



Council of the  
European Union

Brussels, 9 October 2014  
(OR. en)

13784/14

ECOFIN 864  
UEM 324

#### COVER NOTE

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From:	Presidency
To:	Coreper / Council
Subject:	Commission background note on Research and Innovation as sources of renewed growth

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In view of the upcoming ECOFIN on 14 October 2014, delegations will find attached the Commission background note on Research and Innovation as sources of renewed growth.



EUROPEAN COMMISSION

## **RESEARCH AND INNOVATION AS SOURCES OF RENEWED GROWTH**

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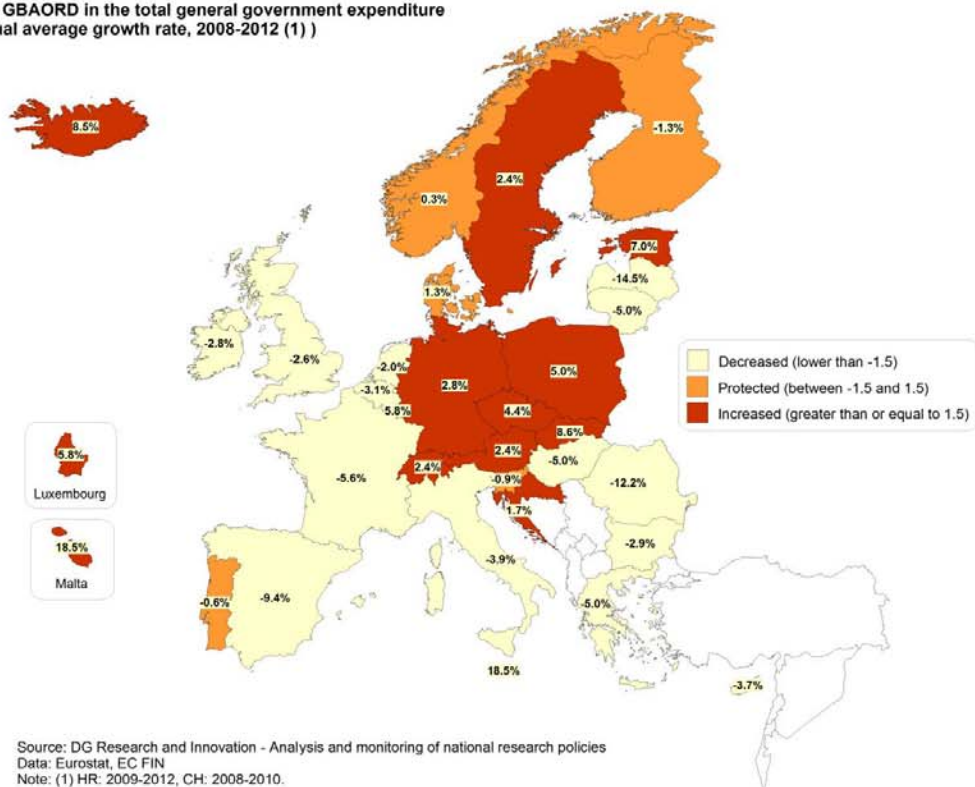
(Background note to the ECOFIN Council of 14 October 2014)

## Introduction

On June, 10th the Commission has adopted the Communication "Research and Innovation as sources of renewed growth", jointly prepared by the Vice-President for Economic and Financial Affairs and the Commissioner for Research, Science and Innovation. The Communication is set against the backdrop of the 2014 Annual Growth Survey with its emphasis on the need to sustain and, where possible, promote growth enhancing expenditures within Member states' overall fiscal consolidation efforts, and improve the quality of public spending. This objective is also reflected in the 2014 European Semester Country Specific Recommendations. In line with the Commission recommendations and European Council guidance, most Member States safeguarded their R&I investments from 2008 to 2010, suggesting that a growth-friendly fiscal consolidation process initially occurred. However, since 2011, an increasing number of Member States reduced their R&I budgets. As a consequence, since 2008 the progress towards the EU2020 3% target has been limited: the EU28 private and public R&D intensity reached 2.06% of GDP in 2012. Europe's shortfall mainly derives from low levels of private R&D investment, also from an international perspective.

