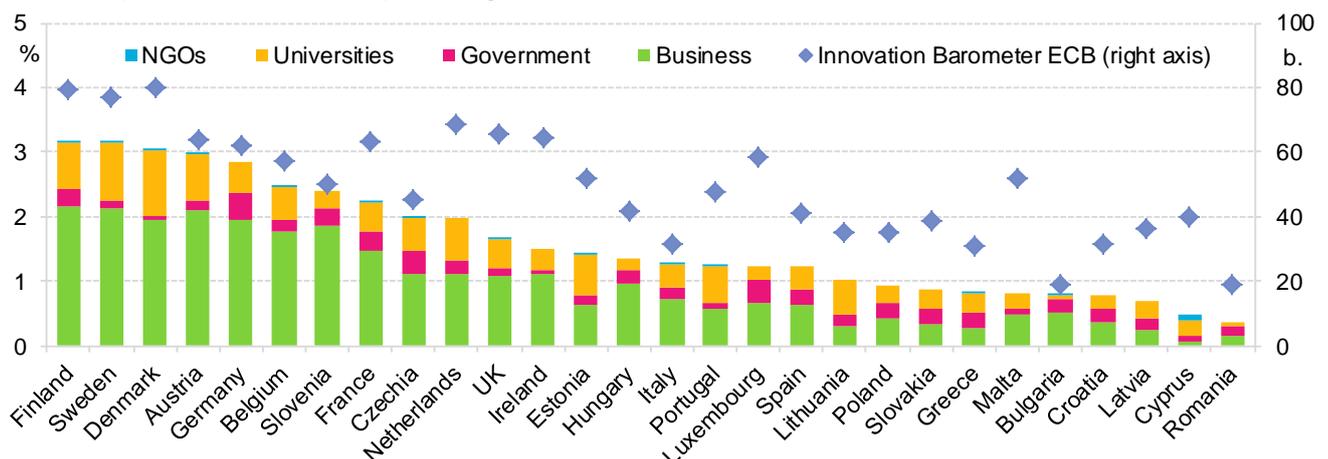
demonstrated by the ECB's Innovation Barometer, which we publish regularly.

Investment in research and development is a necessary but not sufficient condition for economic development – there are many factors that are not so dependent on finance, but ultimately they can significantly limit or even halt development. Interaction plays a key role for a successful economy – research doesn't have to take place only in university ivory towers and institutions conducting primary research; a key role is also played by work on specific innovations as part of applied research. The main role in improving competitiveness is without question played by companies.

In countries with the best innovation system for this there are close connections between various research sectors and other important players. Particular emphasis is placed on research management – this balances interests between independent primary research and more binding applied research and tries to look for examples of "quality" research and promote it at the expense of "lower quality" research.

The public sector plays a very important role in research and development – apart from the fact that it conducts a substantial amount of research itself, for example in the Czech Academy of Sciences, it is also an active player in the business sector. As part of its support for research it influences what companies will research and at the same

**General expenditure on R&D as percentage of GDP in 2014 and Innovation Barometer ECB**



Source: Eurostat; EU Office; Innovation Barometer 2015

# Main Theme



time tries to motivate companies with institutional settings. It's not sufficient, however, for the state to dispense money and hope and that "something will turn up".

Responsible people have to carefully study the potential of the local economy and look for a competitive advantage that

could in future improve regional prosperity. Top EU leaders therefore require a Regional Smart Specialisation strategy – each region should know its weaknesses and strengths and actively take part in local in research and development in companies in accordance with this.

## CORPORATE EXPENDITURE ON R&D IN THE EU

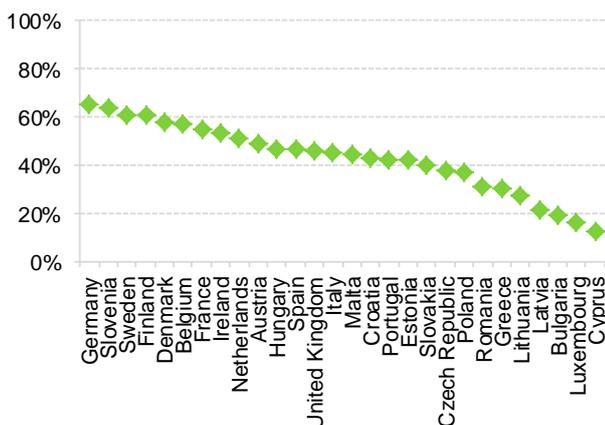
In 2014, nearly EUR 300 billion was spent on research in the European Union, i.e. an amount that exceeds the GDP of Finland and Denmark. On average, around EUR 560 was spent per capita, of which 60% represented corporate expenditure.

