

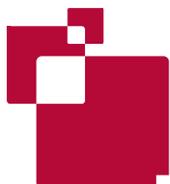
MIND EUROPE'S EARLY-STAGE EQUITY GAP

REINHILDE VEUGELERS

Highlights

- Remedying the European Union's deficient overall business research and development performance requires the nurturing of more new companies in new sectors, enabling them to grow to leading-innovator status. This means addressing young leading innovators' access to external finance, particularly early-stage venture capital.
- The funding system for aspiring young leading innovators ('yollies') needs to be understood as an interconnected system comprising different types of funding at different stages of company lifecycles. Venture capital funds are critical at the early commercialisation stage.
- Venture capital investors rely on a good deal flow of high-potential investment-ready firms, on skilled investment managers, and on developed exit markets.
- Poor returns from early-stage investments in Europe on a smaller deal flow have significantly reduced the appetite for early-stage venture capital. This exodus has left a funding gap in Europe for aspiring yollies.
- The evidence suggests that there are a number of ineffective public schemes supporting mediocre deals at mediocre funds. Shutting those down would free up enough funding to allow a significant shift towards a more effective venture investing system focused on high quality venture capital and innovative projects from aspiring yollies.

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REINHILDE VEUGELERS, DECEMBER 2011

1 WHY WE CARE ABOUT FINANCE FOR INNOVATION-BASED GROWTH

Europe's innovation and growth deficit is rooted in the structure and dynamics of its industries and enterprises. In a Bruegel Policy Brief, Veugelers and Cincera (2010) show that the EU's persistent business R&D deficit relative to the United States can be almost entirely accounted for by the EU having fewer yollies in new, high-growth innovative sectors, particularly health and information and communication technology services.

Why is the EU on average and in contrast to the US, not able to redirect its specialisation pattern to new high-tech, high growth sectors? What holds back new European firms in new markets from growing into global leading innovators?

An extensive body of theoretical and empirical evidence demonstrates the importance of financial constraints as a major barrier to innovation (see eg Hall, 2002, for a review). The risks associated with innovative projects hinder the ability of financial markets to swiftly allocate funds to innovative projects. These capital-market imperfections are likely to hold particularly for young innovators (eg Hall, 2002). Although young innovative companies are rich in intangible assets such as technology and specialist knowledge, they lack the sort of collateral assets that help them access external finance. Young innovators, combining the disadvantages of small scale, short history, less or no retained earnings and more risky innovative projects, can therefore be expected to be more affected by financial barriers.

Although access to finance is a significant issue, the importance of other barriers to aspiring yollies cannot be ignored. These relate to the difficulty in accessing lead customers, regulatory burdens, access to skills, difficulties with intellectual

property and obstacles to partnering¹. These barriers are reminiscent of the often-cited fragmentation of product, services and labour markets in the EU compared to the US, as well as the failure of the EU's innovation 'system' to effectively link its participants. All this is a strong reminder that access to finance cannot be tackled in isolation but should be embedded in an innovation policy that also addresses the other barriers to innovation. As these other barriers reduce the expected rates of return on innovative projects, they will affect the deal flow and the appetite of financiers to provide funds for innovative projects.

2 WHY WE CARE ABOUT VENTURE CAPITAL IN EUROPE

2.1 Venture capital on the funding escalator

There are a range of individuals and organisations that play a role in financing start-up or early-stage innovative projects. These include family and friends, business angels, private venture capital funds, corporate venture funds and public funds. All of these should be seen as playing complementary parts along the 'funding escalator' for innovative projects. While initial ideas can still be funded by own funds and those from 'friends, families and fools', business angels come in when the ideas move to feasibility testing and prototyping. Venture capital typically enters the frame when commercialisation is considered. Start-up venture capital financing includes financing for companies for use in product development and initial marketing. Early-stage venture capital provides funds to initiate commercial manufacturing and sales. These activities may not yet be generating profits. Once sales are realised, internal funds and loans can be part of the funding escalator.

The ability to secure financing during the initial

1. See eg Bruegel Policy Brief 2009/01, 'A lifeline for Europe's young radical innovators'.

stages of the escalator often improves later-stage financing. This holds when the quality of the early-stage funding selection provides 'certification', reducing the typical asymmetric information problems that plague the financing of innovation projects. For instance, selection in highly competitive public grant schemes may make it easier to access further venture capital funding. Firms that have been backed by famous business angels may find it easier to access venture capital. And firms that have been backed by quality venture capital may find it easier to find financing partners at later stages.