This overall figure is the result of heterogeneous R&D input dynamics across Member states: some countries have continued to increase (or kept constant) R&D (public and private), in others we observe a stable private component, but a decreasing public one (and vice versa). Concurrently, Member states have increasingly supported private R&D through fiscal measures, in particular tax incentives.

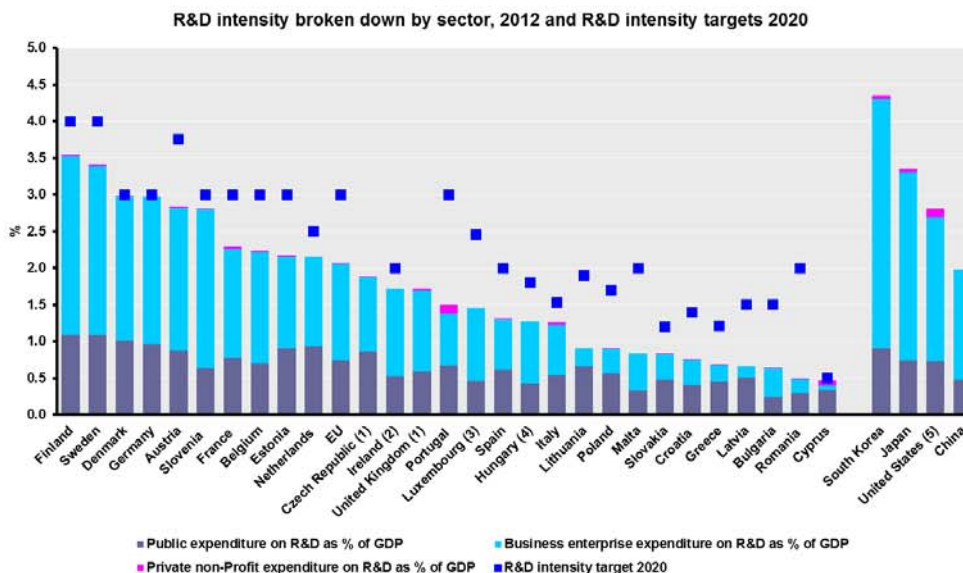
Total GBAORD in the total general government expenditure  
(annual average growth rate, 2008-2012 (1))



To strengthen growth and competitiveness the EU needs more and better research and innovation. Indeed, promoting innovation is crucial for productivity enhancement, which is the main driver of growth. Innovation generates new opportunities in the economy,

increasing the demand for human resources to exploit it. In this context, public support to private R&D may speed up the reabsorption of the unemployed and create more high-quality jobs.

The role of investment in research and innovation is also clearly acknowledged in President elected Juncker's political guidelines. To make further progress towards the Europe 2020 R&D investment target of 3% of GDP, governments across Europe need to continue investing in research and innovation, ensuring its efficiency and leverage over private investment.



Source: DG Research and Innovation - Unit for the Analysis and Monitoring of National Research Policies.

Notes: (1) CZ, UK: No R&D intensity targets have been set. For CZ a target of 1% is available only for the public sector. (2) IE: The R&D intensity target is 2.5% of GNP which is estimated to be equivalent to 2.0% of GDP. (3) LU: The R&D intensity target is between 2.30% and 2.60% of GDP (2.45% was assumed). (4) HU: The R&D intensity sectoral breakdown does not add up to total R&D intensity. (5) US: (i) Most or all capital expenditure is not included; (ii) Government expenditure on R&D refers to federal or central government only.

Private investments in R&I are influenced, however, also by a number of framework conditions, such as the degree of (product, labour and financial) market regulation, the degree of protection of intellectual property rights, as well as the availability of developed venture capital markets and R&I supportive financial instruments.

These framework conditions will not only affect the level of R&D investments in an economy, but also likely affect the efficiency through which innovation inputs (public and private R&D) translate themselves in innovation outputs (publications, patents, new product/processes) and the effectiveness of their outcome (competitiveness, productivity and exports).

