

R&D tax incentives:

A ranking of the world's most attractive regimes

R & D demystified

On August 17, the *Inspection Générale des Finances* [general inspectorate of finance] (IGF) presented to the government, at the latter's request, a report assessing the tax exemption system (tax expenditures, or "*niches fiscales et sociales*"). This report comes to an extremely positive conclusion on the Research Tax Credit. The IGF's report gives the RTC the highest possible effectiveness rating of 3 out of 3 and underscores the RTC's beneficial effects on French enterprises' employment and productivity.

Taj's tax experts and engineers have compared the different R&D tax incentives in **13 OECD countries**.

This study considers a variety of countries (Japan, the United States, France, Germany, Brazil, China, etc.) as well as a variety of types of support available in each country analyzed (direct, indirect, targeted, etc.):

- What are the different types of support available?
- Which country offers **the most attractive** support system for large-sized enterprises?
- For small- and medium-sized enterprises?
- **Is the R&D support system in France** among the most attractive?

Our partners remain at your disposal to discuss the results of this study in greater detail.

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I. Overview of the support systems in the countries studied

1. Countries with a tax credit system

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| Australia | <p>Australia operates under a tax deduction regime. There are two components to the deduction: first, 175% of the difference between the amount of eligible expenditures for the current year and the average of eligible expenditures for the prior three years; and second, 125% of eligible expenditures for the current year.</p> <p>Additionally, the Australian Parliament is currently reviewing an alternative tax credit measure, which would correspond to 45% of eligible expenditures for SMEs versus 40% for large-sized enterprises.</p> |
| Brazil | <p>Brazil has a tax deduction regime. The base rate is 160% of eligible expenditures. However, if the enterprise increases its number of researchers by up to 5%, the deduction rate rises to 170%. If the enterprise increases its number of researchers by more than 5%, the deduction rate then rises to 180%.</p> |
| Canada | <p>Canadian-controlled private corporations (CCPCs) can earn an investment tax credit (ITC) of 35% of qualified expenditures for scientific research and experimental development (SR&ED) carried out in Canada, up to a maximum of \$3 million, and 20% of any excess amount. Other Canadian corporations, sole proprietorships, partnerships and trusts can earn an ITC of 20% of qualified expenditures for SR&ED carried out in Canada.</p> |
| United States | <p>The federal tax credit is not a permanent measure although it is regularly extended. It corresponds to 14% of the difference between total eligible expenditures for the current year and the average of eligible expenditures over the prior three years.</p> |
| France | <p>The RTC is equal to 30% of a base that includes: expenditures for personnel directly involved in R&D, the amounts of depreciation of fixed assets used in research activities, general and administrative expenses (set at a standard rate of 50% of personnel expenditures + 75% of depreciation of fixed assets used in R&D activities), costs to acquire and defend patents, private-sector outsourcing between independent entities up to a limit of 10 million euros, public-sector outsourcing up to a limit of 12 million euros, technological intelligence and, lastly, a standard allowance for external consulting up to a limit of 15 thousand euros or 5% of the base. Subsidized rates of 40% and 35% of the above-referenced expenditures are available to first-time applicants for the first two years.</p> |
| Japan | <p>Japan's research tax credit is volume based and incremental. The rate is different for SMEs and large-sized enterprises. For SMEs, the base for the tax credit is 12% of eligible expenditures. To that is added 5% of the difference between the amount of the eligible expenditures for the year and the average of eligible expenditures for the prior three years. Large-sized enterprises have a lower rate (8-10%) for the base credit, but enjoy the same rate for the incremental credit.</p> |

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| United Kingdom | <p>The United Kingdom differentiates between SMEs and large-sized enterprises. The first are entitled to a tax deduction of 175% of their eligible expenditures, while the second receive a 130% tax reduction rate for these same expenditures. Additionally, loss-making enterprises have the option of converting this tax deduction into a credit at a rate of 24.5%.</p> <p>However, SMEs cannot receive a tax benefit of more than 7.5 million euros per project, when the amount of their tax reduction is greater than it would have been if the enterprise had been subject to the rate applied to large-sized enterprises.</p> |
| Russia | <p>Enterprises benefit from a tax deduction of 150% of their R&D expenditures whether or not they yield the expected results. In addition, Russia allows a tax deduction for the amount of R&D expenditures once they lead to the creation of new products and services.</p> |