In total, 2% of European GDP was spent on research and development. Companies not only conduct research, but to a large extent they also finance it – on average 55% of all resources allocated to R&D in the EU are financed by businesses. Companies fund primarily their own research (they contributed more than 80% to the funding of corporate research), but to a certain extent they also finance research at universities and they may also participate in public sector research.

The overall amount of funds going into research and development has long been increasing, both as an absolute amount and in relation to the other sectors of the economy.

While corporate expenditure on R&D in 2005 was around 1.1% of GDP, in 2014 it reached 1.3% of GDP – growth of 0.2 percentage points over 10 years is not dramatic, but it did not cease with the onset of the financial crisis.

**Percentage of business enterprise R&D expenditure**



Source: Eurostat; 2013

There is significant heterogeneity between states, however. While expenditure on research and development in

companies in Finland, Sweden and Austria exceeds 2% GDP, in Cyprus, Lithuania and Latvia corporate research is negligible (less than 0.4%).

In general, the more competitive an economy is, the more money companies spend on research and development. In Sweden, Finland and Germany, companies finance almost more than 60% of research and development.

In east European countries this share is less than 40%, and on a considerably lower base. A calculation pursuant to purchasing power parity shows that absolute corporate expenditure on R&D is more than 10x greater in Sweden than in Greece and Bulgaria.

### Foreign resources

It's not only expenditure on R&D that varies in the EU, but also price levels, labour costs and other factors that motivate western companies to do research beyond their own domestic economy. In addition, the European Union's regional policy redistributes a considerable amount of funds from western countries to the poorer ones, and one of the important channels is also funding for research and development from grants.

This development can help poorer countries – if it creates a sufficiently attractive environment for competitiveness research then foreign companies will be interested in investing (and are already investing) in local research and development.

But it doesn't work automatically – for a country to successfully link to with international research there needs to be a quality education system in that country which develops specialists who are able to compete with specialists from richer economies.

But it is also necessary to build research infrastructure – scientists have to have access to equipment and laboratories to carry out research effectively. A necessary condition is also the ability to attract and maintain highly qualified specialists. It's therefore necessary to motivate them not only financially, but also with the job description – the research must be relevant, ambitious and

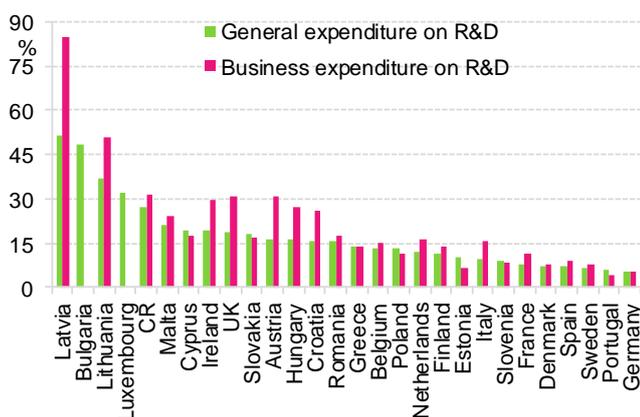


# Main Theme

commensurate with the world leaders. Upon fulfilment of these conditions one can expect a considerable inflow of research investment from abroad.

Within the EU, funding sources from abroad vary substantially – while they comprise a mere 5% of overall expenditure on R&D in Germany, in Latvia they represent nearly 50%. In terms of corporate expenditure, the proportion is slightly higher, but comparable.

## Expenditure on R&D funded from abroad



Source: Eurostat; share of expenditure on R&D funded from abroad on general expenditure on R&D

## Cost structure

Companies have to pay workers from their own expenditure on R&D, as well as other costs – normal operating expenditure on maintenance and investment in new projects, property, buildings, equipment and laboratories.

Within the EU the structure of expenditure varies dramatically – while personnel costs greatly predominate in the Netherlands and Germany, in Bulgaria for example more than 50% of the very small budget for corporate research is comprised of operating costs.

A key factor for an economy in a given country to be able to be successful in research is its willingness and ability to pay the best specialists available and provide them with the best conditions for original and relevant research.

Countries which have enough funds to pay for the quality discoveries of researchers greatly increase their chance of success in the future. Countries which don't try to do this undermine their potential and expose themselves to risk in the future.

