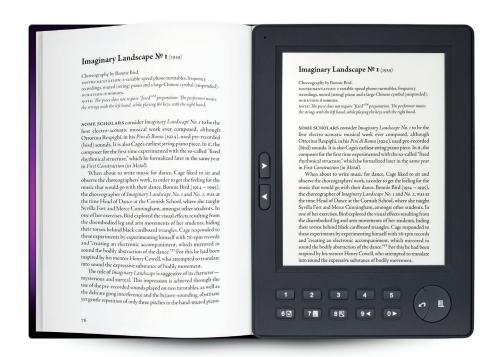
Deloitte.

Romania Corporate R&D Report 2014





Foreword



It is my pleasure to introduce this report, which attempts to assess the factors that influence Romanian companies' spending on Research & Development (R&D) and to identify those of the greatest importance to national economic success.

Today, R&D is widely recognised as a key driver of global economic competitiveness. Indeed, in this survey 81% of Romanian respondents say that in their experience R&D expenditure results in the improved competitiveness of their products and services.

It is therefore somewhat surprising to see that Romania as a whole spends just 0.49% of its GDP on R&D, the lowest proportion among the 10 CE countries participating in the survey (the others being Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland and Slovakia).

Reasons given for this low spend include a lack of perceived government incentives to encourage expenditure, as well as the poor promotion of those that do exist, too much bureaucracy in the application process and concerns about the treatment of R&D spending by the tax authority.

In 2014-2020, EUR 1,066,927,655 is allocated through EU funds to Romania in order to support a strengthening in research, technological development and innovation. In this view, we are optimistic about the increase in absorption rate of these funds.

That said, it is encouraging to note that over 80% of respondents anticipate spending more over the next three to five years, while none expect to decrease their R&D budgets. Still, there is a very long way to go for Romania to achieve the Europe 2020 Strategy's target of 2% of GDP being allocated to R&D activities. Perhaps the publication of this report is just one small step in that journey.

I am very grateful to those enterprises, active in R&D, who devoted some of their time to sharing their views and helping enable this survey to take place, and I very much hope that you will find this report insightful.

Ahmed Hassan

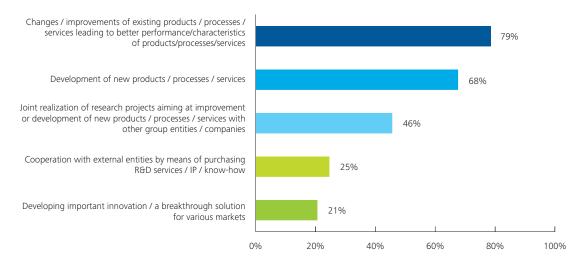
Managing Partner Deloitte Romania

R&D definition

According to the Romanian companies participating in the 2014 Corporate R&D survey, while R&D is perceived as the development of new products, processes and services (68%), it is seen even more as making significant changes or improvements to existing ones (79%). Almost half of the firms involved consider that R&D includes the joint realisation of research projects aimed at improving or developing new products and services in collaboration with other group entities/companies (46%).

The development of an important innovation or of a breakthrough solution for various markets (25%) and co-operation with external entities by means of purchasing their R&D services, externally-developed intellectual property rights or know-how (21%) are less often seen as part being R&D.

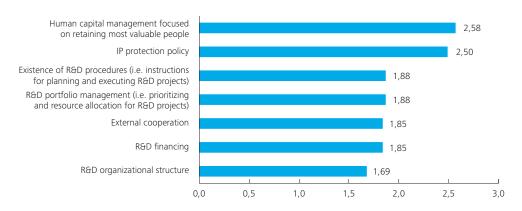
Graph 1: What best describes your R&D activity?



19% of respondents said their companies didn't have an R&D policy. As for the others, the two most important aspects for the company's R&D policy are considered to be an IP protection policy (2.50) and human capital, as in retaining the most valuable people (2.58).

The specialist literature considers employee retention to be a key issue for many companies that have R&D divisions. Some of the solutions highlighted by experts in this field as the most effective retention factors are long-term career opportunities and a unique organisational culture that encourages high performance.

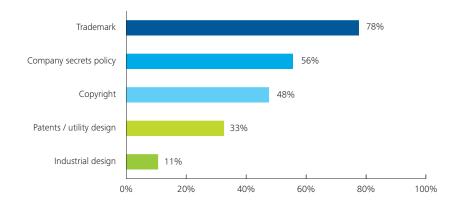
Graph 2: Please rate importance of the following aspects in your firm's R&D policy



Note: the importance of the above factors is rated on a scale from 0 to 3 where 0 means "a factor without any influence" and 3 means "the most important factor".