2. Companies with an expense deduction system

| | |
|--------------------|--|
| Belgium | <p>The tax owed on salaries for research staff is reduced by 75%. There is also a measure that can be used only once per enterprise. The enterprise can then deduct 15.5% of the total amount of its R&D investments from its taxable base. Alternatively, the enterprise may choose to deduct 22.5% of the amount of the depreciation of its investments from its taxable base, by spreading this deduction over the depreciation term.</p> |
| Netherlands | <p>The Netherlands offers a reduction of 50% of the amount of the taxes on salaries for the salary bracket going up to 220 thousand euros, and of 18% above this threshold. However, the total amount of the reductions must not exceed 14 million euros.</p> |

3. Special cases

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| <p>China</p> | <p>China offers a tax deduction of 150% of the amount of eligible expenditures.</p> <p>At the same time, enterprises with High and New Technology Enterprise (HNTE) status benefit from a reduction in the corporate tax rate from 25% to 15%. In 2009, there were more than 16,000 enterprises with this status, of which the overwhelming majority were Chinese. The difficulty of obtaining this status could explain the low number of subsidiaries of HNTE multinationals.</p> <p>Obtaining this status in fact implies a significant transfer of IP into China. Moreover, revenues from technology transfers are exempt from corporate tax up to a limit of 5 million yuan, and are subject to a reduced rate of 12.5% over and above 5 million. Other special tax measures to support R&D have been implemented at both the national and provincial level. We cite, for example, certain tax exemptions for new enterprises in the IT and ICT sector.</p> |
| <p>India</p> | <p>The R&D tax support system in India takes the form of a tax deduction regime. An enterprise can deduct 150% of its eligible research expenditures, as well as 125% of expenditures on outsourcing to approved non-commercial organizations, from its taxable base. Since April 1, 2009, enterprises in all sectors have been able to benefit from this program, with the exception of certain sectors that have been “blacklisted” (tobacco, cosmetics, beer, wine, etc.).</p> <p>The system is not universal, however. In fact, to qualify, the enterprise must seek the approval of the Department of Scientific and Industrial Research (DSIR). To date, 1,327 in-house R&D departments have been accredited, of which 1,245 in the private sector.</p> |
| <p>Germany</p> | <p>For the time being, there are no tax measures in place to support R&D. There are, however, direct subsidies in certain industries such as pharmaceuticals, automotive, energy and IT.</p> |

II. The simulation

Overview of the methodology used by Taj's experts

We have considered three types of enterprises:

- 1) A large-sized enterprise,
- 2) A fast-growing SME,
- 3) A medium-sized enterprise that uses outsourcing.

We then looked at the amount of direct support each enterprise would receive in each of the countries studied, to draw conclusions on the various R&D tax support regimes.

Lastly, we considered different types of R&D support in this study:

- **Direct support:**

This is support granted on the basis of the R&D carried out. For example, a tax deduction for personnel expenses in proportion to the time spent by the latter on R&D activities is direct support. This is also the case for a tax credit whose amount is calculated on the basis of the R&D carried out by the enterprise.

- **Indirect support:**

Indirect support is support whose objective is to encourage R&D without the support being conditioned or calculated on the basis of the research activity itself. A tax reduction on researchers' salaries is therefore indirect support because the amount of support is invariable, regardless of the proportion of the time spent by the researcher on R&D work.

- **Cross-border and cross-sector support:**

In this case, the tax support is available regardless of the enterprise's geographic location or business sector.

- **Targeted support:**

The tax support can only be obtained under certain sector or geographic location conditions.

