European Institute of Innovation & Technology

EIT ROUNDTABLE OF ENTREPRENEURS 2013

"MATCHING ENTREPRENEURSHIP WITH VENTURE CAPITAL"

GRUNDLSEE, AUSTRIA, 11-13 JULY 2013

INTRODUCTION TO THE EIT

SPEAKER:

Mathea Fammels, acting Head of the Policy and Communications Unit

Set up in 2008, the European Institute of Innovation and Technology (EIT) aims to increase European sustainable growth and competitiveness, reinforce the innovation capacity of the EU and its Member States, create the entrepreneurs of tomorrow and prepare for the next innovative breakthroughs.

The EIT is working to achieve this aim by fully integrating all three sides of the 'knowledge triangle' (higher education, research and business) in Knowledge and Innovation Communities (KICs). By bringing together major innovation players from all of these areas to collaborate within the KICs, the EIT is able to promote pan-European innovation ecosystems in Europe.

Creating and enabling such ecosystems to flourish is at the heart of the KICs' mission. While many excellent higher education institutions, research centres and businesses can be found in Europe, integration between these sectors is rare. It is therefore crucial that a 'critical, open and creative mass' of human and physical resources is built, which attracts, seeds and retains private sector investment in the KICs.

In 2010, the EIT established its first three Knowledge and Innovation Communities (KICs):

- **Climate-KIC (www.climate-kic.org)** addresses the challenge of climate change
- **EIT ICT Labs (www.eitictlabs.eu)** generates world-class ICT business
- **KIC InnoEnergy (www.kic-innoenergy.com)** tackles the issue of sustainable energy

Each of the KICs operates across a number of innovation hotspots called 'co-location centres'. There are currently 17 co-location centres spread across Europe.

KICs carry out a whole range of activities including training and education programmes, reinforcing the journey from research to the market, innovation projects and business incubators. The KICs' governance model has been conceived so that they are able to react in an effective and flexible way to changing environments through their 'living' partnerships with the EIT. Each KIC has been set up as a legal entity and has appointed a CEO to run its operations – a first for an EU initiative.

In its next chapter, the EIT will contribute strongly to the objectives set out in Horizon 2020, the new Framework Programme for Research and Innovation. The European Commission has presented a proposal that defines the framework for the EIT's operations for 2014-2020, including a budget of EUR 2.7bn and the introduction of five new KICS:

- 2014: **Innovation for healthy living and active ageing** and **Raw materials;**
- 2016: **Food4Future** and **Added-value manufacturing;**
- 2018: **Urban mobility.**

SESSION 1

VENTURE CAPITAL IN EUROPE: STATUS, PRACTICES AND NEEDS

MODERATOR:

Karen Wilson, Visiting Fellow at Bruegel; Consultant, Structural Policy Division, Science & Technology Directorate at OECD

SPEAKERS:

Clemens van Blitterswijk, Founding partner, LSP-Health Economics Fund

Hermann Hauser, Co-founder and Partner, Amadeus Capital Partners Limited

Thomas Szucs, President of the Board of Directors, BB Biotech

Helmut M. Schühsler, Managing Partner of TVM Life Science Venture Capital Practice; Chairman and Chief Executive Officer of TVM Capital MENA Ltd., Dubai, UAE

Hermann Hauser opened the session by discussing the Cambridge phenomenon. While initially giving low priority to cooperation with commerce and industry, the University of Cambridge (United Kingdom) established the Cambridge Science Park in 1970. Now Europe's longest-serving and largest centre for commercial research and development , the science park represented an early success story in the field of R&D in Europe.

Hauser went on to look at venture capital (VC) in the UK as a whole, noting that a quarter of all European VC funding is in the UK, along with a high concentration of top-level universities. He mentioned how the establishment of Catapult centres – physical centres where the very best of the UK's businesses, scientists and engineers work side-by-side on late-stage research and development – have helped to spur innovation in the country, transforming ideas with high potential into new products and services that generate economic growth[2].

The issue of Technology Transfer Offices at universities was also raised, with Hauser noting that the focus on revenue was limiting the number of start-up companies who could afford to take advantage of these schemes. He made a plea for a '2% golden share', where start-ups would pay the university 2% of the exit value of their business if that business became a reality and suggested that this approach could generate more revenue for the university as more start-ups would be inclined to take part in a scheme with such a simple rule.

Hauser also suggested procurement, and not grants, are an effective way for governments to finance start-ups/businesses. "Orders from educated customers give a better picture of performance for a company," he said, adding that present procurement practices are based on "the cheapest deals" and that the government should set 0.1% aside for "the procurement of innovative products and services". This remark notwithstanding, he acknowledged that Small Business Innovation Research (SBIR) procedures have started to have an impact[3].

[1] In 1969, the Mott Committee published a report with the recommendation "to expand a 'science-based industry' close to Cambridge to take maximum advantage of the concentration of scientific expertise, equipment and libraries and to increase feedback from industry into the Cambridge scientific community.

http://www.cambridgesciencepark.co.uk/about/history/

[2] **https://www.innovateuk.org/-/catapult-centres#**

[3] **http://www.sbir.gov/** for USA and **https://www.innovateuk.org/-/sbir** for the UK

Thomas Szucs spoke next, stating that there is enough money around and the trick is how to get it. Agreeing with Hauser on the matter of universities putting financial demands on start-ups that are too high, he said that VCs are looking for 'black swan' events – improbable, high-return ventures. He called for the regulations to be simplified, particularly when it came to European cross-border settings.