As for intellectual property, the most relevant means of protection chosen by the respondents were trademarks (78%) and a company secrets policy (56%). Industrial design registered the lowest score (11%).

Graph 3: How do you protect Intellectual Property / know-how in your company?

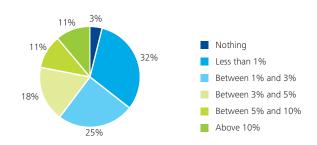


R&D expenditure

The survey shows that most respondent companies (57%) spend up to 3% of their turnover on R&D. The highest spending (over 5%) is claimed by 22% of companies, which mainly operate in the IT media and telecommunications sector.

Only 3% of Romanian respondents told us that they spend nothing at all on R&D.

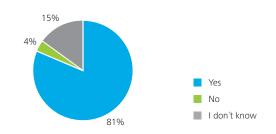
Graph 4: What percentage of your turnover was spent on R&D in 2013?



Although most of the respondents state that they do not spend very much on R&D, they also admit that in their experience doing so increases the competitiveness of their products or services (81%).

However, it is interesting to note that 15% of the respondents are unable to assess the impact of their R&D spend in this way.

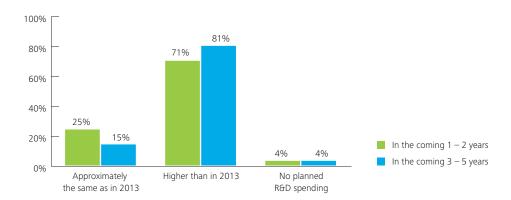
Graph 5: From your experience, have R&D costs increased the competitiveness of your product/services?



A significant percentage of companies (71%) intend to increase the amount they spend on R&D in the years to come. Looking ahead by three to five years, this percentage goes up to 81%. The availability of new, larger R&D grants – which companies also expect to see in years to come – has a significant role to play in these expected positive changes.

25% of companies expect to maintain R&D spending at the same level during the next one to two years. However, looking further ahead, this proportion decreases to 15%. It's interesting to note that no respondents are planning to reduce their R&D spending in the future.

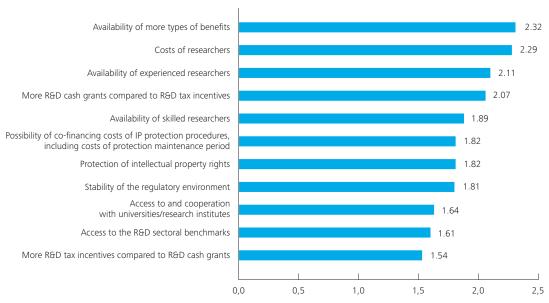
Graph 6: How would you foresee the R&D spending of your company?



One of the key questions of this survey focused on the analysis of those external factors that could most effectively encourage Romania-based companies to increase their R&D spending. Responses show that the most important factors are the availability of various types of benefits (cash grants, tax allowances etc.) and the cost of researchers. These factors are closely followed by the availability of experienced researchers and a greater emphasis on cash grants, as opposed to tax incentives.

Although access to R&D sectoral benchmarks, the stability of the regulatory environment and the lack of R&D tax incentives compared to cash grants are considered the least important external factors likely to influence an increase in R&D spending, they still registered among the preferences of over half of the respondents.

Graph 7: To what extent would the external factors mentioned below influence the increase of your R&D spending in the coming 1-2 years?



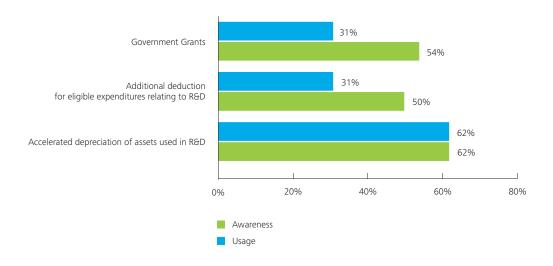
Note: the importance of the above factors is rated on a scale from 0 to 3 where 0 means "a factor without any influence" and 3 means "the most important factor".

Usage of R&D grants and tax incentives

As well as the expectations and external factors determining the level of companies' R&D spending, the survey also explored how familiar companies are with the most important government benefits (cash grant schemes and R&D tax incentives), and whether or not they use them.

As indicated in chart 8, 62% of the companies know about and benefit from the accelerated depreciation of assets used in R&D. In addition, over 50% of respondents claim to be familiar with other incentives, such as government grants and the additional deduction for eligible expenditures relating to R&D, which increased in 2013 from 20% to 50%. However, less than half of them have actually used these benefits.