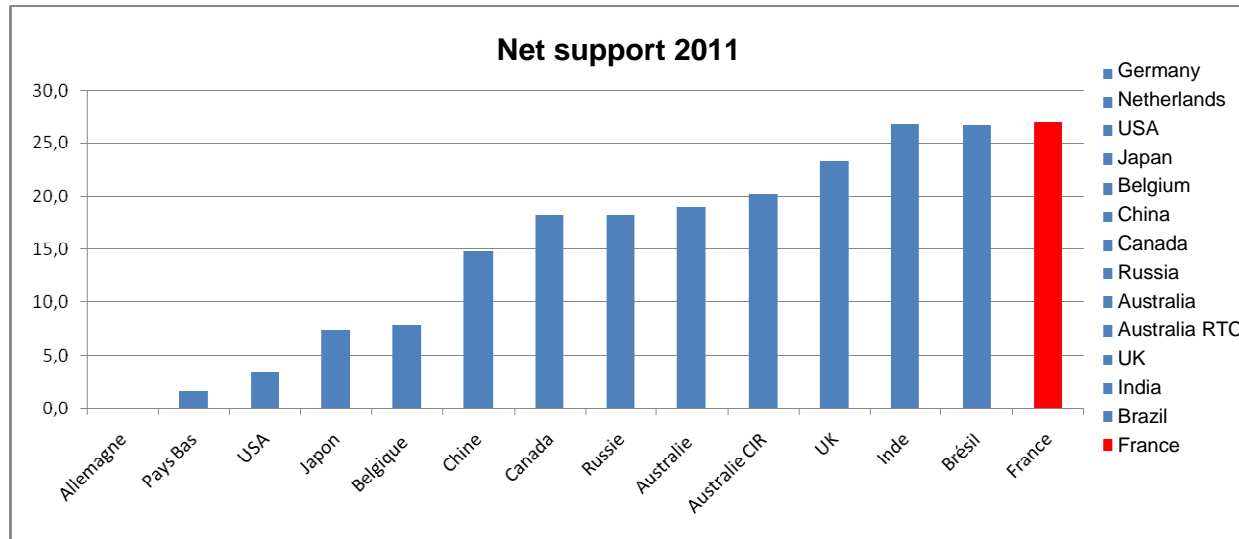
1- SIMULATION: LARGE-SIZED ENTERPRISE

Example: Information and Technology Sector

Characteristics:

- Stable R&D
- 2,000 employees, of which 580 in R&D (350 researchers + 230 technicians)
- Average salaries
 - o Researchers: €50.9 K/Technicians: €33.2 K
- Annual R&D expenditures: €63.4 M (€49 M personnel expenditures + €2.4 M fixed assets + €2.4 M patents + outsourcing + €1.6 M technology intelligence)
- Use of outsourcing (€4 M for private-sector outsourcing + €4 M for public-sector outsourcing)

RESULTS OF THE SIMULATION: LARGE-SIZED ENTERPRISE (in € millions)



FOCUS

- The research tax credit in France proves to be the most favorable system for large-sized enterprises with net support of €27 M for €63.4 M in annual R&D expenditures.
- The R&D support offered in France is twice that offered in China for an enterprise with more than 2,000 employees (€27 M > €14.8 M).
- All of the countries considered offer direct support, only India offers targeted support.
- The top 5 most attractive countries for large-sized enterprises: 1. France – 2. Brazil – 3. India – 4. the United Kingdom – 5. Australia.

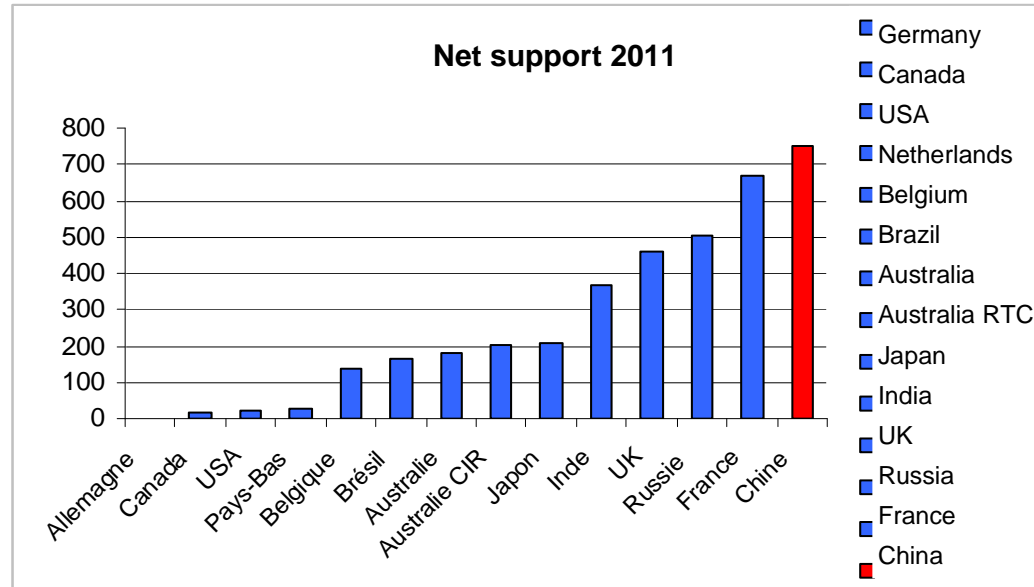
2- SIMULATION: FAST-GROWING SME

Example: Pharmaceutical Sector

Characteristics:

- 26 employees of which 5 in R&D (2 researchers + 3 technicians)
- Average salaries:
 - o Researchers: €42.5 K/Technicians: €14.2 K
- Annual R&D expenditures: €1,562.5 K (€300 K personnel expenditures + €50 K fixed assets + €20 K patents + outsourcing + €5 K technology intelligence)
- Use of outsourcing (€687.5 K for private-sector outsourcing + €500 K for public-sector outsourcing)

RESULTS OF THE SIMULATION: FAST-GROWING SME (in € thousands)



FOCUS

- The French system is ranked second (€671,000), just behind the Chinese support system (€751,400) for €1,562,000 of annual R&D expenditures.
- None of the countries considered offer indirect R&D support.
- The top 5 most attractive countries for fast-growing SMEs: 1. China – 2. France – 3. Russia – 4. the United Kingdom – 5. India.