A sufficiently developed level of scientific research is thus one of the ways of at least slowing down the brain drain.

## Support for research

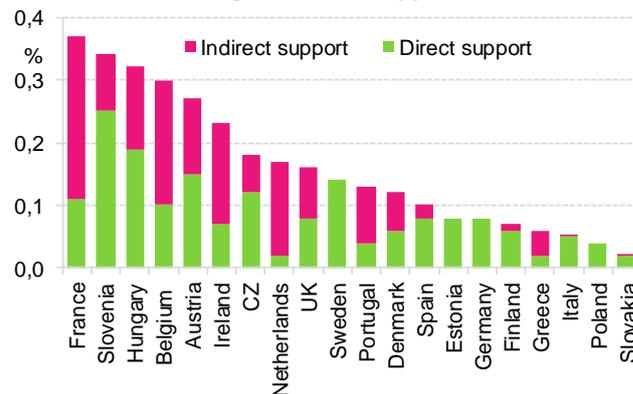
The state tries to motivate companies to devote themselves to research and development.

One form of assistance is direct support – grants for specific projects that in the context of the Czech Republic are distributed for example by the Technological Agency of the Czech Republic.

In order for a grant to be effective it's necessary to pay attention to the substitutional effect – the state has to watch whether companies really are spending money on research that they wouldn't manage to finance from their own resources or whether because of the receipt of grant funding other research projects are not being restricted which would not otherwise be subsidised.

In many countries, however, there are also indirect incentives in addition to direct grants – especially in the form of tax deductions. The data, however, do not demonstrate a strong relationship between subsidised science and research and corporate expenditure.

## Direct and indirect government support of business R&D



Source: OECD; share on GDP; 2013

For example, in Slovenia and Belgium both support and corporate expenditure on research and development is high. Conversely, support is very low in Germany and Finland.

While there's no indirect support at all in Germany in the form of tax deductions for investment in research and development, the role of direct support in the Netherlands is minimal.

# Main Theme



## CORPORATE R&D IN THE CZECH REPUBLIC

The Czech Republic, thanks to its historic tradition and location in the heart of the European Union, has expectations and the opportunity to get to the highest level of research and development – the Czech education system produces competitive graduates and the results of Czech science are in some technical fields at least comparable to Western Europe (see the IDEA study).

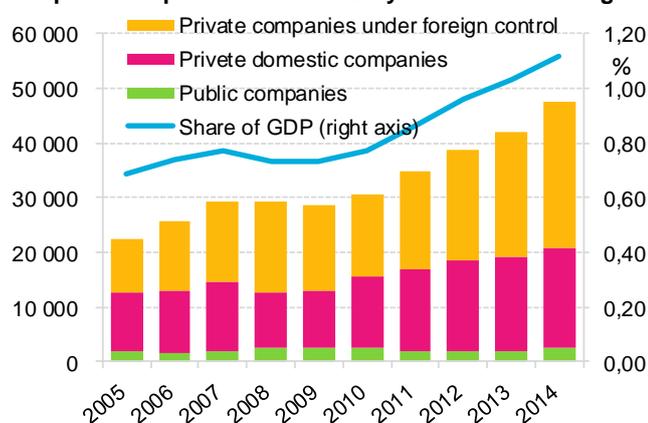
And it appears that Czech companies have been relatively successful in trying to make use of this position – corporate expenditure on R&D since 2005 has more than doubled.

This development can be partially explained by the general growth in economic activity, but corporate research is also increasing relatively.

While in 2005 corporate research represented 0.7% of GDP, in 2014 it already exceeded 1.1% Corporate research has long been at around 55 – 60% of overall expenditure on research and development.

Eighty-five percent of spending on corporate R&D comes directly from corporate funding, 10% is paid from domestic public sources and 5% comes from public foreign sources (i.e. EU funds in particular). Research dependence in the Czech Republic on EU grants is therefore not particularly high.

**Corporate expenditure on R&D by sources of funding**



Source: ČSÚ, Eurostat; mil. CZK in common prices

As a small open economy, the Czech Republic greatly depends on foreign investors and this also applies to research and development.

According to European Commission data, foreign sources make up more than 30% of expenditure on R&D. More than half of the total corporate expenditure on R&D is carried out in companies with a private foreign owner.

In enterprises with a domestic owner, 38% of investment goes into R&D.