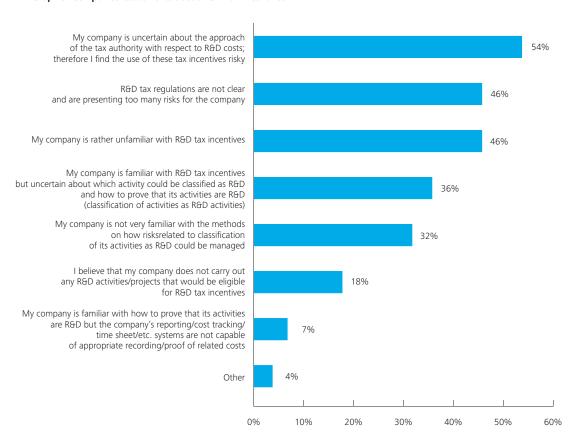
Graph 8: Awareness and usage of grants and tax incentives



The main obstacle to using R&D tax incentives appears to be uncertainty about the tax authority's approach to the treatment of R&D costs. Also, 46% of companies are not familiar with R&D tax incentives. In addition, it is important to note that almost half of respondents (46%) consider R&D tax regulations to be unclear and laden with risk for the company.

Further perceived difficulties in claiming R&D-related tax benefits, cited by around one third of companies, included uncertainty and risk-management issues relating to the classification of activities as R&D.

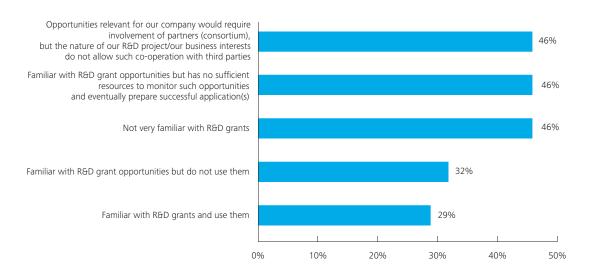
Graph 9: Companies' statements about R&D Tax Incentives



29% of the companies surveyed in Romania are familiar with and make use of R&D grant programmes. However, 46% of respondents stated that, although they are familiar with R&D grant opportunities, they are unable to benefit from them. This is because those that are relevant require the involvement of partners in a consortium; the nature of these respondents' R&D projects or business interests does not allow such co-operation with third parties.

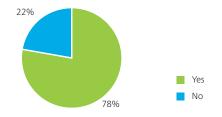
At the same time, 46% are familiar with the programmes but are unable due to a lack of resources either to monitor grant opportunities or to manage them once received. A similar percentage of companies (46%) admitted a lack of awareness relating to R&D grants, while almost a third (32%) said they were familiar with R&D grants but didn't use them.

Graph 10: Companies' statements about R&D grants



Over three quarters (78%) of companies conduct their R&D projects in collaboration with third parties. The main driver for most of these (86%) seems to be the need to carry out research projects. On the other hand, the most important reason for a lack of collaboration with third parties is that companies already have a Romania-based R&D centre within the organisation (mainly in Bucharest).

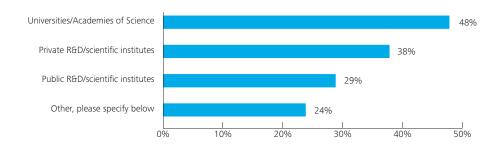
Graph 11: Are you cooperating with third parties when you are carrying out R&D projects?



Almost half of respondent companies collaborate with universities or academies of science. Private R&D/scientific institutes are partners for 38% of these companies, and their public counterparts are partners to 29% of these respondents.

24% of these companies said they collaborate with other public or private companies.

Graph 12: What entities are you cooperating with?



Finally, the participating companies were asked to state some of the reasons why Romania has the lowest R&D expenditure among the 10 countries in the survey. The most common answers referred to the lack of available grants, insufficient promotion and a lack of information available to Romanian companies. The lack of interest in R&D on the part of government and politicians, the non-accountability of government agencies and unclear legislation are additional issues worth considering.

Other complaints included:

- the exaggerated bureaucracy in meeting eligibility criteria for co-financing
- the difficulties met in managing R&D funds (e.g. The National Authority for Scientific Research activity and procedures)
- the fact that too few investors are willing to stimulate R&D activity
- a distrust of the state's long-term and medium-term economic policies
- the major technological gap between Romania and other more developed countries
- the lack of a well-known and regulated national programme to stimulate R&D activities.

Other reasons given included the small size of the local market, the limited number of local commercial success stories, the local experts who are leaving the country (and not being encouraged to come back) and the lack of educational standards in universities (both for teachers and students).

The Europe 2020 Strategy aims to foster smart growth by supporting sustained investment in innovation. In 2012, Romania invested only 0.49% of GDP in Research & Development, with more than 80% accounted for by the Romanian public sector. A steep change in behaviour is needed in order to achieve the national Europe 2020 target of 2% of GDP by 2020. Country Specific Recommendations 2013 envisaged closer links between research, innovation and industry, in particular by prioritising R&D activities that have the potential to attract private investment.