He stressed that Europe has to change its culture with respect to VCs and entrepreneurship and lose its fear of failure. "We need a mind-set change in Europe towards increased entrepreneurship," he said, "and we cannot start early enough." He also noted the importance of role models: "We should ensure that students get an opportunity to interact personally with role models at the institutions where they study".

In Szucs's opinion, universities should hire entrepreneurs to teach and stimulate students, which raised the question of how to motivate these busy people to return to universities. It was acknowledged that many people want to give something back to society, and that this should not be realised by "funding a chair", but by an active contribution – by getting involved. Panel member **Clemens van Blitterswijk** noted that the University of Twente in the Netherlands appoints an entrepreneurial professor with each group in order to spur entrepreneurship.

Hauser pointed to the "Enterprise Tuesday" events run by the University of Cambridge as another example of how to get experienced entrepreneurs involved. Open to all university staff and students, members of other universities and the local business community, "Enterprise Tuesday" is a series of free evening lectures and networking sessions that aim to introduce participants to the world of business, as well as to encourage and inspire individuals to pursue their entrepreneurial ambition[4] .

Hauser also highlighted the university's "ideaSpace" concept, a hub for early stage innovation that provides space and resources to a flourishing community of innovators, entrepreneurs and advisors. The key feature is that new entrepreneurs get to benefit from the experience of entrepreneurs who started their business 1-2 years ago[5] .

van Blitterswijk emphasised that there is no "one size fits all" model and that investment strategies for VCs differ according to the sector.

Helmut M. Schühsler then expressed the view that modern VC amounts to the process of searching for ground-breaking innovations. He praised the work of the EIT in combining centres of excellence and networks, which – along with good management – represent the most important ingredients for success for him.

To conclude, the session moderator, **Karen Wilson**, requested the panellists make some final remarks.

Szucs sees a particularly good future for converging technologies. He emphasised that Europe needs to change its attitude towards entrepreneurship, as well as improve education and training in this field.

van Blitterswijk stressed the importance of partnering with the right people and letting them do what they are good at.

Schühsler stated that education in entrepreneurship is absolutely essential and that it should start as early as possible. He said that technology alone is not the answer; technology with a credible value proposition is needed.

Hauser expressed his contentment with the establishment of the EIT and its first outcomes. He emphasised the need for education in entrepreneurship, not only at post-graduate level but earlier too.

[4] **http://www.cfel.jbs.cam.ac.uk/programmes/enterprisetuesday/**

[5] **http://www.ideaspace.cam.ac.uk/**

SESSION 2
THE ACADEMIC/RESEARCH VIEW ON FINANCING

MODERATOR:

Peter Olesen, Chairman of the Danish Council for Strategic Research

SPEAKERS:

Massimo Colombo, Professor of Economics of Technical Change, Politecnico di Milano

Gordon Murray, Professor Emeritus in Management, University of Exeter Business School

Yannis Pierrakis, Head of Investments Research, NESTA

Massimo Colombo presented the results emerging from a large EU project:"VICO - Financing Entrepreneurial Ventures in Europe: impact on innovation, employment growth, and competitiveness"[6,7].

Colombo began by explaining the background of the project, which is examining the impact of VC on innovation, employment growth, and the competitiveness of young, high-tech and entrepreneurial European firms. With over 8,000 firms (of which 759 are VC-backed) and 2,104 VC investments by 1,124 VC investors in the dataset, the project has a strong evidence base to draw from.

He went on to highlight key findings of the project, which include the fact that VC investors have a substantial positive effect on the growth and productivity of firms, along with investment and innovation performance. The evidence shows that independent VC (IVC) is the most common form in Europe, providing not only capital but also assistance, resources and competencies to develop businesses (such as changing the management team and finding board members) and enable ventures to strengthen their product/market offer. However, cross border VC investments are rare and IVCs tend not to invest in small/young firms, firms in seed stage, or firms with long new product development cycles in Europe.

European governments have tried to fill this investment gap through the launch of public VC funds (PVC), including university seed funds and funds controlled by regional governmental bodies. Governmental VCs appear to have had a positive impact on the growth of early stage firms, but a negligible impact on the more mature ones, while university VCs appear to have had a negligible impact regardless of the age of the portfolio firm.

In contrast, Europe IVC has had a very positive effect on the performance of those companies being invested in, with the datasets showing an average yearly increase in sales growth of more than 67%. Syndicates led by independent VCs, but also including governmental VCs, exhibit the greatest positive impact on firms' innovation. Experienced VC investors have disproportionally positive effects on employment generation and asset accumulation within the economy. An investigation of policies in France, the UK and Finland revealed that there are inefficiencies in the policy mix of support schemes, and ambiguity about the expected returns of public schemes. There are also weaknesses in the skills of managers working in public funds.

Colombo concluded by identifying the key issues for European policy-makers: how to help young, small, promising European companies attract money; how to make Europe more VC-friendly; how to support the development of new forms of SEED finance; and how to generate collaboration between VC investors with different investment patterns.