The benefit of foreign owners to the Czech economy is also well illustrated by the fact that two-thirds of the overall growth in spending on R&D has been contributed by foreign-owned companies.

The Czech Republic is traditionally an industrial country and this is also reflected in the structure of corporate expenditure on R&D – apart from the scientific activities category which brings together companies making a living directly from scientific work (whether in the field of biotechnology or economic research), the most funds for R&D are invested in the automotive sector.

Large funds are also invested in R&D by information and communication companies, particularly software firms. And engineering companies are definitely not staying in the background.

The good news is that corporate research is not concentrated in one place and is being conducted practically across the entire Czech Republic. The most developed is Prague, closely followed by Central Bohemia.

A slight distance behind is South Moravia where academic research has been successfully combined with regional policy and innovation in technological companies. The Central and South Bohemian regions have managed to increase corporate investment in R&D by more than 75% since 2005.

Two regions are significantly behind – in the Moravia-Silesia region companies spend half the Czech average on R&D, and that's despite the fact that it's a region with a substantial industrial tradition, three universities and a branch of one of the largest car makers in the world.

Even worse is the North Western region where investment in R&D in comparison with the rest of the Czech Republic is critically low (around 20% of the overall Czech average).

The close connection between long-term macroeconomic stability and company expenditure on research and development sounds a warning bell for these two regions.

The Doing Business is part of the Foreign Business Guide offered by the Česká spořitelna EU Office. Within the program, we provide our clients from among small and mid-sized enterprises with information about how to expand abroad successfully and what business environment awaits them there. In the May issue, we will focus on the business environment in Slovenia.



# Doing Business



## SLOVENIA

<b>Official name</b>	Republic of Slovenia		
<b>Population</b>	2 062 874 (2015)		
<b>Area</b>	20 273 km <sup>2</sup>		
<b>Currency</b>	Euro (EUR)		
<b>Ethnic groups</b>	Slovene 83,1 %	Serb 2 %	Croat 1,8 %

Source: Eurostat

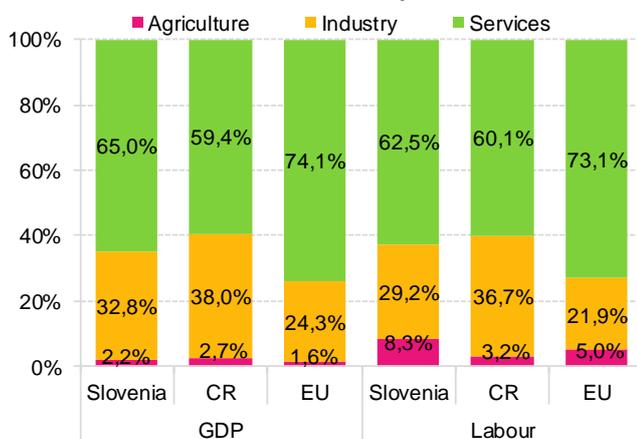
Slovenia was the first country which broke away from the former Yugoslav Federation and became independent in 1991. In 2004, Slovenia became a member of the European Union and NATO, and three years later it adopted the euro.

Slovenia is a parliamentary republic. The head of state is a president elected for five years in a direct two-round majority vote. Legislative power is entrusted in parliament's two chambers: the State Assembly (90 members elected for four years) and the National Council (40 councilors with lesser legislative power elected for five years). Structure of economy and foreign trade

### Structure of economy and foreign trade

Exported commodities include primarily different types of consumer goods (Gorenje), machinery and transport equipment, chemicals and foodstuffs. Imports are mainly machinery, transport equipment, chemicals and plastics. The main business partners (in regard to imports and exports) are in this order: Germany, Italy and Austria.

### Sectors of the National Economy



Source: Eurostat, data as of 2014

### Macroeconomic outlook

In 2014, the Slovene economy finally overcame the recession and its 3% growth places it among the best in the

European Union. This dynamic spilled over into the first half of 2015 when GDP year-on-year grew by 2.7% thanks to growing exports and a recovery in domestic demand. Private consumption grew strongly in the first half of the year thanks to an improving situation on the labour market, growing consumer confidence and low inflation. Overall growth in GDP for 2015 was 2.9%. The year 2016 should be taken in the spirit of improving private consumption, and growth in employment and wages together with a better situation on the property market and higher household confidence. Net exports will continue to contribute positively to GDP, but the main driver will remain domestic demand.

