Czech Republic
Corporate R&D
Report 2015
Welcome to the third edition of the Deloitte Research & Development (R&D) Survey in the Czech Republic, part of an annual R&D survey conducted by Deloitte across the countries of Central Europe. The survey is designed to gauge the overall situation in each country regarding investments in R&D, and brings to light the obstacles companies face in pursuing R&D activities. The survey is also an opportunity for companies to compare their R&D efforts with those of other companies in the region and for state institutions to gain insight into private sector views on the current and future support available to stimulate R&D and innovation.

Over 70 private businesses from various sectors participated in the survey in the Czech Republic. Just as last year, it was conducted in cooperation with the Technology Agency of the Czech Republic, whom I would like to thank. I would also like to thank all the companies that dedicated their time to filling out the questionnaire.

This year’s results have yielded some interesting points for discussion and identified the disadvantages and risks connected with subsidies and tax incentives. The conclusions drawn here can serve not only as a useful source of data for comparing local companies with other businesses in the region; they can also be an impulse for the further allocation of support from state authorities and other institutions responsible for determining the conditions of R&D support.

Luděk Hanáček
Partner
Macroeconomic view

Investments in research and development are a necessary ingredient in every recipe for long-term economic growth. These recipes are supported both by theory and practice. Economic growth models, from the basic model by Robert Solow to modern theories, state that increasing the productivity of production factors is the key driving force behind long-term economic growth. The way to increase productivity is through innovation driven by research and development. The relationship between economic growth and investment in research and development is not trivial, but it is certainly a positive one.

Empirical evidence supports this conclusion, whether we look at the numerous scientific studies or just compare the statistics. Scandinavian countries and Germany are generally considered examples of well-functioning economies and it is no coincidence that these countries invest significantly larger amounts in R&D than other European states do. In the European Union, 2% of GDP has been the average investment in R&D over the past few years. By way of comparison, in Germany this expenditure is close to 3% of GDP, while Finland, Sweden and Denmark are all above the 3% level. On a global scale, the leaders in the field of R&D include – in addition to the Scandinavian countries – Japan, South Korea and Switzerland, where investments in R&D exceed 3% of GDP.

Central European countries, meanwhile, spend significantly less on R&D investments on a national scale. In most of the countries belonging to this region, investments in R&D do not exceed 1% of GDP (with the exception of Slovenia, where this expenditure amounts to 2.6% of GDP). The advantage of comparatively cheaper labour in Central Europe is exhausted with the gradual economic convergence towards the level of advanced countries. If these countries want to maintain their solid dynamics in economic growth, they will have to invest more in research and development.

In the Czech Republic, investments in R&D oscillated between 1.0% and 1.3% of GDP on a long-term basis; however, during the past few years, they increased steadily and reached 1.9% of GDP in 2013. The reason for this acceleration of R&D expenditure was primarily due to the hasty drawing of money from EU structural funds. While the EU has set a goal of achieving investments into R&D of 3.0% of GDP as part of its Europe 2020 strategy, the Czech Republic has not set any goals in this respect, despite the obvious fact that more activity in this field would help increase the long-term growth of the economy and compensate for the anticipated negative impacts of an aging population.

The most significant source of R&D funds in the Czech Republic are public sources, which account for 42% of the total volume of expenditure in this field. The private (corporate) sector covers 38% of R&D investments. The ratio is the exact opposite in more developed countries: the private sector finances most investments into R&D. Moreover, in light of the continuously deficit-ridden state of public finance, supporting corporate investments in R&D with the aim of increasing their total volume seems like a wise thing to do.
The basic means of supporting corporate investments in R&D are either direct support through subsidies or indirect support through tax incentives. There is no universal model for the allocation of support between these two forms around the world. For example, Germany, Finland and Sweden rely exclusively on direct support through subsidies, while Korea and Japan use tax incentives as the main tool for supporting corporate investments in R&D. However, a glance back at history shows that the number of countries using tax incentives as a means of stimulating investments in R&D has been continually increasing. In the Czech Republic, 74% of the public support of corporate investments in R&D is represented by tax incentives and 26% by direct subsidies.