[6] **http://www.vicoproject.org/**

[7] **http://www.vicoproject.org/doc/policy/VICO_FinalPolicyBrief.pdf**

The next presentation came from **Gordon Murray**, who spoke about VC and the government's role in supporting entrepreneurial activity[8] . He observed that while VC is often seen as the 'answer to absolutely everything', evidence shows that institutional fundraising is increasingly difficult, median financial returns have been consistently very poor, the number of Young Innovative Companies (YICs) receiving private VC is small, and the government has become the largest early-stage VC investor in much of Europe. Murray recognised that governments had little choice but to intervene directly in order to stimulate VC activity, but suggested that they needed to make choices about who to fund and why. He said that most new or existing firms should not be the focus of direct government involvement as this carries the risk of market disruption through the potential misallocation of capital and consequent danger of 'crowding out' private investors. However, well-designed 'hybrid' VC programmes can have positive outcomes – governments co-invest with private investors and use their specialist competencies to increase the supply of risk capital finance available for high potential young firms.

Murray emphasised that successful entrepreneurial support for technology and innovation will require the pursuit of 'meritocracy' and that supply-side measures alone cannot create a viable VC industry. In addition, there have to be major changes to the entrepreneurial ecosystem that also allow for significant improvements in the quality and prospects of the firms seeking VC finance. Underpinning these improvements is the need for a major cultural change that embraces entrepreneurship. To summarise, there is not a need for more start-ups, but better ones that create a good deal flow. He also stated that 'indirect' investment in the entrepreneurial ecosystem (such as removing barriers and aligning incentives) is likely to be highly effective.

In conclusion, Murray highlighted the fact that entrepreneurship is a critical and legitimate role of government. He praised the positive role of policy-makers in the progress of 'enterprise activity' over the last decade, and noted that VC is now one of a growing range of entrepreneurship funding models with different combinations of investors at different stages: (national) governments, EU, corporations, business angels, customers and suppliers, and perhaps crowd-funding.

Yannis Pierakis gave the final presentation of the session, which looked at the performance gap between UK and US VC funds and the reasons behind this. Referring to the results of the NESTA reports 'Atlantic Drift: Venture capital performance in the UK and the US'[9] and 'Unchaining Investment: Barriers to US venture investment in UK internet and digital businesses'[10] , Pierakis showed how the gap between the two has been large since 1990, with the only real decrease being because of the worsening performance of US funds, rather than the improved performance of the UK (1998-2007).

Several reasons for this discrepancy between UK and US VC funds were identified:

- US VC funds are larger, with greater management experience and fewer partners than the UK and continental Europe funds;
- US funds make twice as many investments as European funds, and invest larger amounts;
- US funds make more follow-on investments, tend to syndicate with a larger number of funds and be more specialised;
- European funds are more internationalised than US funds.

Pierakis noted that US and UK funds both exhibited the lowest share of initial public offering (IPO) exits when investing in UK companies, while they achieved the highest share of IPOs in their US investments. UK funds performed well when investing in the US, while the performance of US funds worsened when investing in Europe. Pierakis concluded that the wider environment in which UK funds and the companies they finance operate is a major contributor to the historical gap in VC returns.

At the end of the session a discussion took place that focused on four topics:

Improving dialogue between research and VCs: One of the main problems highlighted was that the research sector does not know what the VC industry is and the VC sector tends to see academia as a PR instrument. The academic sector needs to train good analysts, but also needs to cooperate with VCs in order to devise educational programmes and such cooperation is difficult to initiate. Another issue raised was to improve the understanding of scientists of the VC industry and the panellists considered how to design proper on-site or 'learning-by-doing' courses to enable academics to be good partners for VCs.

Bringing VC closer to universities: The discussion concluded that VC networks are effective, but the IP regulations of academia often prevent cooperation; academic institutions do not need to create their own seed funds, but should collaborate with VCs instead; and the key players are PhD or MSc students.

Implications for KICs and their co-location centres: Under this topic, the panel discussed how investment opportunities are also about creating proper ecosystems – the issue is how public funds may support this process. In addition, as indicated by Murray, more and – in particular – better start-ups are needed to become attractive for VCs. The learning effect is important – monitoring tools are crucial for the learning process.

Public-private partnerships in the VC industry: The final topic concluded that the PPP approach in the VC industry is a positive experience; however, a long-term vision is needed for the public funding. Purely public funding should be avoided.

[8] See also: " Government co-financed ' Hydrid' Venture Capital programmes: generalizing developed economy experience and its relevance to emerging nations", authored by Gordon Murray, Marc Cowling, Weixi Liu and Olga Kalinowska-Beszczynska, **http://www.kauffman.org/uploadedfiles/irpr_2012_murray.pdf**

[9] Josh Lerner, Yannis Pierrakis, Liam Collins and Albert Bravo Biosca, ' Atlantic Drift. Venture capital performance in the UK and the US' , NESTA research report, June 2011. **http://www.nesta.org.uk/publications/atlantic-drift**

[10] Louise Marston, Liam Collins, Albert Bravo-Blosca, Henry Lane. 'Unchaining Investment: Barriers to US venture investment in UK internet and digital businesses' NESTA research report, June 2013 **http://www.nesta.org.uk/sites/default/files/unchaining_investment.pdf**

SESSION 3
ACCELERATING INNOVATION

MODERATOR:

Linnar Viik, Member of the Governing Board of the EIT, and lecturer and member of the board of the Estonian IT College

KEYNOTE SPEAKER:

Wilhelm Molterer, Vice-president of the European Investment Bank responsible for cohesion

SPEAKERS:

Koenraad Debackere, Professor of Managerial Economics, Strategy and Innovation, KU Leuven

Reinhilde Veugelers, Professor of Managerial Economics, Strategy and Innovation, Bruegel and KU Leuven

Wilhelm Molterer gave the keynote presentation. He focused on the question of why Europe has been hit harder by the recent financial crisis than other parts of the world and suggested four main reasons for this:

1. Europe has a high public debt;
2. Europe has the highest share for public expenditures, in particular for social welfare;
3. Europe has an ageing society;
4. Europe has a high level of taxation.

