

Round table discussion on UK policy for R&D and Innovation - how will this be impacted by withdrawal or continued membership of the EU.

Creating customer value through innovation invariably requires development of new products, services, or processes - (the 'D' of R&D). In light of the EU referendum, the R&D Society is therefore holding a round table discussion to identify the key issues for enhancing UK innovation capability, what policies are needed to support this and how these are impacted by membership of the EU. The outcome of this initial discussion may result in a wider open debate before the 23 June referendum or a future debate on manufacturing or CSR 'one year on'.

Innovation is widely seen as the route to economic growth both at corporate and national level. However, current UK policy on innovation lacks a clear direction with yet another new National Innovation Plan promised in May this year but looking increasingly likely to be delayed. If this is published before the EU referendum, how should it be judged in relation to the benefits/disadvantages of EU membership?

As a basis for this discussion, we start with a provocation statement that '*the EU and the UK lack a coherent and consistent strategy for innovation*' - for example,

- The steel crisis has brought into sharp focus how the current government policies fail to ensure that key industries and overseas companies are anchored to the UK. The writing was on the wall when Tata announced in 2013 the closure of UK R&D centres by moving them to Netherlands and India. Given the threat to EU steel production was apparent years ago, the EU has failed to react quickly.
- The UK Coalition Government 'industrial strategy' appears to have been abandoned and the 'eight great technologies' focus has been side-lined. EU innovation policy remains centred on the Lisbon agreement of 2002 which targets R&D spend at 2.5% of GDP – while there is little evidence that this target has any substantial impact on economic growth. The UK has failed to meet these EU R&D targets – does this matter?
- Innovate UK has had its resource undermined by the proposed shift from grants to loans & integration into ResearchUK. It is proposed that one third of 'grants' in the coming year will be replaced by 'loans'. There is currently no plan for how this will be achieved and what the impact will be but it is widely believed that this will result in a reduction of support for innovation.
- There is no substantial evidence that the Catapults are having a positive impact. It has been widely reported (Based on the WECD 'Pathways to impact' report) that the High Value Manufacturing Catapult is generating £15 for every £1 invested but the basis of this analysis is highly questionable and in any event the HVMC is simply a wrapper for seven institutes which were already successful before the catapult was formed.
- The flagship National Graphene Institute is being accused of ineffectiveness and passing key technologies to overseas companies in China. In addition it is widely reported that new graphene based applications are being developed outside the EU, notably in US, China and South Korea – for example new battery technology and wearable medical devices
- The Dowling review was a serious piece of work (albeit limited due to time constraints) and does identify some interesting issues policy issues. There has been no formal Government response to this report which appears to be following previous University/Business reports (Lambert, Wilson, Witty) into a black hole. Other EU countries have attempted similar studies again with no obvious impact.

- While the UK academic research base benefits from EU R&D funding, only 18% of this total EU funding is received by UK business -- only Latvia of the EU countries has a worse record.
- There does not appear to be any substantial response to the UK 'Foresight Future of Manufacturing Project' report, in particular the recommendation to create an independent cross government manufacturing oversight akin to the OBR. There are indications that other EU countries are also dissatisfied with manufacturing innovation policy – for example, the industry led Industrie 4.0 initiative in Germany. The USA has established National Network for Manufacturing Innovation (NNMI) initiative – what impact will this have?
- UK productivity lags most other developed countries which suggests that the use of technology and new management approaches have not been adopted by UK businesses as quickly as in other countries.
- For more than 20 years we have known that innovation is not linked only to science¹ - but EU (including UK) policies to support R&D have focused on the 'R' not on the 'D'. We are now in an era of rapidly changing customer expectations and companies need to respond with innovative products and services. So some of the questions the roundtable discussion might address include:
 - how well do we understand barriers to growth,
 - how will the digital world impact traditional industries and create new opportunities for business growth and what do companies need to do to adapt.
 - What needs to be done to 'anchor' high growth/high value adding companies to the UK,
 - what can governments do to enable companies to accelerate growth, eg more effective leverage through public procurement (eg infrastructure),
 - skills - do we need more than apprenticeships to increase the capacity of companies to absorb new technologies and management approaches,
 - how can companies capture the creativity of their workforce and supply chain,
 - and if we have some answers to these questions is the UK better off by withdrawal from or continued membership of the EU

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¹ Ref: 1993 First DTI Innovation lecture, 2005 Alec Broers Reith lectures and 2013 Mariana Mazzucato "the Entrepreneurial State"