

## **Alleviating development funding gaps**

The Technology Transfer and Commercialization process has idiosyncratic funding requirements that require governmental support throughout its different stages.

Financing is often unavailable for the additional research needed to develop a proof of concept, prototype, or patent. These activities are neither eligible for standard research grants nor attractive options for venture capitalists, constituting a segment of the research commercialization process often called “the valley of death”. At this stage, innovative young firms are at too early a stage of development to pull in venture capital investors and too risky and lacking tangible assets to receive traditional bank loans.

The existence of this gap limits the possibility to turn research results into commercially viable products and services, while private investments remain low due to the high technological uncertainty and management difficulties. Such conditions require governments and, increasingly, individual institutions to provide alleviate such funding gap.

This can be achieved through the combination of instruments that (i) stimulate the demand for new technologies, i.e. innovation procurement schemes, (ii) supply firms the necessary credit to fuel the R&D process and (iii) provide advisory and technical services for bridging the gap between exploring a new concept and developing a product or service.

### **How does public procurement assist in the alleviation of development gaps?**

There is a wide heterogeneity in gap funding programmes, in terms of which stages of commercialisation they support (e.g. from proof-of-concept funding to post-seed funding), governance (e.g. managed by internal or external TTO, investment professionals or a venture capital firm) and business models (e.g. investment focus, number of serviced institutions) (OECD, 2013).

Their contribution to the alleviation development gaps is not restricted to the provision of credit, rather their wider objective relates to the reduction of technological and organizational uncertainty and, consequently the attraction of private investment.

### **What are the direct funding schemes used to alleviate development gaps?**

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### **How do Proof of Concept Centers contribute to the alleviation of development gaps?**

Proof of Concept centres (PoCs) are placed at the core of the bridging stage between invention and commercialization PoCs form part or work in association with universities and provide funding, mentoring, and education. Typically, their activities spread across the provision of : business and advisory services, incubator space, market research and educational training, the development and verification of a commercial concept, the identification of an appropriate target market, and the development of additional required protectable IP.

Their establishment can be result of national programmes and/or public research organizations. The latter seek to complement national initiatives by setting up their own PoC and seed funds (i.e.

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institutional risk capital funds), either fully funded or co-funded with institutional resources.

## References

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