In addition, he noted that both the EU itself and the euro/single currency are 'works-in-progress' that were overtaken by the crisis.

Molterer emphasised that both Member States and individuals have a responsibility to try and tackle the problems faced; however many individuals do not seem to recognise this. Europe seems to have lost its willingness to embrace change and innovation and, as result, risks losing its economic strength.

In particular, Europe seems to focus on risks and not on opportunities. Molterer called for a strengthening of the economic governance structure in Europe and observed that improvements are needed in many different sectors.

He emphasised the need for a growth perspective, which has to be tackled by both the EU and its Member States. The latter have an important role to play as they have the primary responsibility of restructuring a diverse set of areas such as sovereign debt, labour markets, health, social and welfare systems, as well as education.

Molterer went on to stress that innovation is key to putting Europe back on a track to growth. He pointed out that the public expenditure in the EU on research and development (R&D) is 2%, which compares unfavourably with the USA (3%) and Japan (4%). Furthermore, as GDP shrinks, the expenditures for R&D are also reduced in absolute terms, even if the percentage stays the same. Molterer believes it is a severe mistake for the crisis to hit the European R&D infrastructure and reduce spending in this area, and called for counter-cyclical investments.

He gave nanotechnology as an example: Europe is a global leader in R&D, but does not translate its dominant R&D base into the production of goods and services needed to stimulate growth and jobs.

This illustrates again that while Europe may have great ideas and knowledge, its major weakness remains bringing the knowledge and ideas to market. In response to a question, he identified several areas of importance for innovation in Europe: the six Key Enabling Technologies (KETs) identified by the European Commission (photonics, nanotechnology, micro/nano-electronics, industrial biotechnology, advanced materials, and advanced manufacturing) IT, energy, resource efficiency, and the food industry. He emphasised, however, that social innovation is equally important as technological innovation.

In Molterer's opinion, grants are not the right incentive for innovation. He questioned why loans are still considered an inadequate way of supporting business and suggested that as loans have to be paid back, this gives borrowers a strong incentive to work on the strategy to commercialise their idea/technology from the very beginning (in order to pay back the loan later).

A member of the audience stated that in Europe we have money, brains and entrepreneurs, and yet the broader environments are not fitting. He asked whether our start-ups should go to the US. Molterer responded that there is huge amount of private money looking for investments. However, legislation needs to be in place to create regulatory environments that allow the private money to be utilised on the market to finance innovation. There have to be trustworthy and secure ways for 'normal' people to invest their money.

Koenraad Debackere stated that there are three issues of importance for accelerating innovation: inter-disciplinarity, the 'entrepreneurial university', and support to start-ups.

Debackere emphasised that universities should not only develop generalists and specialists, but also 'multi-specialists'. They should offer double bachelor degrees integrating different scientific areas, and entrepreneurship. Europe should not only educate scientists, but also encourage young people to take on a multi-disciplinary perspective.

He continued by saying that TTOs can play a very important role in advising and supporting investors and scientists alike. In his view, TTOs should also focus on developing and offering three core competences within a university: invention, incubation and acceleration.

On the subject of how universities can support start-ups, Debackere stressed that there is 'life beyond equity' and that universities should pursue other ways of financing and supporting start-ups.

Reinhilde Veugelers's presentation considered how to accelerate innovation in Europe [11,12] . She began by looking at the reasons behind EU's private R&D deficit and concluded that the nature of the EU's industrial structure was key. The EU specialises in 'old leading innovators' (ollies) in medium-tech sectors, but lacks 'young leading innovators' (yollies) in new, high-tech, high-growth sectors (e.g., Amazon, Google, Microsoft, etc.). In comparison with the US, the EU has fewer young firms and the yollies it does have are less R&D intensive than their US counterparts. This difference is almost entirely due to a different sectoral composition, confirming that the EU–US private R&D gap is mostly a structural issue. Veugeler presented several reasons why Europe, in comparison with the US, is missing yollies in new sectors including:

- A lack of access to risk-taking financial markets;
- Segmented product markets;
- More costly IPR;
- Inflexible labour markets;
- Insufficient links between science and industry.

She emphasised that policies aimed at raising R&D expenditure across all types of industries and companies do not address the root causes of Europe's innovation deficit. She called for a specific policy for yollies, which should be part of an overall innovation and growth policy. Such a policy needs to address the specific barriers to development of new, high R&D-intensity sectors and companies, including access to external finance for fast-growing, highly innovative projects by public funding and/or by leveraging private risk funding.

The session came to a close with moderator **Linnar Viik** pointing to an apparent contradiction between the panels. In the first session, criticism on the functioning of some TTOs was voiced. In the second session, an important role was allocated to TTOs. He emphasises that a professional support function at universities is essential and that TTOs need to have a special integrated place in universities with a strong leadership.

[11] See also: Michele Cincera and Reinhilde Veugelers, Young leading innovators and the EU's R&D intensity gap, Economics of Innovation and New Technology, Volume 22, Issue 2, 177-198, 2013

[12] See also: Veugelers, R., and M. Cincera. 2010. Europe's missing Yollies. Policy Brief 2010/06, Bruegel, Brussels

SESSION 4
THE POLICY VIEW ON FINANCING

MODERATOR:

Daria Gołębiowska-Tataj, Member of the Governing Board of the EIT

SPEAKERS:

Jan Dexel, Program Manager Risk Capital, Ministry of Economic Affairs, the Netherlands

Christian Weinberger, Senior Advisor – Entrepreneurship & SME Policy, DG Enterprise

Karen Wilson, Visiting Fellow at Bruegel and Consultant, Structural Policy Division, Science & Technology Directorate at OECD

The fourth session of the day was started by **Jan Dexel**, who presented the Dutch policy on financing innovative companies.