Nevertheless, the escalator seldom runs smoothly, with entrepreneurs incurring successive costs to find and negotiate with new and multiple parties, imperfect transformation of information between parties, existing financiers expressing concerns about dilution and other conflicting interests between old and new financing partners.

2.2 The supply of venture capital to aspiring yollies

When innovative projects from young companies enter the commercialisation and growth phases, venture capital becomes a critical financing source (eg Lerner, 2009). At this stage, financing requirements quickly become too large to be supplied by friends or business angels. The high risk profile of young highly innovative growth companies is often a barrier to bank financing at this stage. A deficient VC market may thus hamper the development of young highly innovative companies into world-leading yollies.

Venture capital is guided by the VC cycle (Gompers and Lerner, 2004)². After the fundraising, screening and negotiating, the investment process starts. At this stage, non-capital value is added to the firms in VC portfolios through the monitoring, advice and guidance of the fund managers. The entire length of the investment process for early-stage ventures is estimated to

be on average about 6-7 years. Exit is the final stage of the VC cycle. This occurs through an initial public offering (IPO), trade sale, secondary sale to another financial institution or fund, buy back by the entrepreneur or write off. The first of these, the IPO, is perhaps the most celebrated and prominent in the literature, yet the second method, the trade sale is the most common successful exit method for VC funds (Soderblom, 2006).

Venture capital financing has some distinctive features. Because venture capital funding is equity funding, it transfers part of the ownership risk from the entrepreneur to the investor. Unlike debt funding, it encourages venture capitalists to provide managerial support to entrepreneurs. As fund managers are typically rewarded with a percentage of returns above a certain threshold, fund managers are incentivised to focus on the 'big wins' from a portfolio of investments. In addition, because VC is a very costly and risky type of financing, high financial returns are required from their successful investments in order to be economically viable. The returns to investment are highly skewed. Where attractive net returns are made by the fund, it is likely to result from the realisation of a small minority of exceptional investments within the portfolio. A consequence of this is that venture as an asset class shows extremely large variation in returns, and only a small number of exceptional start-ups are likely to attract VC attention.

In summary, for venture capital to be a viable business model, it needs to be 'smart', ie able to select potential 'hits' and carry them through to the exit stage by providing both financial and non-financial support.

2.3 The demand from aspiring yollies for venture capital

The number of companies requiring equity finance is a relatively small percentage of the total company population. For example, Shane (2008) notes that since 1970, VC firms have funded

2. Venture capital is defined as dedicated pools of capital provided by third party investors that focus on equity, or equity-linked investments in privately held, high-growth companies (Lerner, 2009). The limited liability partnership arrangement, LLP, is the dominant fund model in the venture-capital industry. The fund is owned by third-party investors, known as the limited partners, and managed by the venture capital fund managers.

'When innovative projects from young companies enter the commercialisation and growth phases, venture capital becomes a critical financing source. A deficient VC market may thus hamper the development of young highly innovative companies into world-leaders.'

about 800 new companies out of the 2 million started each year in the US (ie less than 0.05 percent of all companies).

The few firms that could access venture finance have had enormous economic impact. Shane (2008) notes that the VC-funded public companies (1972 to 2000) generated 11 percent of the sales, 13 percent of the profits, 6 percent of the employees, and created about one third of the market value of all public companies in the US, with a few hits such as Google and Amgen accounting disproportionately for these substantial economic effects. Micro-level studies comparing venture-backed young innovative companies with comparable non-venture backed firms confirm the superior growth performance of the former, both in terms of employment as well as sales. And this is not because venture capitalists succeed in picking hits, but also because venture capital funding contributes to value creation in portfolio companies (eg VICO, 2011). A well functioning VC funding system, through its role in smartly allocating funding, monitoring and advising relatively few high-growth yollies, thus generates substantial positive effects for the rest of the economy, despite its relatively small size.