The strategy identifies the following thematic priorities related to public research, development and innovation (RDI) investments for the next six years:

- Bio-economy (agriculture and forestry, fisheries and aquaculture, food, biotechnologies and biopharmaceuticals)
- · ICT, space and security
- · Energy, environment and climate change
- Eco-nano-technologies and advanced materials
- Health.

Regional perspective

Partner's Foreword



Central European countries are in the process of transforming into knowledge—based economies. They can no longer compete with low-cost labour on the global market. This has already been acknowledged by Asian countries, whose share in global spending on R&D is still rising – from 33% in 2009 to nearly 40% in 2014 (and China's from 10% to nearly 18%). In the meanwhile Europe is decreasing its participation – down from 26% of the total in 2009 to 22% in 2014¹.

After political changes, countries in the region have begun their transformation from a similar level although currently they are at different stages of development. The European Commission's Innovation Union Scoreboard 2014 shows that among countries taking part in the survey, only Estonia is ranked in the group of so-called *innovation followers* (those whose innovation performance is close to or above the EU average). Croatia, the Czech Republic, Hungary, Lithuania, Poland and Slovakia are among the *moderate innovators* with performance below the EU average, while Bulgaria, Latvia and Romania are rated as *modest innovators* (innovation performance well below the EU average).

Innovation-wise we all are looking in the same direction. However, a differentiated approach to supporting R&D is apparent across the region. As the findings of last year's survey showed, the R&D activities of companies vary across the region and different factors are influencing increase of spending on R&D. Much is however to be learnt and shared – this is one of main reasons for covering additional countries in this year's survey, gathering data from 10 countries in the region. This brings us the opportunity to compare how countries stimulate R&D activities, how implemented systems are evaluated by enterprises and how this impacts the effectiveness of various systems.

Supplementary to the on-line survey, we have conducted detailed interviews with representatives of some of the best-known R&D developers in the region. Key quotes from these interviews provide a valuable complement to the survey conclusions presented in the report.

I very much hope that you find this report an interesting and insightful read.

Magdalena Burnat-Mikosz

(Usual ()

Partner

Central European Leader for Deloitte R&D and Government Incentives Service Line

¹ 2014 Global R&D Funding Forecast by Battelle and R&D Magazine

Key trends and findings:

- Availability of more types of incentives is still the most important factor affecting the level of expenditure on R&D. Results of the survey show that cash grants are only a slightly more frequently expected incentive than tax reliefs a mixed system, combining these two schemes, is perceived as the most effective way to support companies' R&D activities. In order to maintain the present rising trend of companies' share in R&D expenditure, it is essential to adjust the support schemes available in Central Europe to match enterprise expectations².
- Predicted percentage of R&D expenditures is declining overall more companies are allocating less than 1% and under 3% of their turnover to R&D, while those allocating over 10% have declined from 24% to 22.1% of the sample. As indicated above, the availability of incentives strongly influences R&D spending; this means slightly pessimistic forecasts regarding short-term R&D spending may result from ongoing work on support schemes under the EU 2014-2020 agenda and limited availability of grants.
- Increasing numbers of companies are collaborating with research units, indicating a trend towards strengthening co-operation between business and science. The proportion of companies with their own R&D centre is also growing, and this results in the fact that the availability of skilled and experienced researchers is one of the most important factors influencing R&D expenditure. However, the possibility of co-operating with universities / research institutes is still highly appreciated and desirable in R&D activities.

Key trends and findings:

- We can see a number of changes in how companies define R&D and their R&D activities. While the proportion of firms in 2014 defining R&D as changes / improvements of existing products / processes / services leading to better performance / characteristics of products / processes / services has fallen from 67% to 65.2%, this selection has also moved up from third to first place. The leading definition in 2013 (Development of new products / processes / services) has fallen from 88% to 60%, while the third most popular definition is joint realisation of research projects aimed at improvement or development of new products/processes/services with other capital group entities/companies. (It rises from fourth to third despite a reduction in support from 49% to 29.4%). Clear and transparent understanding of R&D is being underlined by firms in the region as important factor for all support schemes.
- IP / know-how are protected usually in the form of a company secrets
 policy and trademarks. However, companies declare that the most
 effective way is to combine different forms of protection and tailor them to
 the specific needs of different sectors.

² In 2011 BERD (Business Expenditures on R&D) index value for Europe Union was 54.9% and only Estonia had this index value above the average (55%). The lowest index was in Bulgaria (16.9%), Latvia (24.8%), Poland (28.1%) and Lithuania (28.2%) – Eurostat

Findings

Definition of companies' R&D activities

Within last year's survey, respondents were asked to define their understanding of R&D. This year, we invited them to describe their R&D activities – and there have been some major changes in their answers.