The Dutch innovation and industrial policy landscape has changed in recent years. Budgets for subsidies have been cut. Subsidies are being replaced by soft/hybrid loans, risk capital and guarantees, and more emphasis is put on tax measures (i.e., corporate tax reductions, wage tax reduction for R&D, and tax reduction for R&D investments). The focus regarding research and innovation has been shifted to nine 'top sectors' and a revolving innovation fund has been created.

A number of principles and constraints are applied, and public intervention is only acceptable in the case of a real market or system failure. The aim of interventions is to create a supportive business climate for companies and the finance sector, including the regulatory and fiscal environment. The intervention must be market-oriented (i.e., the market selects and is the lead investor) and requires an integrated approach. A balanced mix of policies/instruments covering access to finance, R&D support, investment readiness, stimulating business angels, use of incubators, etc., is key to improving the success rate of companies and the governmental operations.

The government aims to stimulate access to finance, for instance, by improving the risk-return profile for early stage venture capital funds. Experience shows that it is important to avoid getting involved in subsidising management fees.

The Dutch government pro-actively seeks cross-border and pan-European cooperation, as a purely national context may constrain options too much. The Netherlands now has a framework with financial instruments connected to different stages of product development and maturity phases of the company.

Christian Weinberger emphasised that SMEs are crucial to achieve the objectives of the Europe 2020 Strategy. In this context, he presented the new SME instrument in Horizon 2020 and COSME, the EU programme for the Competitiveness of Enterprises and Small and Medium-sized Enterprises (SMEs).

The SME instrument in Horizon 2020 targets highly innovative SMEs which have a strong ambition to develop, grow and internationalise (these SMEs may be high-tech and research-driven or non-research conducting, social or service companies). It aims to fill gaps in funding for early-stage, high-risk research and innovation by SMEs as well as stimulating breakthrough innovation, and will support SMEs in three different phases:

1. **Phase 1**: Assessment of technical feasibility and market potential;
2. **Phase 2**: R&I activities;
3. **Phase 3**: Market-maturity to market-launch (commercialisation).

Each stage is open to all SMEs. In addition, a coaching and mentoring scheme is provided to beneficiaries of the instrument in order to accelerate the impact from the funding provided. The service will be provided by specially-recruited business practitioners and will be accessible through the Enterprise Europe Network.

COSME is managed by the European Agency for Competitiveness and Innovation. The programme aims to strengthen the competitiveness and sustainability of the EU's enterprises, encourage an entrepreneurial culture, and promote the creation and growth of SMEs. Its four main priority areas are:

1. **Better access to finance for SMEs**: through the Loan Guarantee Facility and the Equity Facility for Growth;
2. **Improve access to markets**: through the Enterprise Europe Network;
3. **The promotion of entrepreneurship and an entrepreneurial culture**;
4. **More favourable conditions for business creation and growth**.

In the final presentation of the session, **Karen Wilson** discussed the role of policy in relation to seed and early-stage finance[13] .

She began by considering the role and impact of policy intervention on the equity financing cycle, before looking at policy rationales for intervention such as financing gaps, market failures and spill-over effects (job creation, economic growth). In terms of supply versus demand, Wilson noted that the majority of governments' focus remains on the supply side, although demand side interventions are becoming increasingly important.

The types of financing interventions on the supply side include grants, loans and guarantees; fiscal/tax incentives; and equity funds (VC and angel). Wilson observed that it has become more difficult to access debt financing over the last five years and that the role of government in providing funding has greatly increased. In many countries, programmes addressing seed and early stage finance focus on VC, whereas in others the amount of angel investment is significantly larger at this stage and VC funding has moved to later stages of financing. Wilson highlighted the benefits of angel investors, saying that in addition to the money provided, they play a key role in providing strategic and operational expertise for new ventures as well as social capital (i.e. their personal networks). In some countries, policies such as tax incentives and the creation of co-investment funds seems to have played a role in encouraging this type of investment.

Wilson went on to say that a healthy entrepreneurial ecosystem is critical for successful angel investing. Entrepreneurship can only flourish in a healthy entrepreneurial ecosystem where a range of stakeholders play a role, including entrepreneurs, investors, large companies, universities, governments, services providers, etc. Governments can help by addressing market failures and making sure that the appropriate legal and financial framework conditions, such as bankruptcy laws, employment legislation and the development of financial markets are in place.

In her summary, Wilson noted that the full policy mix should be taken into account, that design, structure and implementation of policies can make the difference between success and failure and that policy should focus on leveraging (not replacing) private funding. (For more information, please see the OECD paper on the role of angel investors[13]).

[13] Also see the OECD paper on the role of angel investors:
http://www.oecd.org/innovation/inno/financinghigh-growthfirmstheroleofangelinvestors.htm

SESSION 5
SUPPORTING START-UPS IN PRACTICE

MODERATOR:

Karen Wilson, Visiting Fellow at Bruegel;
Consultant, Structural Policy Division,
Science & Technology Directorate at OECD

SPEAKERS:

Jon Bradford, Managing Director,
Techstars London

Bart de Beer, Chief Financial Officer,
KIC InnoEnergy

Hero Prins, Director of
Entrepreneurship, Climate-KIC

Willem Jonker,
CEO, EIT ICT Labs

Richard Pelly, Chief Executive,
European Investment Fund

Accelerating the development of start-ups

Jon Bradford began by giving an overview of Techstars, one of the world's foremost accelerators.