2.4 Demand meeting supply: the early stage VC market

The VC market suffers from 'two tyrannies': project risk and scale-related costs. Project risk involves problems in assessing "a technology that is unproven incorporated into products not yet demonstrated, for markets not yet developed" (Murray and Marriott, 1998). The scale-related costs are the relatively fixed costs associated with due diligence and deal negotiation. The combination of both costs with relatively modest capital demands at early stage, compared to later stages, may lead to a concentration by VC funds on larger and later-stage deals. Only sufficiently developed ('thick') venture capital markets can build the critical scale and expertise needed to overcome these tyrannies and avoid an early-stage venture capital gap.

To avoid this early-stage venture capital gap, venture capital markets need to be sufficiently 'thick'. This requires:

- A strong deal flow of attractive, high-potential portfolio companies;
- Large, professional VC funds of sufficient scale and managerial competence to make initial and follow-on investments and to grow portfolio firms until attractive exit opportunities are identified;
- Informed institutional investors (including pension funds, endowments, etc) willing to accept the risks of early-stage equity investment;
- Support from professional services firms, such as specialised lawyers, accountants and consultants;
- Efficient and liquid exit markets.

3 US VERSUS EU VENTURE CAPITAL MARKETS

It has taken the US several decades to build its VC eco-system, which is the largest and most developed in the world. The US accounted for 49 percent of total venture capital investments in 2008 in OECD countries. The United Kingdom is the only other country with a share exceeding 10 percent of the OECD total (OECD 2009).

Comparing VC in the US and Europe is notoriously difficult because of poor-quality data, and international differences in definitions of VC³. With this caveat in mind, Lerner *et al* (2011) find that US funds are substantially larger than continental European funds, make more than twice as many investments in more firms with more money per firm, and syndicate more.

As well as being smaller, the European VC industry is structurally different from the US (NESTA, 2009). In Europe the bulk of equity activity is focused on the expansion stage. Poor returns from early-stage investments in Europe on a smaller deal flow have significantly reduced the appetite for early-stage VC. This exodus has resulted in a funding gap in Europe for aspiring yollies that are seeking risk capital in amounts that are too large for business angels but too small for a majority of venture capitalists. Table 1 illustrates the European 'early-stage equity gap'.

This European early-stage equity gap holds for the three major countries, UK, France and Germany, as Figure 1 shows. Sweden and Finland concentrate on the 'seed' stage, but not (yet) on the early stage. The US is the only country that specialises in the early stage.

3. A forthcoming Bruegel working paper will provide a more indepth comparative analysis of the structure of the European and US venture capital markets.

Table 1: Europe's early-stage equity gap relative to the US

| | Total | Seed | Early | Mature |
|---------------|-------|------|-------|--------|
| EU13 (US=100) | 50 | 38 | 22 | 71 |

Source: Bruegel on the basis of Kraeussel and Krause (2011). Note: gaps are calculated as total venture capital investments from 1985-2009. EU13 includes the major VC countries of Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, the Netherlands, Portugal, Spain, Sweden and the UK.

As individual US VC funds get bigger they do not necessarily move out of seed-stage investments in new technology. Rather they use the scale of their funds to make initial and repeated follow-on investments across a portfolio of interesting firms and technologies. The majority of successful seed activity in the US is undertaken by large integrated VC funds, each managing a big portfolio. They attempt to make a number of extremely high-return investments that are large enough to cover the costs of the majority of less successful investments or failures. This VC business model has proven in the US to lead to higher investment returns. For the model to work, it must be large scale, with a large deal flow, and technically and commercially well-informed and experienced fund managers. For the smaller scale European VC market, this business model is not yet possible.

These differences have implications for average VC deal size. Table 2 shows that in the US the