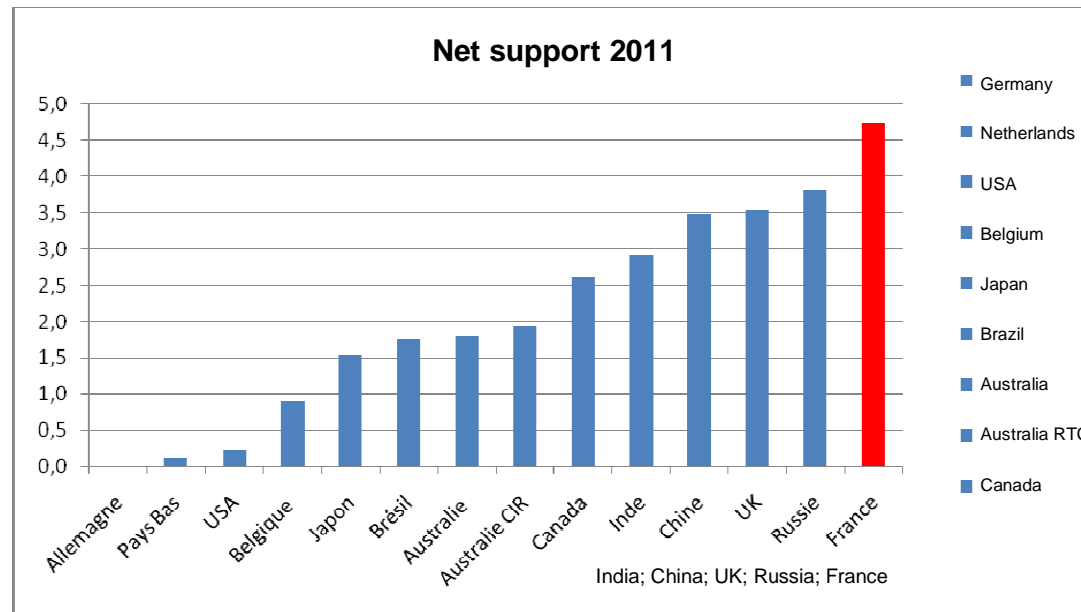
3- SIMULATION: MEDIUM-SIZED ENTERPRISE WITH OUTSOURCING

Example: Information and Technology Sector

Characteristics:

- 132 employees of which 42 in R&D (27 researchers + 15 technicians)
- Average salaries:
 - o Researchers: €43.6 K/Technicians: €33.6 K
- Annual R&D expenditures: €11.33 M (€3.2 M personnel expenditures + €0.15 M fixed assets + €0.2 M patents + outsourcing)
- Use of outsourcing (€4.75 K private-sector outsourcing + €3 K public-sector outsourcing)

RESULTS OF THE SIMULATION: MEDIUM-SIZED ENTERPRISE WITH OUTSOURCING (in € millions)



FOCUS

- The French system is ranked first (€4.7 M) for €1133 M of annual R&D expenditures.
- Only the Netherlands does not offer direct support (hence indirect support).
- The top 5 most attractive countries for medium-sized enterprises: 1. France – 2. Russia – 3. the United Kingdom – 4. China – 5. India.

CONCLUSION

From this study, we are able to identify different categories of countries:

Uncompetitive systems: Belgium, the Netherlands, the United States

First, we note that Germany is a special case in this study as it does not have a tax regime. It then becomes very clear that certain tax systems are uncompetitive, namely those of Belgium, the Netherlands and the United States.

Belgium and the Netherlands differ from the United States in that the tax incentive offered by these two countries consists of a reduction in the amount of the tax on salaries. Thus, this measure does not take into account **any R&D expenditures except those on personnel**. Yet, in our study, personnel expenditures only amounted to 19% and 23% of R&D expenditures for the SME and medium-sized enterprise, respectively.

The ranking of the United States is consistently quite low, inasmuch as the tax deduction that it grants to enterprises engaged in R&D **depends on the differential between eligible expenditures for the current year and for prior years**. Hence, it implies a necessary increase in R&D expenditures. Furthermore, the 14% tax deduction is relatively low compared with the deductions offered in other countries in the study.

