

MEETING OF EUROPEAN COMPETITIVENESS COUNCIL BUDAPEST, 13 APRIL 2011

TALK BY DAVID CONNELL

Thank you very much for your introduction and for giving me the opportunity to speak at this meeting.

As the Minister said, I am a Senior Research Fellow in Innovation Policy at the University of Cambridge. Though this is a relatively recent and part-time role and my background is in the technology sector, including as cofounder and Chief Executive of an early stage venture capital fund.

As a result of this combined experience, I have come to believe that EU innovation policy would be far more effective if it adopted the procurement based approach used in the US.

But let me summarise some of the evidence.

Cambridge is a good place to start, as it is one of the best examples of a science and technology cluster in Europe, centred around one of the world's leading research universities.

However, studying the most successful companies in this cluster (in terms of profitable growth and jobs) suggests that UK and EU innovation policies have actually been based on three important myths, or false assumptions.

The first is that inventions created during university research projects are the prime source of innovation.

Wrong. Very few of Cambridge's most successful companies are based on university IP. It is actually the process of solving problems for lead customers in a BUSINESS environment that is the real driver of innovation and new product ideas. And often these customers are willing to pay for much of the R&D.

The second false assumption is that venture capital is the key source of funding for early stage firms. Again this is a myth. It is funding from customers in the form of R&D contracts or purchase of prototypes that is often the key source of early stage funding. Many of Cambridge's most successful companies have little or no venture capital, or drew on it only later in their development.

There are other problems with venture capital. It is only appropriate for a minority of business and returns to investors in VC funds are very low – around zero per cent per annum or a little worse. And this is a long term problem over many years, not a temporary aberration.

I suspect that no one in this room would want any portion of their personal pension funds invested in an asset class offering this level of return. And, not surprisingly, the vast majority of institutional investors take the same view.

So if we want a stronger European VC sector (and I believe we do) we have to find a **new** way of supporting it.

But let's return to my list of innovation policy myths.

The third and final policy myth is that the best way to fund R&D projects is through multi-partner collaborations that bring together different firms and universities.

Regretfully, I have to tell you that as a VC, any company coming to me for funding that was involved in, or proposed to get involved in, a multi-partner EU R&D project would probably receive a black mark. Like many VCs I tend to regard these projects as too far from market and a potential distraction.

Now this does not mean that excellent universities, university inventions, venture capital, and collaborative R&D do not have important roles to play in the innovation system. Of course they do. My point is that we have largely neglected one of the most important players in the innovation process - the "lead customer", prepared to fund something that does not yet exist, may not work, or has not been trialled.

Lead customers often find it hard to get budgets to play this role, and they take organisational and personal risks. But the best market research any business can have is funding from a customer. And besides the cash, they also provide an endorsement of the business - both for subsequent customers and for investors.

The Americans do things differently, and **Government** procurement has played a major role in developing many new technology sectors.

The most visible programme for SMEs is the Small Business Innovation Research Programme – or SBIR. Under this all Federal Government Agencies are required by law to place R&D contracts with small companies to develop technologies those agencies believe they will require in future.

The SBIR is currently worth around **two and a half billion dollars** a year and awards roughly 4000 contracts. Project costs are covered 100% (which is essential for the majority of early stage companies that don't have venture capital) and firms get to keep any IP they develop.

SBIR contracts are awarded in phases – there is an initial feasibility study worth up to **one-hundred-and- fifty-thousand dollars** (\$150k) and then roughly 40% of firms go on to win Phase 2 development contracts worth up to **a million** (\$1m). This helps to manage risk and focus funding on the best projects.

The UK and the Netherlands have developed similar programmes, though in the UK it has been difficult to persuade spending departments (transport, health, defence etc) to set aside money for the programme, so in relation to GDP, the programme is still quite small compared with the US.

It is my contention that the EU should set up something similar to the US programme, by using **one-billion-euros** each year of the FP8 budget to co-fund national SBIR programmes by member states. The aim should be to create an overall EU SBIR programme worth **two-billion-euros** a year.

Properly designed (and there are a lot of very important details to get right) such a programme could play a major role in helping innovative SMEs.

It could also help build the single market.

Using procurement to stimulate innovation has long been part of EU policy and the Commission has already done some excellent work.

“Innovation Union” includes a strong commitment to this approach.

However the financial commitment to pilot procurements still look very small – about €9m I believe.

I believe we should urge the Commission to be bolder.....To commit to funding more, earlier and larger trials, with the aim of building a European SBIR on a par with the US programme within five years.

Thank you