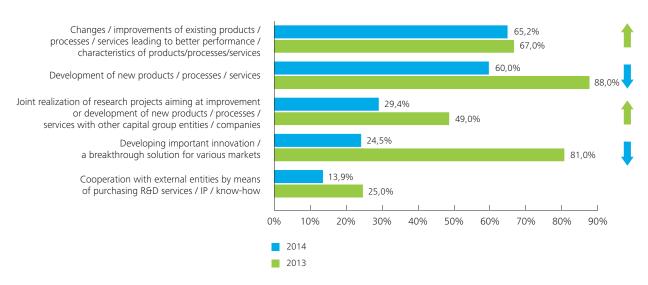
In the 2014 report, 65.2% of companies across the region defined R&D activity as making *Changes I improvements to existing products I processes I services, leading to better performance I characteristics of products I processes I services.* This was a small decline comparing to 2013's 67%, but despite this the definition has moved up from number three to the number one choice. Its new popularity was driven up by above average selection in Estonia (87.5%) and Romania (78.6%).

In the 2013 report, the leading definition of choice was the *Development of new products / processes / services*, chosen by 88% of respondents. In 2014, this has slipped to 60%, although it attracted 75% of respondents in Lithuania.

2014's third most popular definition, with 29.4%, is the Joint realisation of research projects aimed at improvement or development of new products / processes / services with other capital group entities / companies. In the 2013 report, this was number four with 49%. This year, it was driven up by above average scores in Romania (over 46%) and Estonia (over 37%).

Perhaps the most significant change in the definition of R&D activities appeared within the *Co-operation with external entities by means of purchasing R&D services/IP/know-how*. This has been observed particularly among Polish respondents – last year, 68% declared that it is how they understand R&D activities; this year, that figure went down to 19.4%.

What best describes your R&D activity?



Spending on R&D

The 2014 report shows that in 2013 20.6% of companies allocated less than 1% of their turnover to R&D – this went up from 15% in 2012. There was also an increase in companies allocating less than 3% of their turnover to R&D (rising to 41.8% from 36% in 2012).

Meanwhile, just 22.1% of companies allocated more than 10% of their turnover on R&D, down from 24%. However, in Slovakia (as in the previous year) and Bulgaria the percentage is well above average at 54.5% and 40% respectively.

Only 5.5% of companies allocated no expenditure for R&D activities in 2013, down from 2012's 10%. Hungary (17.8%) and Poland (9.7%), however both significantly exceeded the average.

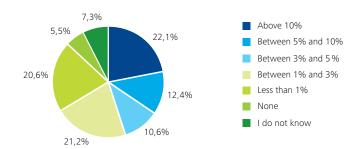
20.5% of companies in Croatia, 12.1% in Slovakia and 11.1% in Poland do not know how much expenditure has been allocated to R&D activities. In Poland, this might be the case because there are no effective incentives in place that encourage them to keep solid records of their R&D expenditure.

Across the region, 88.5% of companies plan to maintain the current level of spending or increase it in the short term (one to two years). At the same time, 89.7% expect to maintain or increase spending in the next three to five years. All the respondent companies in Lithuania and Estonia are confident that there will be no decrease in spending on R&D over the next five years.

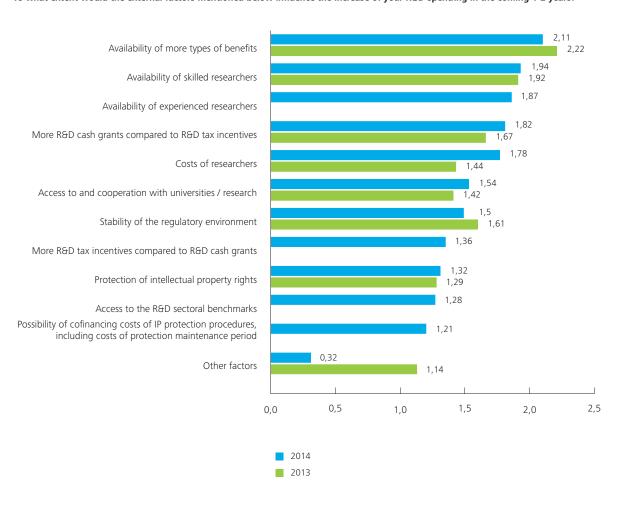
Across the region, 4.8% of respondents expect to make no expenditure in the next five years - only in Bulgaria, Estonia and Lithuania did no respondents make this claim. It is also worth noting the results from Romania, where 67.9% of companies plan to increase expenditure in the next two years and 78.6% in the next three to five years (the averages for the region are 42% and 58% respectively).

