Innovation Investment and Economic Recovery
A Green Paper for Successful Economic Policies

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Aim of the green paper

Serves as a vehicle to invite opinions, discuss evidence and data, help identify policy instruments and inform policy development.

We start by inviting comments on three main themes (but comments should not be limited or constraint by those themes)
Outline

1. The picture in the UK and Europe
   a. GDP
   b. Investment in fixed capital
   c. Investment in R&D

2. Green paper questions
   a. Is the engine of creative destruction kaput?
   b. Are the current economic policies the right ones?
   c. Investment in infrastructure projects vs investment in research and innovation
1. WHAT IS THE PICTURE?
1.a) GDP annual growth rates

Source: OECD
1.a) GDP annual growth rates

Source: OECD
1.b) Investment (GFCF) growth rates

Source: OECD
1.b) Investment as % of GDP

**Business sector**

**Public sector**

Source: Eurostat
1.c) R&D investment as % of GDP

Source: OECD
1. Summing up

• The decline in economic growth is more severe in the UK and Europe in comparison to emerging countries and the United States.
• At the same time the investment needed for growth is lacking as neither the private nor public sector is providing it.
• The fact that government expenditure on R&D is pro-cyclically has not helped a return to growth
2. GREEN PAPER QUESTIONS – THREE THEMES
2.a What is going on?

The pessimist
A drought in new technological opportunities

The optimist
Issue with the exploitation of the current technological opportunities

The business analyst
Top technologies in the ICT cluster
2.a What is going on?

1. Did the crisis come about because the potential of the current techno-economic paradigm is exhausted?
2. Which technologies will lead on the path of economic recovery?
3. Which innovations will drive the new economic recovery?
4. To what extent will they be based on social, organizational or technological components?
5. How can we overcome differences in public policy priorities in science and technology and business strategies?
6. Do we have appropriate indicators to measure the economic potential and impact of new technological opportunities in a changing context?
2.b Is what is being done enough?

European Commission’s Investment Plan for Europe: The Juncker Plan

The UK’s Green Paper: Building our Industrial Strategy
2. b Is what is being done enough?

1. Is the Juncker Plan an effective tool and does it counteract low investment in the private sector?

2. Is the UK’s Green Paper proposing the right Industrial Strategy for the UK?

3. Do the UK and Europe need to commit larger resources, and, where should those go?

4. Do the UK and Europe need a new golden rule for investments?
2.c Where should we invest?

<table>
<thead>
<tr>
<th>Infrastructure investment</th>
<th>Investment in research and innovation</th>
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<tbody>
<tr>
<td>Effect in the short- and long-run</td>
<td>Effect mainly in the long-run</td>
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<tr>
<td>Effects are measurable</td>
<td>Difficult to measure and estimates vary</td>
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<tr>
<td>Selection of projects reasonably straightforward based on established criteria</td>
<td>Selection at the technological frontier</td>
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<tr>
<td>Uncertainty and failure are less of a problem</td>
<td>Uncertainty and possibility of failure high</td>
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<tr>
<td>Moderate</td>
<td>Increase in human capital high</td>
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<tr>
<td>Low</td>
<td>Increase in the knowledge base high with spillover effects</td>
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</table>
2.c Where should we invest?

1. What type of publicly funded investment is more appropriate in the current economic landscape?
2. Do we need a European public infrastructure push or a public research push for recovery?
3. Which innovation policies can make the biggest contribution to economic recovery?
4. What specific innovation initiatives oriented towards business are most useful: e.g. Small Business Research Initiatives, R&D Tax Credits, Knowledge Partnerships and Networks?