The state of public finances has improved significantly since the start of the crisis and from 2015 the public deficit should fall to less than the "Maastricht" limit of 3%. According to the European Commission, overall government debt could fall to less than 80% GDP in the years 2016 and 2017.

Basic macroeconomic indicators	2014	2015 <sup>e</sup>	2016 <sup>e</sup>	2017 <sup>e</sup>
<b>GDP Growth (%)</b>	3.0	2.9	1.8	2.3
<b>Unemployment rate (%)</b>	9.7	9.1	8.8	8.4
<b>Inflation (%)</b>	0.4	-0.8	-0.3	1.1
<b>Current account balance (% GDP)</b>	-5.0	-2.9	-2.4	-1.9
<b>Public debt (% GDP)</b>	80.8	83.5	79.8	79.5

Source: European Commission; <sup>e</sup> - estimate

### Labor market

The unemployment rate in Slovenia is gradually falling and was 9.1% for the year 2015 (about 4 percentage points more than in the Czech Republic). Average labour productivity is higher there than in the Czech Republic and represents approximately 86% of the EU average. The minimum monthly wage in Slovenia is EUR 790.7.

Basic indicators of labor market		
Unemployment rate (March 2016)	8.1%	
Labor productivity to ø EU in PPS (2013)	86.1%	
Minimum monthly wage	790.7 EUR	
ø monthly labor costs 2014	Slovenia	CR
Manufacturing	2 162 €	1 475 €
Wholesale and retail trade	2 118 €	1 434 €
Transportation and storage	2 118 €	1 389 €
Accommodation and food service	1 719 €	916 €

Source: Eurostat



Labour costs (wages plus ancillary labour costs) are higher in all sectors in Slovenia than in the Czech Republic. For example, for hotels and restaurants it's 88%, but for information services and communication it's only 8%.

## Labor law basics

A labour contract can be concluded for an indeterminate or a defined period, but only in some legally-defined cases. The trial period may be up to a maximum length of 6 months and the notice period during the trial period is seven days.

The general notice period depends on the length of employment. The shortest is 30 days (up to five years employment), and the longest is 120 days (over 25 years employment). At the same time, the amount of severance is tied to the length of employment and is calculated according to a relatively complicated algorithm. The working week is 40 hours. Workers have the right to 4 weeks' holiday.

## Commercial law basics

For smaller projects the most common form of entry into the market is a limited liability company (d.o.o.) where shareholders are liable only up to the amount of their unpaid deposits.

The minimum required capital is EUR 7,500. Larger companies most commonly take the form of a joint stock company (d.d.) with a minimum base capital of EUR 25,000. A World Bank survey indicates that the creation of a company in Slovenia is free, is comprised of two procedures and an enterprise is registered within six days.

Form of Company	Minimum Capital
Private Limited Company	7,500 EUR
Public Limited Company	25,000 EUR

Source: Ministry of Economic Development and Technology

## Main taxes and additional labor costs

The tax rate on corporate income is 17% and dividends are taxed at a 15% withholding tax rate on non-residents (the tax burden may be alleviated by a contract on avoidance of double taxation). Employee incomes are subject to progressive taxation where the marginal tax rate is 50%.

Total contributions to social and health insurance in Slovenia are 38.2% of the monthly wage and are deducted more from employees (22.1%) than from employers (16.1%).

The basic rate of VAT is 22%, and a lower rate of 9.5% is imposed on foodstuffs, water, medicines, transport, books, newspapers and periodicals, cultural and sporting events, etc.

Tax/payment	Rate
Corporate Tax	17%
Dividend Tax (non-resident)	15%
Individual Income Tax	16 / 27 / 14 / 50%
VAT	22 / 9.5%
Social insurance (employee)	22.1%
Social insurance (employer)	16.1%

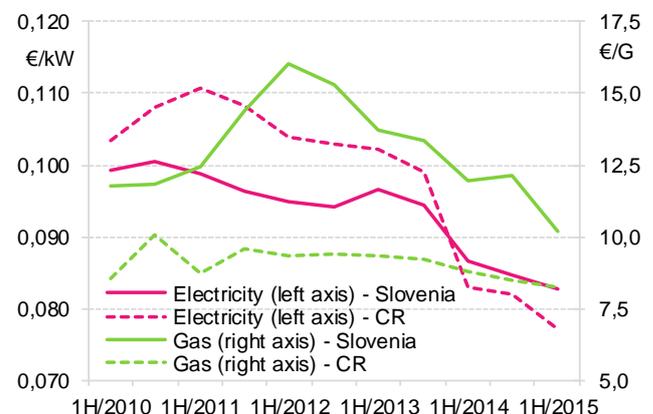
Source: Ministry of Finance

## Energy

Slovenia does not escape the energy situation on the Balkan Peninsula – domestic generation of energy resources are far from covering consumption and approximately half is imported. Electricity prices in Slovenia have on average over the long term been around 20% lower than in the Czech Republic, but this has been the opposite since 2014. Large consumers paid 8.2 eurocents for electricity in 2015.