Responses indicate positive forecasts in terms of the economic situation of companies, and may result from the fact that in years to come significant R&D support will be available from EU funds.

What percentage of your turnover was spent on R&D in 2013?



To what extent would the external factors mentioned below influence the increase of your R&D spending in the coming 1-2 years?



As in the previous survey, the most important factor affecting the level of expenditure on R&D over the next two years is to be the availability of more types of incentives – this was chosen as the most important factor by more than 50% of companies in Bulgaria, Estonia and Romania, and almost 54% of companies in Poland.

The next most important factors are the availability of skilled and experienced researchers (particularly important in Bulgaria and Lithuania, where it is the most important factor for over 60% of companies) and issues related to the cost of R&D activities (selected by 50% of companies from Lithuania).

The international experience of GM indicates that the availability of incentives for R&D activities, that may be an element of a long-term development strategy, significantly facilitates "acquisition" and execution of high-tech projects by companies in local countries.

Paweł Widel, Governmental Relations Director, General Motors Poland Sp. z o.o.

Respondents indicate that the availability of grants stimulates spending more than the availability of tax incentives. This is particularly the case for companies in Bulgaria and Poland, where 48% or more chose this answer. The importance of grants is growing too – in 2014, they were chosen by 34.5% of respondents across the region, compared to 22% in 2013.

In Slovakia, while over 50% of companies declare that grants are more important than tax incentives in influencing their R&D expenditure, only 12% say more tax incentives would not be an influencing factor. This is of significant importance as a new tax incentive is to be introduced there on July 1st 2014, which is expected to have a positive impact on R&D spending in Slovakia.

One factor that has declined in importance is the stability of the regulatory environment. In 2013, this was the factor with the greatest impact on expenditure for 22% of respondents; in 2014, it has fallen to 18.8%. This may mean that there is a generally positive attitude to those authorities that have not made significant changes in the legislation regulating R&D

Almost 47% of companies in Latvia consider the possibility of co-financing the costs of IP protection procedures, including the costs of maintaining protection, to be a factor with no influence on their R&D spending.

Companies' R&D policies and Intellectual Property / know-how protection

Almost 21% of companies in the region say they have no R&D policy. Clearly above average in having no policy are companies from Estonia (50%), Hungary (42.2%), Croatia (28.2%) and Poland (27.8%).

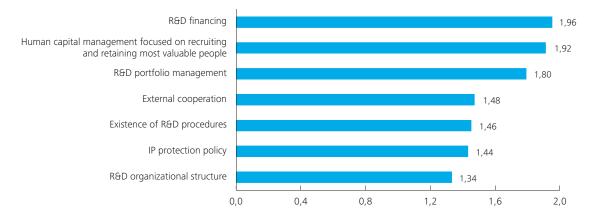
The key factors for the majority of R&D policies are sources of funding and the availability of appropriate human resources. In terms of R&D financing, an above average number of responses indicate that this is the most important factor for companies from Romania (57.1%), Slovakia (45.5%) and Poland (43.1%).

At the same time, 15.6% of companies from Hungary declare that this is a factor without any influence at all on their R&D policy.

Significant numbers of companies in Romania (60.7%), Slovakia (54.5%) and Lithuania (50%) recognise Human capital management focused on recruiting and retaining the most valuable people as the most important factor.

Please rate importance of the following aspects in your firm's R&D policy

(0 - no influence, 3 - highest influence)

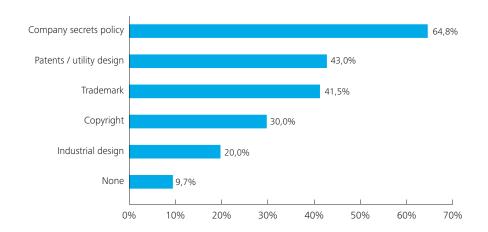


The most common means of protecting IP / know-how (at 64.8% firms across the region) is the company secrets policy. This is above average in Estonia (87.5%), Croatia (79.5%) and Poland (76.4%). The trademark is the most popular form of protection in Romania (75%) and Bulgaria (53.3%). 44.2% of companies in the region benefit from patent protection, but only 23.1% do so in Croatia and 20% in Latvia. While 9.7% of companies in Central Europe do not protect their IP / know-how, this figure is significantly higher in Hungary and Lithuania (25%). All respondents from Romania and Estonia declared that they protect their IP / know-how.

The most efficient and effective way to manage intellectual property rights is a tailor-made policy that combines patents and trade secrets protection.

Łukasz Socha, Vice President, HS Wrocław sp. z o.o.

How do you protect Intellectual Property / know-how in your company?