### 1. Main messages

The biggest challenge the EU is currently facing is to keep up the pace of reforms to secure a lasting recovery and to create the conditions for long run growth. In this respect, R&I has a key role for the European Union economic recovery given its potential as main engine of long-run economic growth. In this context, curbing public investment in R&I, even if due to difficult budgetary conditions, may also have a considerable impact on a country's long

term growth potential by reducing the capacity to absorb research and innovation performed elsewhere and through the loss of attractive career opportunities for a country's most talented young people.

The Communication "Research and Innovation as sources of renewed growth" explores how the potential of research and innovation as drivers of renewed growth can be maximised through raising the quality of investments within Member States' growth friendly fiscal consolidation strategies.

Considering that the pressure on public budgets will likely persist in the near future, it is of vital importance that fiscal adjustments include the pursuit of efficiency and effectiveness of scarce public resources and their better allocation.

According to the evidence presented, the countries with higher efficiency of government spending tend to be those with higher levels of public spending in R&D and GDP per capita, and a stronger knowledge base.

The Communication stresses also that, reforms to improve quality and efficiency of public spending are important for all Member States, but even more vital for those that are more fiscally constrained and less efficient in spending.

In addition, improvements in the quality and efficiency of spending can contribute to the creation of a virtuous cycle by leveraging higher investment levels from the private sector and generating increasing economic returns.

Thus, the Communication invites Member States to prioritize growth-enhancing expenditure, in particular on R&I, and conduct reforms to increase the quality, efficiency and impact of public R&I spending. In fact, expenditure quality is not simply the result of the composition of expenditures and of the weight of more growth-friendly spending items, but is also determined by how well public resources are translated into outputs. The Communication suggests that Member States focus on 3 priority axes for reform:

(1) Quality of strategy development and policy-making processes. R&I decisions and effects depend on many policy areas involving a large number of actors: an overarching strategy steered at a sufficiently high political level and accounting for the long term impact of R&I would be beneficial. Avoiding spreading scarce resources too thinly through the process of smart specialisation as supported under the European Structural and Investment Funds is also advisable. Finally, systematic ex-ante and ex-post evaluations, in particular to assess the long term socio-economic impact of R&I funding are crucial to make the most of such investments.

(2) Quality of programmes, focusing the resources and funding mechanisms. Allocation of funding on a competitive basis and coordination of priorities between Member States through joint programming of research and innovation agendas increases the impact of public investment in a given R&I area. Making R&I programmes relevant and accessible to businesses is also necessary to ensure a greater participation of the private sector and reinforce industrial leadership.

(3) Quality of R&I performing institutions. Institutions receiving public R&I funding (universities, technology institutes and other public research and technology organisations) need to be entrepreneurial and reach out to improve transfer of knowledge to the private sector and to reallocate resources to activities that have the greatest impact. Sufficient

autonomy and flexibility, while ensuring accountability, and the ability to attract the best possible researchers (namely through open, transparent and merit based recruitment) are paramount.

At EU level, support for R&I has been fundamentally reformed in a single, integrated and simplified programme, Horizon 2020, with clear, measurable objectives focusing on scientific excellence, industrial leadership and societal challenges. A greater participation of SMEs will be guaranteed by a new dedicated instrument designed specifically for highly innovative smaller companies. This aims to fill gaps in funding for early-stage, high-risk research and innovation by SMEs as well as stimulating breakthrough innovation. All this should allow for higher synergies between projects under Horizon 2020 and EU priorities.

Finally, the Communication pledged support to Member States in pursuing R&I reforms best suited to their needs, including by providing policy support, world-class data and examples of best practice.

## **2. Questions for discussion**

Q1. In the current economic situation, with several Member States still under tight budgetary constraints, and considering the need to pursue fiscal consolidation while preserving growth-enhancing public expenditures, what are the strategies put in place by your country to increase the efficiency and effectiveness of public expenditures in growth-enhancing areas such as R&D and innovation?

Q2. In view of the low level of private investment in R&D in Europe, what are the main obstacles that need to be overcome to create a more supportive environment for private R&D in Europe? Which instruments do you consider as most effective in incentivising private investment in R&D?