The importance of supporting corporate investments in R&D through tax tools has been on the increase in the Czech Republic. In 2005, corporate income tax deductions claimed for R&D projects amounted to CZK 3.2 billion and the value of indirect support was CZK 819 million. In 2012, the tax deductions claimed reached CZK 10.5 billion and indirect support amounted to almost CZK 2 billion.

The volume of corporate investments benefiting from either direct or indirect support could be higher, but there are certain factors impeding this potential increase. Our survey shows that companies mostly fear the uncertainty of tax or other authorities in assessing subsidies and tax deductions. Some companies also complain that the process of gaining subsidies is too bureaucratic and overly complicated.

The character of the Czech economy has undergone changes in the past two decades. The factors that have played a role in economic growth so far have been exhausted to a certain extent and the global economic crisis has changed the external economic environment. Investments in R&D will become increasingly important. The Czech Republic could draw inspiration from economically successful countries that use this factor to their benefit. It would therefore be advisable to minimise, if not remove, the obstacles mentioned above – ideally to intensify the support of corporate investments in R&D and promote its use.

David Marek
Chief Economist Deloitte
What amount of funding is your company planning to invest in R&D over the next three to five years?

A clear majority of nearly four fifths (81%) of Czech companies reported that in the long term (3-5 years) they plan to invest in R&D at the same (36%) or a greater level than they did in 2014 (45%). These findings are similar to last year’s survey and are influenced by the significant share of foreign investments into R&D in the Czech Republic.

In comparison with answers of other countries in the Central European region, companies in the Czech Republic plan to invest less in this area, especially in comparison with companies which plan to invest in R&D the same or greater level than they did in 2014 in Poland (90%), Slovakia (88%) or Croatia (94%).
External factors that would positively influence R&D spending in the next two years

This year’s survey shows that the factors companies consider to be key in deciding whether to increase R&D spending in the long term are primarily the availability of qualified workers who are skilled and experienced in R&D (71%) and the opportunity to benefit from various types of support, such as a combination of subsidies, investment incentives, tax deductions and other financial tools (amounting to 70%). Just as last year, the third key factor for companies is the labour cost of researchers. Companies in the Czech Republic are able to use various forms of R&D support (i.e. subsidies, tax incentives, tax deduction) and they appreciate it. Meanwhile the availability of qualified workers who are skilled and experienced in R&D is a crucial factor in all Central European countries, and tackling it will require a long-term solution in the education and labour systems.

One of the solutions could be support for employing young, unskilled workers in the R&D area, who may be expensive for companies during the first year but compensate for the risk of companies losing them after the one-year induction period. The Slovak model could be considered as an example, in which companies are encouraged to hire young people on the labour market by receiving a tax benefit.

What amount of funding is your company planning to invest in R&D over the next three to five years?

<table>
<thead>
<tr>
<th>Factor</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Availability of skilled and experienced researchers</td>
<td>71%</td>
</tr>
<tr>
<td>Availability of more types of benefits</td>
<td>70%</td>
</tr>
<tr>
<td>Costs of researchers</td>
<td>66%</td>
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<tr>
<td>Access to and cooperation with universities/research institutes</td>
<td>58%</td>
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<tr>
<td>More R&amp;D cash grants as compared to R&amp;D tax incentives</td>
<td>53%</td>
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<tr>
<td>Stability of the regulatory environment</td>
<td>49%</td>
</tr>
<tr>
<td>Access to the R&amp;D sectorial and competitors’ benchmarks</td>
<td>45%</td>
</tr>
<tr>
<td>More R&amp;D tax incentives compared to R&amp;D cash grants</td>
<td>44%</td>
</tr>
<tr>
<td>Protection of intellectual property rights</td>
<td>29%</td>
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<tr>
<td>Possibility of co-financing costs of IP protection procedures</td>
<td>29%</td>
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What do you see as the biggest problem in the current system of R&D support?