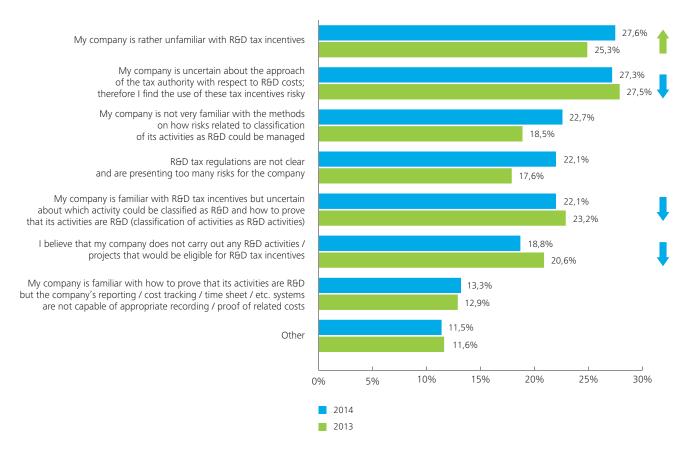


Usage of R&D grants and tax incentives

Increasing numbers of companies say they are not very familiar with the methods of managing risks associated with the classification of their activities as R&D; this has risen from 19% in 2013 to 22.7% in this year's report. Also rising are those saying that R&D tax regulations are not clear and present the company with too many risks (up from 18% to 22.1%). These findings may mean that the systems of R&D tax incentives are becoming unclear; fewer companies are therefore

benefitting from it, leading to a strong preference for grants (as shown by the answer to the previous question). There is a lack of knowledge about tax incentives among 67% of companies from Bulgaria. In Latvia, 60% of companies state that they do not carry out any R&D activities or projects that would be eligible for R&D tax incentives. This is an important finding given the introduction of a new R&D tax incentive on July 1st 2014.

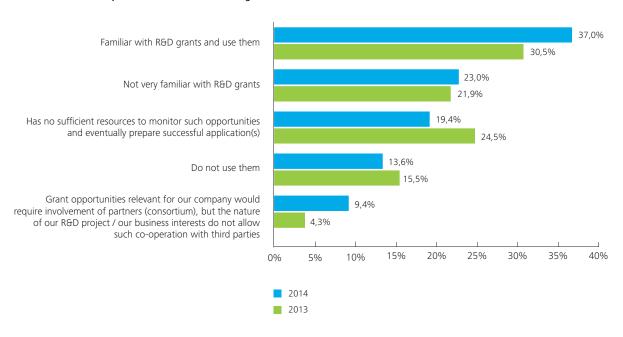
Companies' statements about R&D tax incentives



Across the CE region, 37% of companies are familiar with and use R&D grant opportunities (up from 31% in the 2013 survey). This proportion is particularly high in the Czech Republic (almost 60%) and far below average in the Baltic countries (16%). At the same time, 23% of respondents across the region are not very familiar with R&D grants (rising to 43.6% in Croatia and 42.9% in Romania).

In addition, 19.4% of respondents indicate that they do not have sufficient resources to monitor grant opportunities and submit a successful application (down from 25% in 2013); in Poland, however, the figure is almost twice as high at 36.1% (an increase from 29% in 2013). Such answers about discouraging bureaucracy and doubts concerning the use of available sources of support are particularly alarming when we consider that companies claim that their R&D spending is largely determined by the availability of external funding.

Companies' statements about R&D grants

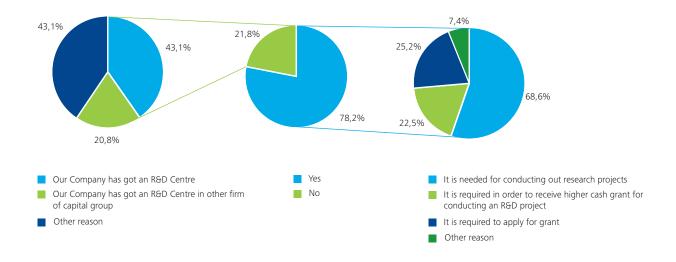


Co-operation with third parties while carrying out R&D projects

A very high proportion (78.2%) of companies say they work with third parties during the implementation of R&D projects (up from 65% in 2013). While the most important primary factor driving co-operation across the region is that it's vital to carrying out projects, grant requirements and the possibility of receiving higher funding are almost equally important in Poland. For those companies that have their own R&D centres (either within the immediate structure of the business or in a sister firm in the same capital group), this is the most important reason for not collaborating with third parties.

While most companies in the CE region co-operate with universities / academies of science, there is an increase in the importance of public and private R&D / scientific institutes (29.8% and 35.7% respectively, up from 25.8% and 33.8%).