Gas has long been more expensive in Slovenia than in the Czech Republic, and despite a fall in prices Slovenian gas costs 10.2 eur/GJ, i.e. about a quarter more than the Czech price. The most important source of electricity generation is renewable sources (33.5%), nuclear energy (33%), and solid fuels (30%).

## Development of energy prices



Source: Eurostat; tariffs for wholesales excluding VAT

## Investment incentives

A system of investment incentives also fights for the attention of foreign investors in Slovenia. These take the form of tax instruments (lowering the tax burden by up to 40% or accelerated depreciation) or direct subsidies that are generally tied to employment or the training of a new work force.

Another system that can be used for submitting applications to EU programmes is the Farmers' Portal. The Portal is designed for those who are considering projects in the field of agriculture, forestry and aquaculture. And this one, together with the upcoming May calls as part of the Rural Development Programme, is again opening its doors to potential applicants.



## EU Series

# THE FARMERS' PORTAL AND GRANT OPPORTUNITIES FOR FARMERS

The Farmers' Portal is an information portal that provides applicants with the possibility of submitting an application for a grant for their project, especially as part of the Rural Development Programme and the Operation Programme Fisheries. An applicant will also find access there to individual information about his or her applications and the state thereof, as well as support and instructions for selected tasks.

Only registered users after registering into the system have access to this information and service on the Farmers' Portal. To obtain a user name and password for the Farmers' Portal it's necessary to fill out an Application for Access to the Farmers' Portal according to the instructions listed in the document "Information for Applicants regarding Access to the Farmers' Portal". Information about access to the Farmers' Portal is accessible [here](#).

An application can be submitted personally at a relevant branch of a regional office or via data box. In the new grant period 2014-2020, the necessity to submit projects personally in a written form has been done away with, and all tasks associated with the process of submission and administration of the grant application and the subsequent project implementation can take place via the Farmers' Portal.

Procedures and manuals are to be found in the Portal following registration. A grant application must be generated from an applicant's account in interactive PDF format that is filled out and subsequently uploaded to the Portal. Individual form tabs are opened on the basis of defined criteria. The link "Submit New Application" on the introductory page or the "New Submission" section in the left-hand column of the menu can be used to generate a Grant Application. All inserted information can be gradually stored and this procedure is also recommended.

A big disadvantage of this system is the fact that it's possible to create and manage an application only under one user name and more contact persons or administrators can't be assigned to it. For each measure in every call only one application can be submitted per one applicant.

For projects over CZK 1 million the applicant must demonstrate financial health over the last three completed accounting periods, and it's possible to continuously amend it. Financial health is provided separately in the Financial

Health tab exclusive of the actual application form. Again, you must first generate the appropriate form, then fill it out and subsequently upload it. Note: it's necessary to upload the file, then approve (is small and easily overlooked) and then submit. If you don't approve the file then it won't be submitted and a second party won't see it during the audit. The procedure is as follows: Save – Continue with submission – Approve the contents of the submission and certify that I am authorized as part of my unique access authorisation to make submissions – Submit document.

The portal has to be continuously monitored, as a lot of information doesn't go to email and appears only in the Farmers' Portal. It's necessary to keep an eye on the system for the transfer of attachments, calls for amendments, etc.

Since this time the article is more theoretical than practical, we've prepared in conclusion several important notes for potential applicants relating to the most important changes from the previous grant period.

- It's no longer possible to artificially lower the percentage of the grant at the expense of increasing the number of points;
- For projects over CZK 1 million it's necessary to document financial health for the last three completed accounting periods;
- For a young farmer just starting out, it's necessary to comply with minimum production upon registration of a grant application;
- If a husband applied in the past as a young novice farmer, then the wife may no longer apply and vice-versa;
- A young novice farmer (6.1.1. Initiating Young Farmer Activities) as of the day of submitting a grant application has to comply with the minimum and maximum size of an enterprise that is given by achieving the minimum or maximum values of standard production;
- The results of construction management have to be documented after the submission of an application;
- As part of measure 16.2.1. Support for Development of New Products, Procedures and Technologies in Agricultural Primary Production, an applicant has to publish the results of a project and ensure its dissemination.