The company was founded in 2006 in Boulder, USA, and now has other offices in Boston, Seattle, New York, Austin, Chicago and London. Techstars sources technology-orientated, web-based or software start-ups worldwide, specifically targeting those with national or international potential.

Selected ventures are offered an intensive three-month programme with highly qualified mentors, and at the end of this period, they will have developed a financeable business. Each participating venture receives financial support and they are also entitled to several benefits offered by Techstars's partners. At the end of the three-month period, ventures present themselves to a gathering of VCs, alumni and others.

Techstars has accelerated 220 companies employing 1 400 staff since 2007. On average, about $1.5m was raised per company after leaving the programme and up to now, about $335m of venture capital has been raised. Nine out of ten companies have received funding or became cash-flow positive and about 10% of all companies exited. The network that Techstars provides – alumni, mentors, VC firms, etc. – is a very strong asset.

In the discussion that followed Bradford's presentation, it was noted that there is a fundamental difference between incubation and acceleration; the latter providing very targeted support to start-ups in a limited timeframe.

Bart de Beer presented the KIC InnoEnergy Highway™ concept. KIC InnoEnergy was set up with the aim of establishing itself as a leader in innovation and entrepreneurship in the field of sustainable energy. The KIC InnoEnergy Highway™ concept provides added value services that can't be found in today's existing incubators: it is a European incubator with six entry points that specialises in energy. It provides full support along the innovation chain, including office space, integrated services, trainings and access to finance.

The Highway™ concept is offered to selected ventures and has four dimensions. In the **technological dimension**, the soundness and maturity of the product or service idea are assessed, paying attention to competitive solutions in the market, the differentiating features of the product or service, features that need to be added or eliminated for success and which proof of concept needs to be done.

In the **market dimension**, an assessment is conducted on the market definition of the product, the targeted customer, the value proposition, the business case in financial terms, the business model and the strategy and channels to access the market.

In the **human dimension**, entrepreneurial and management skills are evaluated, strengthened and complemented by other profiles in order to launch a commercial business successfully. The output of this dimension is a solid organisation, with the right profiles (either internal or external) for each phase of the business.

Finally, in the **financial dimension**, KIC InnoEnergy is developing a network of investors to act as counterparts to their ventures when investment is needed.

Hero Prins gave an overview of the Climate-KIC Entrepreneurship programme, which has five elements:

Master classes are given by experienced entrepreneurs with an outstanding track record and teaching skills. Entrepreneurs, start-ups and staff of partners get state-of-the-art training in aspects ranging from business model generation and building teams, to negotiating and closing sales deals.

Climate-KIC offers **vouchers** for small and medium sized enterprises (SMEs) to grow their business by working with world-class academics and researchers at any of its European centres.

Climate-KIC also operates a **Climate Market Accelerator (CMA)**. The CMA brings together end-users and suppliers of climate innovations. It helps end-users identify their key climate-related challenges, after which one or more of the CMA support measures is used to attract new solutions from Europe's innovation community.

An incubation programme is offered to ventures that have undergone a rigorous selection process, which lasts for up to 18 months and includes financial support and coaching. The first stage results in the first version of a venture's business model. The second stage results in a comprehensive business plan and financial model. The third stage results in ventures securing a customer and scaling their business model.

Finally, Climate-KIC organises **start-up tours**, for instance to Silicon Valley, and has connected its incubators so they can share experience and best practices.

A new strategic link-up between the European Investment Fund (EIF) and the EIT – EIT ICT Labs case study

Richard Pelly provided an overview of developments at the EIF. In 2012, the EIF managed assets with a total value of € 9.3bn. In 2015, this volume is expected to rise to € 13.6bn. Equity business volumes increased from 2008 to 2012 by 30% p.a. on average; in the Corporate Operational plan an average increase of 8% p.a. is expected for 2013-2015.

The EIF is involved throughout the entire business cycle. Richard distinguished four phases:

The EIF **provides and manages financial instruments** to stimulate innovation, competitiveness and cross-border investment for technology transfer, proof of concept, business angels and seed stage.

The EIF **invests in VC funds** in the early stage where, in particular, business angels are active.

The EIF **invests in growth capital** in the third phase – expansion and development capital – and invests in hybrid Debt/Equity funds (mezzanine) for lower and mid markets.
From 2013, the EIF is entrusted with implementation of:

- The Equity Facility for Research and Innovation for mainly early-stage investments, with a particular focus on early-stage SMEs that have the potential to be innovative and grow rapidly;
- The COSME Equity for Growth facility that provides venture capital and mezzanine finance to expansion and growth-stage SMEs, in particular those operating across borders.

In addition, the EIF **provides venture and growth capital** through the European Angel Co-Investment Fund, the Corporate Innovation Platform and the Social Impact Fund.

Willem Jonker introduced EIT ICT Labs' structured process to identify promising technologies and entrepreneurial talent, and to guide these to the market.

In a scouting phase, both technologies and entrepreneurial talent with high potential growth are screened and qualified. EIT ICT Labs has an 'Innovation Radar' to identify developments and trends in ICT, focusing on the innovation areas of EIT ICT Labs. This instrument helps to develop tools and capabilities to turn ideas into ICT-based products and services that reach the market faster and with a larger impact than today. Selected ventures receive training to build or strengthen entrepreneurial competences, are engaged in local entrepreneur communities, and receive an intensive strategic coaching and support in business modelling.