One of the aims of the survey is also to monitor the biggest problems for the companies in the current system of R&D support over a long term period, and to look beyond the field of subsidies to include tax deductions as well.

More than a third of respondents (34%) cite the lack of clarity of tax and other authorities in assessing subsidies or tax deductions as the biggest problem in the current system of R&D support, which is in contrast with last year, when companies singled out unclear guidelines on eligibility criteria, including the way that costs should be calculated (36% in 2014). This may be a result of the greater number of financial controls and legal disputes in the area of R&D support, despite the fact that there were not any significant changes in the guidelines on eligibility criteria. On the other hand, in the future we can expect an increase in companies reporting a lack of clarity in the guidelines for direct support in connection with the beginning of the new program period for 2014-2020.

All the factors mentioned above emphasise the necessity for changes to legislation and the need for a stable interpretative praxis among all inspecting authorities.

The survey also showed that companies do not view having to keep separate records of R&D costs to be a significant administrative burden (8%).

When questioned about their companies’ approach to tax deductions, 60% of companies stated that they had good knowledge of R&D subsidies and have made use of them.

Regarding the R&D tax deduction, 29% of respondents reported that they are familiar with them but they were unsure about the tax authorities’ attitude to R&D costs; they therefore feel that using an R&D tax deduction is risky from a tax-certainty point of view, while another 29% of respondents see the methods on how risks related to classification of its activities as R&D could be managed.

What do you see as the biggest problem in the current system of R&D support?

- Lack of tax clarity in the assessment of subsidies or tax deductions by tax or other authorities: 34%
- Unclear guidelines on the conditions of the eligibility of the costs and their calculation: 21%
- Identifying the activities that meet the R&D requirements for requesting a subsidy or a tax deduction: 16%
- Keeping track of costs separately: 8%
### Financial tools

The survey showed that companies are looking for other forms of R&D support in addition to what is currently available. The implementation of various financial tools for R&D support is the trend these days in the EU, which could be attractive especially for small and medium companies that often suffer from worsened access to financing their R&D activities. All of these financial tools will require different implementation methods.

### Which financial instruments in the R&D field do you know and would use?

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Know</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loan/credit</td>
<td>78%</td>
<td>33%</td>
</tr>
<tr>
<td>Capital input</td>
<td>32%</td>
<td>14%</td>
</tr>
<tr>
<td>Interest rate subsidy on a commercial loan</td>
<td>32%</td>
<td>16%</td>
</tr>
<tr>
<td>State guarantee for a commercial loan</td>
<td>32%</td>
<td>12%</td>
</tr>
<tr>
<td>Subordinated</td>
<td>12%</td>
<td>4%</td>
</tr>
<tr>
<td>Project bond</td>
<td>8%</td>
<td>5%</td>
</tr>
</tbody>
</table>
Conclusion

Research and development is a key area, not only in increasing companies’ competitiveness but also in developing the national economy as a whole.

The survey also confirmed the positive trend that companies are planning to invest in R&D, with almost half of respondents (45%) stating that they will be increasing the amount they spend on R&D over the next three to five years and 36% of respondents planning investments in the same amount as in the previous year.

The volume of investments in the R&D area is mostly influenced by the availability of people who are not only qualified but also experienced in working in R&D (71%). An additional 70% of respondents regard the opportunity to benefit from multiple types of support (including a combination of subsidies, investment incentives, tax deductions and other financial tools) as a key factor in increasing R&D investments. In comparison with the previous survey, the results are almost the same and signify a consistency in the attitude of Czech companies over the long term.

When identifying the biggest issues in the current R&D support system, a significant proportion of companies (34%) cite the uncertainty of tax and other authorities in assessing subsidies or tax deductions and over a fifth (21%) selected the unclear guidelines on assessing the eligibility of costs, including how they are calculated, making this the second-largest perceived problem.

The survey results highlight the need for the necessity of legislation changes which should particularly include more precise and simple guidelines, as well as a methodology guideline, increased transparency in assessing subsidy application and the need for a stabilised interpretative praxis among all inspecting authorities.
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