*Tereza Kniezková, project manager Erste Grantika Advisory, a.s.*

# Statistical Window



The “Statistical Window” in a tabular form shows important macroeconomic indicators from all member states and the European Union as a whole. It includes economic performance indicators, external economic stability indicators, fiscal stability indicators and price level to ø EU. The source of the data is Eurostat and ECB.

## Key economic indicators

in %	Inflation (YoY)				Unemployment rate				Labor costs to ø EU			
	XII-15	I-16	II-16	III-16	Q1-15	Q2-15	Q3-15	Q4-15	2012	2013	2014	2015
Belgium	1.5	1.8	1.1	1.6	8.6	8.6	8.1	8.7	143.8	144.7	143.8	141.0
Germany	0.2	0.4	-0.2	0.1	4.8	4.7	4.6	4.4	120.9	120.9	121.3	122.0
Estonia	-0.2	0.1	0.4	0.5	6.6	6.5	5.5	6.3	38.4	40.9	42.7	43.8
Ireland	0.2	0.0	-0.2	-0.6	10.0	9.6	9.2	9.1	116.0	115.2	114.1	113.0
Greece	0.4	-0.1	0.1	-0.7	25.8	25.0	24.7	24.4	69.8	64.4	63.0	n/a
Spain	-0.1	-0.4	-1.0	-1.0	23.2	22.6	21.6	20.9	87.9	87.1	85.9	84.3
France	0.3	0.3	-0.1	-0.1	10.3	10.4	10.5	10.2	130.6	129.3	128.6	127.4
Italy	0.1	0.4	-0.2	-0.2	12.3	12.2	11.6	11.6	104.4	105.3	104.2	102.1
Cyprus	-0.6	-1.1	-2.2	-2.2	16.5	15.2	14.8	13.4	72.1	69.1	65.8	63.9
Latvia	0.4	-0.3	-0.6	-0.6	9.7	9.8	10.0	10.0	27.0	28.2	29.4	31.0
Lithuania	-0.2	0.7	0.5	0.8	9.3	9.4	9.0	8.9	25.0	26.4	27.2	28.1
Luxembourg	0.9	0.5	-0.3	-0.6	6.3	6.5	6.5	6.5	142.2	145.1	147.6	145.0
Malta	1.3	0.8	1.0	1.0	5.8	5.4	5.2	5.3	57.0	58.7	59.6	59.8
Netherlands	0.5	0.2	0.3	0.5	7.1	6.9	6.8	6.7	135.3	135.5	136.4	134.3
Austria	1.1	1.4	1.0	0.6	5.5	5.9	5.7	5.9	123.9	125.5	126.9	128.4
Portugal	0.3	0.7	0.2	0.5	13.5	12.3	12.3	12.3	52.5	51.5	50.2	50.6
Slovenia	-0.6	-0.8	-0.9	-0.9	9.2	9.5	9.0	8.4	62.6	61.1	61.7	61.2
Slovakia	-0.5	-0.6	-0.3	-0.5	12.2	11.5	11.4	10.9	37.9	38.4	39.8	40.4
Finland	-0.2	0.0	-0.1	0.0	9.1	9.3	9.4	9.4	124.9	125.6	125.8	124.9
Bulgaria	-0.9	-0.4	-1.0	-1.9	9.9	9.8	8.8	7.9	14.3	14.7	15.4	16.2
CR	-0.1	0.5	0.5	0.3	5.7	5.1	4.8	4.5	42.4	42.4	42.6	43.6
Denmark	0.3	0.4	0.1	-0.3	6.2	6.2	6.1	6.0	157.4	157.7	157.5	156.9
Croatia	-0.3	-0.2	-0.6	-0.9	17.0	16.2	16.4	15.6	39.4	39.6	38.8	38.6
Hungary	1.0	1.0	0.3	-0.2	7.4	6.9	6.6	6.3	33.9	34.2	34.9	35.5
Poland	-0.4	-0.3	-0.2	-0.4	8.0	7.5	7.4	7.1	31.7	32.3	33.0	33.6
Romania	-0.7	-1.5	-2.1	-2.4	6.9	6.8	6.8	6.7	18.9	19.4	20.1	21.2
Sweden	0.7	1.3	0.8	1.2	7.7	7.6	7.2	7.1	162.9	163.7	165.7	166.8
UK	0.2	0.3	0.3	0.5	5.5	5.5	5.3	5.0	111.7	111.4	111.6	113.5
EU	0.2	0.3	-0.1	0.0	9.7	9.6	9.3	9.0	100.0	100.0	100.0	100.0