The Soft Landing programme of EIT ICT Labs fosters the international development of SMEs and start-ups by connecting them with its established European ICT ecosystem. Soft landing targets promising companies doing business in areas consistent with EIT ICT Labs Action Lines.

EIT ICT Labs also has an Access to Finance programme, which supports the early stage financing possibilities for innovative start-ups and facilitates access to risk capital for the EIT ICT Labs ventures.

During the event, **Richard Pelly**, CEO of the European Investment Fund, and **Willem Jonker**, CEO of EIT ICT Labs, signed a Memorandum of Collaboration (MoC) to jointly boost the access to finance for European SMEs and start-ups.

The collaboration will connect the EIF financing instruments to the EIT ICT Labs business acceleration activities. Key ingredients of the collaboration are connecting the EIF supported financial community to the EIT ICT Labs innovation ecosystem, joint raising of fund capital and joint development of future, early stage financing instruments.

It is generally accepted that Europe needs to strengthen its investment instruments compared to other parts of the world and this collaboration is an important step to make that happen. Chairman of the EIT Governing Board Alexander von Gabain stated that this is the first pilot experiment which might become the model for the existing and future KICs.

BREAK-OUT SESSION 1

HOW TO CREATE VIBRANT FINANCIAL MARKETS AND ENTREPRENEURIAL ECOSYSTEMS?

MODERATOR:

Paulo Andrez, President of the Board of the European Trade Association for Business Angels

This session focused on the question of how to enhance entrepreneurship in practice.

- In the incubator process, more focus should be put on market and clients. Teams should be getting support early to focus on these two areas, in order to avoid start-ups being financed for a long period before realising that there is no market for the product or service;
- Paolo Andrez, being a business angel, argued that people who approach him often don't understand the role of a business angel and can't estimate the potential value of their business;
- It was agreed that 'talking to/addressing VCs and business angels' should be part of the regular entrepreneurial curriculum, but it was not known whether this is already the case;
- It was suggested that e-learning modules could be created on issues such as how to approach a VC or business angel. However, this idea was not fully shared among all participants. Some argued that these skills are better being taught face-to-face rather than in an e-module.
- The panel agreed that it was essential to have role-models to foster/support entrepreneurship and entrepreneurial learning;
- 'Train-the-trainers' was also underlined as being very important (entrepreneurs training the trainers/teachers).

BREAK-OUT SESSION 2

WHAT ARE THE FINANCIAL AND INSTITUTIONAL BARRIERS TO ACCELERATE THE FOUNDATION OF INNOVATIVE FIRMS IN EUROPE?

MODERATOR:

Gordon Murray, Professor Emeritus in Management, University of Exeter Business School

This session dealt with the existing financial and institutional barriers that prevent the foundation of innovative firms in Europe. Key barriers highlighted included the following:

- Risk aversion (both by universities and investors, especially subsequent to, and as a result of, the financial crisis);
- Fragmentation of the European market and lack of harmonised regulation (the EU is still not a fully integrated single market, but in certain areas a group of 28 separate markets);
- Ignorance (lack of knowledge and experience, for example in IP and tech-transfer deals).

The EIT and its KICs may play an important role in addressing and eventually overcoming these barriers.

BREAK-OUT SESSION 3

HOW TO BUILD LINKS BETWEEN SMALL AND LARGE CORPORATIONS?

MODERATOR:

Daniel Zimmer, Director of Innovation, Climate-KIC

This session considered how the cooperation between small and large companies could be strengthened. The conclusions from this session included:

- Cooperation is easier when there is no direct competition (i.e., the companies are from different sectors);
- Consortium partners or research institutions should have a balance between large and small companies;
- Mechanisms protecting the IP of small companies should be developed and implemented;
- Broker and mediator roles of such institutions like the EIT and its KICs is important;
- In addition to a pathway through the EIT and its KICs, ways to approach larger companies could also be identified through public intervention;
- There is a need for a balanced strategy for small companies;
- Large companies could benefit from 'education' on how to cooperate with small companies to mutual benefit;
- No single solution fits all.

BREAK-OUT SESSION 4

HOW TO ACCELERATE THE RESULTS OF DEEP TECHNOLOGICAL RESEARCH TO THE MARKET?

MODERATOR:

Koenraad Debackere, Professor in Managerial Economics, Strategy and Innovation, KU Leuven

The final break-out session looked at how to speed up the process of bringing the results of technological research to market. The following conclusions were drawn:

- In Europe, many researchers do not wish to be involved with the private sector. This is in strong contrast with the situation in the USA. The tenure track system in the USA is an incentive for scientists to keep options open and maintain links with the private sector; it represents a ten year long path to the position of professor, but 85% have to stop earlier. The inherent uncertainty in the tenure track system means scientists keep looking for new opportunities. Many European universities take a more "civil servant" approach to university careers.
- A university such as the MIT have as policy that "a scientist has to contribute to the financial viability of the institution" and scientists may get fired if this doesn't happen. This policy stimulates interaction between the university and private sector.
- Researchers that combine science, innovation and entrepreneurship at a high level are rare. Angela Belcher was mentioned as a prime example – she is one of the world's leading nanotechnology experts and at the same time an outstanding inventor[15].
- Large companies (e.g. Siemens, Philips, Intel, etc.) have an extensive R&D competence and are able to access external research to help them meet their objectives. Many smaller companies do not have these competences, and translation/mediation of knowledge is therefore required to accelerate the results of deep technological research to market.
- The KICs have the potential to host people who can have a translating/mediating role. To this end, they need excellent networking competences and a deep understanding of both technologies and (potential) applications. It was agreed that such people cannot simply be recruited – if a KIC performs well, translation and mediation will develop as property product of the KIC ecosystem.
- KICs should concentrate many experts in particular fields: for example, "at MIT you do not have to read, but you get information through osmosis owing to the high density of experts". The KICs should provide ample opportunities for such osmosis.
- Given the limited amount of talent, the EU should become more outward thinking. 1/3 of the world's population lives in India and China; this means that 1/3 of the world's brilliant minds will come from these countries. However, at present the EU is not seen as an attractive place by top scientists from this region. The KICs should be able to attract this top talent: students, teachers, researchers and entrepreneurs.
- Europe is far behind the USA when it comes to branding and marketing. In this respect, it was noted that the EIT should work to improve its communications, as the value of its work is understood by a limited number of people.

[14] See for instance: **http://web.mit.edu/newsoffice/2013/belcher-wins-lemelson-mit-500k-award-0604.html and http://web.mit.edu/be/people/belcher.shtml**

CONCLUSIONS AND RECOMMENDATIONS

The event concluded with participants reflecting on the proceedings and putting forward suggestions for steps the EIT and the KICs could take to bring entrepreneurship and VC together:

- The EIT and its KICs are creating a 'world-class assembly line' to make new, globally competitive products and services, and to establish new ventures. This is accomplished through a carefully structured process in which considerable time is spent on maturing the products and services, and developing the teams and competences of start-ups.
- The enabling infrastructure provided to start-ups by the EIT and its KICs is unique and prepares the route of new ventures to the market more thoroughly than an accelerator can. As a result, the opportunity costs for investors are low. This means that the EIT and KICs should be very attractive to VCs and business angels, as the latter may have lower risks when investing in start-ups emerging from the KICs.
- The EIT and KICs have to earn recognition and build a reputation demonstrating that the quality of start-ups coming out of the KICs is high. The KICs and EIT have to show credible success stories.
- All three existing KICs are well underway and can show tangible outputs. It is now time to reach out to VC and business angels and to 'market the KICs'. The EIT and KICs should build structural relationships with investors (VC firms, corporate VCs and business angels).
- VCs and business angels have extensive experience in assessing and coaching start-ups. Several participants recommended involving VCs and business angels more strongly in the KIC activities, and perhaps giving representatives of VCs or business angels a role in the governance structure of KICs and/or the EIT, either directly or in an advisory capacity.
- It was stated that 'all entrepreneurs know Techstars and the like; however the EIT and its KICs are far less known yet'. The EIT has to invest in building a brand. Techstars has an attractive name, the EIT and KICs do not (yet).
- Participants emphasised that a high quality mentor network is a necessity. Such a network enhances not only the quality of start-ups, but also adds to the branding of the EIT and KICs. The EIT and KICs should start immediately with the development of an appealing network of mentors.
- Hermann Hauser noted that VCs tend to work 'locally'. It makes sense that VCs and business angels take a more pan-European approach; this constitutes a unique opportunity for the EIT and its KICs.

- Paulo Andrez acknowledged that the EIT and KICs are pan-European, bringing together a network at EU, national and regional level. He noted that the KICs and the EIT should establish relations with investors from all over Europe, not only where nodes are.
- Massimo Colombo noted that agglomeration is very important for entrepreneurs, however many entrepreneurs work in a relatively isolated way. The KICs may have a role to link up with such entrepreneurs and bring them into contact with strong clusters.
- Reinhilde Veugelers noted that there is a common agreement that the EIT and its KICs should work to rapidly strengthen their reputation, but emphasised that there is still a lot to learn and prove. The EIT should set up a good monitoring and evaluation system to demonstrate and improve quality. Other participants raised the question of how to measure the EIT and KICs' success.
- Koenraad Debackere stated that valuable entrepreneurship activities may take place in the nodes where KICs are represented, but may be conducted by institutions which are not a KIC partner. The KICs should reach out to these institutions and ensure complementarity.
- Oliver Gajda questioned why KICs are going to Silicon Valley and not addressing European investors. He makes a plea for "techtours" among European VCs and other investors.
- The KICs are not competitors of Techstars and similar initiatives – all have a role to play in spurring innovation and entrepreneurship in Europe. The EIT and KICs should proactively seek mechanisms for cooperation and collaboration to accelerate the attainment of their mission.
- Several participants noted that the KICs should avoid the trap of taxpayers' money and focus on 'smart money'.
- Jerzy Langer recommended that the KICs open up to new territories. The introduction of affiliate partner nodes may be a possibility.
- John Schellnhuber supported the notion of such a pan-European dimension to the KICs, but emphasised that excellence is leading each addition to a KIC.
- It was suggested that the EIT could make an action plan to link its incubators in order to leverage their activities. Such a network could contribute to enhancing the quality by sharing experiences and could constitute a mechanism to link up to VC and business angel networks.
- Hermann Hauser suggested that the EIT might set up a Massive Open Online Course (MOOC) or Massive Open Online Programme (MOOP) specifically to help educating entrepreneurs in Europe.

LIST OF PARTICIPANTS

(IN ALPHABETICAL ORDER)

Name	Role	Organisation
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