Cooperation with third parties when the companies are carrying out R&D projects



Regional contacts

R&D and Government Incentives

CENTRAL EUROPE

Magdalena Burnat-Mikosz

Partner

Phone: +48 22 511 00 65

E-mail: mburnatmikosz@deloittece.com

BULGARIA

Georgi Sarakostov

Partner

Phone: +359 (2) 8023 118

E-mail: gsarakostov@deloittece.com

CROATIA

Sonja Ifković

Director

Phone: +36 1 2351 915 E-mail: sifkovic@deloittece.com

CZECH REPUBLIC

Luděk Hanáček

Director

Phone: +420 246 042 108 E-mail: lhanacek@deloittece.com

ESTONIA

Veiko Hintsov

Partner

Phone: +372 6406512

E-mail: vhintsov@deloittece.com

HUNGARY

Dr. Csaba Markus

Director

Phone: +36 (1) 428 6793 E-mail: csmarkus@deloittece.com

LATVIA

Jānis Čupāns

Director

Phone: +371 (6) 7074171 E-mail: jcupans@deloittece.com

LITHUANIA

Tatjana Vaičiulienė

Director

Phone: +370 (5) 2553004

E-mail: tvaiciuliene@deloittece.com

POLAND

Magdalena Burnat-Mikosz

Partner

Phone: +48 (22) 511 00 65

E-mail: mburnatmikosz@deloittece.com

Michał Turczyk

Director

Phone: +48 (12) 394 43 38 E-mail: mturczyk@deloittece.com

ROMANIA

Oana Petrescu

Partner

Phone: +40 (21) 2075 288 E-mail: opetrescu@deloittece.com

SLOVAKIA

Martin Rybar

Director

Phone: +421 258 249 113 E-mail: mrybar@deloittece.com

CE Clients & Markets

Halina Frańczak

Director

Phone: +48 (22) 511 00 21 E-mail: hfranczak@deloittece.com

Cem Turan

Manager

Phone: +420 234 078 464 E-mail: cturan@deloittece.com

Local contacts

Ahmed Hassan

Managing Partner
Tel.: +40 (21) 2075 260

E-mail: ahhassan@deloittece.com

Oana Petrescu

Partner in Charge, Management Consulting

Tel.: + 40 21 207 52 88

E-mail: opetrescu@deloittece.com

Tiberiu Negulescu

Manager, Management Consulting

Tel: + 40 21 207 53 07

E-mail: tnegulescu@deloittece.com

Ioana Bardan

Senior Co-ordinator, Clients & Markets

Tel: + 40 21 207 54 52

E-mail:ibardan@deloittece.com

This publication contains general information only, and none of Deloitte Touche Tohmatsu Limited, any of its member firms or any of the foregoing's affiliates (collectively the "Deloitte Network") are, by means of this publication, rendering accounting, business, financial, investment, legal, tax, or other professional advice or services.

This publication is not a substitute for such professional advice or services, nor should it be used as a basis for any decision or action that may affect your finances or your business. Before making any decision or taking any action that may affect your finances or your business, you should consult a qualified professional adviser. No entity in the Deloitte Network shall be responsible for any loss whatsoever sustained by any person who relies on this publication.

"Deloitte" is the brand under which tens of thousands of dedicated professionals in independent firms throughout the world collaborate to provide audit, consulting, financial advisory, risk management, and tax and legal services to selected clients. These firms are members of Deloitte Touche Tohmatsu Limited (DTTL), a UK private company limited by guarantee. Each member firm provides services in a particular geographic area and is subject to the laws and professional regulations of the particular country or countries in which it operates. DTTL does not itself provide services to clients. DTTL and DTTL member firm are separate and distinct legal entities, which cannot obligate the other entities. DTTL and each DTTL member firm are only liable for their own acts or omissions, and not those of each other. Each of the member firms operates under the names "Deloitte", "Deloitte & Touche", "Deloitte Touche Tohmatsu", or other related names. Each DTTL member firm is structured differently in accordance with national laws, regulations, customary practice, and other factors, and may secure the provision of professional services in their territories through subsidiaries, affiliates, and/or other entities.

Deloitte Central Europe is a regional organization of entities organized under the umbrella of Deloitte Central Europe Holdings Limited, the member firm in Central Europe of Deloitte Touche Tohmatsu Limited. Services are provided by the subsidiaries and affiliates of Deloitte Central Europe Holdings Limited, which are separate and independent legal entities. The subsidiaries and affiliates of Deloitte Central Europe Holdings Limited are among the region's leading professional services firms, providing services through more than 3,900 people in 34 offices in 17 countries.

Deloitte provides audit, tax, consulting, and financial advisory services to public and private clients spanning multiple industries. With a globally connected network of member firms in more than 150 countries, Deloitte brings world-class capabilities and deep local expertise to help clients succeed wherever they operate. Deloitte's approximately 200,000 professionals are committed to becoming the standard of excellence.