in %	Productivity to ø CR				Average interest rate on mortgages				Price electricity to ø EU			
	2010	2011	2012	2013	2012	2013	2014	2015	2012	2013	2014	2015
Belgium	259.6	257.1	266.6	282.3	n/a	n/a	n/a	n/a	116.1	110.6	100.1	100.3
Germany	204.8	204.5	211.0	224.3	3.2	2.9	2.5	2.2	140.7	147.9	146.9	143.2
Estonia	83.5	85.4	91.1	98.8	3.1	3.0	2.9	2.6	55.2	64.9	61.4	59.7
Ireland	279.5	283.2	293.2	n/a	3.3	3.5	3.4	3.5	131.8	134.8	141.2	138.1
Greece	156.9	151.0	156.0	159.4	3.6	3.1	3.4	3.0	61.2	71.6	78.5	80.4
Spain	184.1	181.7	190.4	n/a	3.4	3.2	3.2	2.5	120.5	116.4	121.6	121.0
France	237.2	235.3	244.0	258.5	4.5	3.9	3.6	3.1	78.4	81.4	81.3	81.4
Italy	211.2	207.5	210.5	222.6	4.3	3.9	3.5	3.1	94.3	92.4	95.8	92.8
Cyprus	147.2	145.7	153.9	157.6	5.5	5.4	5.0	4.4	138.5	121.5	105.4	86.6
Latvia	70.4	75.4	83.3	89.2	3.9	4.1	n/a	n/a	61.6	58.8	55.7	73.1
Lithuania	73.9	79.5	84.9	91.6	3.3	2.7	2.7	n/a	62.9	65.4	61.2	57.0
Luxembourg	599.0	599.5	614.3	n/a	2.4	2.2	2.3	2.0	92.2	85.1	86.1	85.8
Malta	130.8	128.2	131.3	138.4	3.6	3.4	3.6	3.7	94.4	89.8	70.9	61.7
Netherlands	229.6	225.4	230.6	n/a	4.3	3.9	3.4	3.0	56.1	53.1	36.8	54.0
Austria	n/a	n/a	n/a	n/a	3.3	2.8	2.7	2.5	109.1	109.3	105.8	107.8
Portugal	115.6	112.9	116.0	124.6	4.8	4.3	4.0	3.4	110.2	108.4	109.1	110.2
Slovenia	122.4	122.4	122.7	n/a	3.6	3.5	3.5	3.0	85.8	90.0	88.3	84.7
Slovakia	94.6	95.9	100.4	106.0	5.3	4.4	3.7	3.1	95.1	89.2	77.7	77.7
Finland	239.6	241.7	251.3	266.6	2.2	2.2	2.0	1.5	95.7	93.4	91.4	90.1
Bulgaria	33.3	35.2	38.2	40.0	8.3	7.8	7.4	6.4	43.9	42.1	39.5	42.5
CR	100.0	100.0	100.0	100.0	4.2	3.6	3.3	2.7	113.2	108.5	90.1	87.7
Denmark	286.5	283.0	295.4	313.5	3.5	3.7	3.2	2.9	160.6	152.0	151.0	148.8
Croatia	97.1	95.7	100.5	104.8	n/a	n/a	n/a	n/a	68.8	69.0	65.0	63.8
Hungary	84.7	83.6	82.2	85.2	12.0	9.6	7.3	6.0	80.8	66.5	55.5	52.0
Poland	76.3	76.8	80.4	85.5	7.4	5.9	5.5	4.6	75.1	70.9	67.5	68.4
Romania	43.6	45.2	45.6	51.8	8.1	7.6	5.5	4.3	53.4	61.8	59.5	59.3
Sweden	259.0	270.3	289.8	307.7	3.6	2.8	2.3	1.7	109.2	106.0	98.8	92.2
UK	198.6	195.6	215.2	n/a	n/a	n/a	n/a	n/a	92.4	89.8	99.1	104.3
EU	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	100.0	100.0	100.0	100.0

Source: Eurostat

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