Attractive tax system for all types of enterprises: the United Kingdom and France

At the same time, we find that certain countries—the United Kingdom and France—are attractive in terms of taxation for all the types of enterprises we studied. In fact, with a tax deduction rate of 130% on eligible R&D expenditures, the United Kingdom is competitive. This is why, by proposing an even higher rate for SMEs, the United Kingdom is an even more appealing region for the subsidiaries of multinationals from a tax perspective.

France: one of the most attractive counties

France, the leader in our study, comes out **on top in our different rankings** for many reasons. First, the eligible R&D expenditure base is broad, comprising personnel, operational and outsourcing expenses, as well as patent and technology intelligence expenditures. Additionally, although there are caps on eligible expenditures, they are relatively high, allowing enterprises to benefit from sizeable tax credits. Lastly, France applies subsidized rates of 40% and 35% in the first two years for first-time applicants.

Systems with varying degrees of appeal depending on the type of enterprise: Brazil and India for large-sized enterprises, China and Russia for SMEs

Lastly, these simulations permit a comparison of which types of tax regimes are effective for a particular type of enterprise.

In that respect, we can show that the regimes in Brazil and India are favorable for large-sized enterprises in terms of R&D support: both countries offer tax deduction rates of 150-180%. However, while Brazil encourages enterprises to hire even more researchers via an incremental rate of deduction, India allows enterprises to deduct expenditures on outsourcing to approved non-commercial organizations at a rate of 125%.

Similarly, we find that the tax systems in China and Russia are more profitable for fast-growing SMEs. These two countries in fact grant enterprises a 150% tax deduction. Russia also stands out in that it is the only country to grant a 100% tax deduction on the amount of R&D expenditures when the research actually results in the creation of new products and services.

Results of the study: France offers the best R&D support system

These different simulations clearly show that France has one of the best tax regimes in the world in terms of R&D support. In fact, regardless of the size of the enterprise and its relation to outsourcing, the support provided by the French government is always in the top two, and by a wide margin.

A multinational seeking to create a foreign subsidiary would therefore be well advised to establish itself in France, which has a favorable environment for the development of research and innovation.

| Ranking of the most favorable regimes | |
|---------------------------------------|----------------|
| 1 | France |
| 2 | United Kingdom |
| 3 | Russia |
| 4 | China |
| 5 | India |

RECOMMENDATIONS FROM TAJ'S EXPERTS

To make the French system even more attractive and effective, Taj's experts propose implementing the following recommendations:

1. A multiyear strategy for the RTC policy

Extending the current RTC regime is of the utmost importance through 2013 and, for now, as part of the debate on the 2012 finance bill. In fact, the RTC effectively and visibly enhances France's competitiveness for the R&D investments of both French and foreign enterprises. The credibility of this measure (and others) lies in its stability, as the *Inspection Générale des Finances* moreover stressed in its latest report assessing the tax systems, and stability over several years (three or even five years) is particularly sensitive. Making the system permanent would send a strong message to foreign and French enterprises that are planning their R&D investments and would strengthen France's leadership position with respect to R&D.

2. A "professionalization" of the controls

The rules and regulations governing the controls performed by the experts from the MESR [*Ministère de l'enseignement supérieur et de la recherche*/ministry of higher education and research] could be clarified and simplified. Increasing the professionalization of the controls would also optimize their effectiveness and make the enterprises more secure. While significant efforts have been made on this front, it should be noted that, despite the recommendations of various task forces and in particular that of the IGF in 2010, no new legislative proposals have been made to date.

3. Elimination of RTC accreditation

RTC accreditation, which allows the enterprise awarding the contract to the outsourcing enterprise to benefit from the RTC for the latter's work under certain conditions, is a mechanism that requires an evaluation by the MESR experts; however, accreditation makes no real assumption as to the eligibility of the outsourced tasks. Taj's experts therefore recommend eliminating this accreditation, which would make the MESR's experts available to perform controls.

Lastly, in the view of Taj's experts, the current debate, which pits SMEs against large-sized groups, seems to reflect a narrow view of the advantage of the RTC. While supporting SMEs must always be an objective, the RTC is fulfilling its role in that respect; independent SMEs, which represent 16% of the national R&D effort, account for 20% of the RTC. Bear in mind that one of the major goals of the RTC is to increase France's competitiveness in R&D and thus to attract foreign companies to France. The development in France of research centers by large international enterprises over the last three years shows that this goal is being realized.