Table 2: Average deal size of venture capital investment (2003-06), € millions

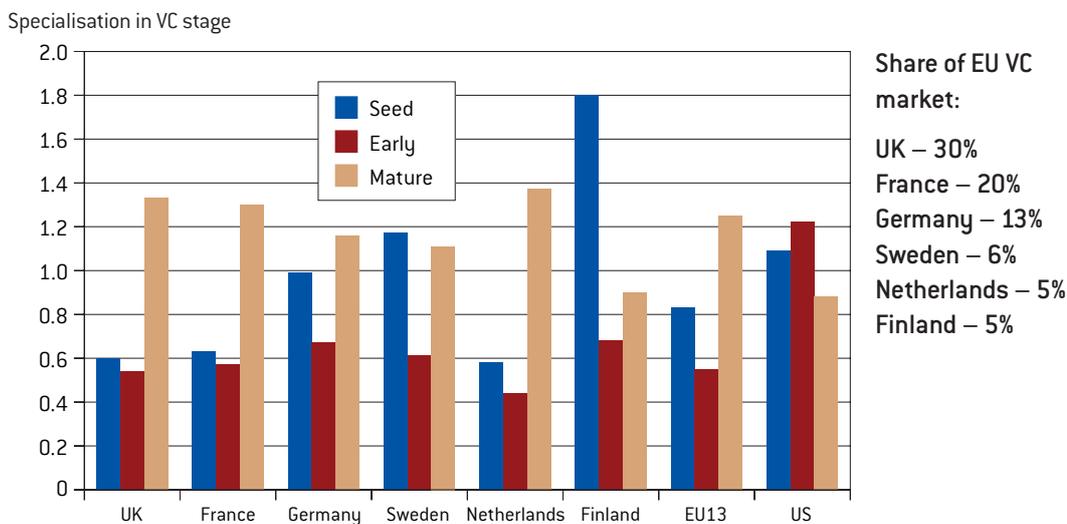
| Investment stage (EVCA) | Europe | Investment stage (NVCA) | US |
|-------------------------|--------|-------------------------|-------|
| Seed | 0.425 | Seed/start-up | 2.181 |
| Start-up | 1.425 | Early stage | 3.499 |
| Expansion | 2.652 | Expansion | 6.011 |
| Replacement capital | 7.208 | Later stage | 7.699 |

Source: Raade and Machado (2008). Note: EVCA = European Private Equity and Venture Capital Association; NVCA = National Venture Capital Association (US).

average deal size is substantially larger at each stage, with the exception of the later stage deals.

With the caveat in mind that performance indicators for venture capital tend to be highly volatile and skewed, most studies confirm the low rates of return of European venture capital, although the funds in the top quantile can show strong performance (Kelly *et al*, 2011). This difference in performance does not seem to be caused by US venture funds being superior, as they do not create more value than their EU peers when investing in Europe (Hege *et al*, 2009). Instead, it seems to reflect the difficulty of making commercial returns in Europe, particularly on their early and seed-stage investments. Table 3 illustrates the lower success rates for EU VC funds in the last decade, with lower successful exits,

Figure 1: Specialisation of selected EU countries in stages of venture financing



Source: Bruegel on the basis of Kraeussel and Krause (2011). Note: only the countries with at least 5 percent of the total EU13 venture capital market are reported. Specialiation ratios are calculated as share of the country in VC stage relative to share of the country in total VC.

particularly for the very early stage firms, labelled as 'infant' firms⁴.

In summary, European venture investing is still underdeveloped. Despite some success stories and a number of top funds that are performing well, overall the European venture system is still maturing. The average fund in Europe remains significantly smaller than in the US. Facing a smaller deal flow of high-quality firms that might grow rapidly to become yollies, European VC is less focused on early-stage technology firms, and has less developed exit routes.

4 PUBLIC SUPPORT FOR VENTURE CAPITAL

The early-stage equity gap has led governments to intervene. Virtually every major economy, including the US, has implemented initiatives to promote venture capital (Bottazi and Da Rin, 2002; Lerner, 2009; Murray 2008)⁵. Different types of public support have been deployed, ranging from encouraging investors through tax breaks and concessions, to creating new pools of capital through regulations and guidelines allowing institutional investors such as pension funds to invest in VC funds.

Many governments initially established their own VC funds, but these have been largely abandoned. Today government policy in support of VC typically takes the form of capital participation in which the state invests as a special limited partner in a VC fund managed by a commercial venture capitalist, the so-called hybrid funds. A special focus for governments when sponsoring VC funds has been micro-funds, restricting investments to below a threshold (typically less than €2 million in total (including follow-up investments)).

In sponsoring early-stage funds government is pursuing other objectives beyond financial returns. It is also interested in non-financial results, including the development of innovative communities in local clusters. These other objectives have been partially captured through investment objectives and restrictions in terms of geography, technology, size of investment and co-investment requirements.

How effective have these public interventions

Table 3: Success in venture capital: Europe versus the US

| | | Success by infant firms | Success by mature firms |
|---------|------|-------------------------|-------------------------|
| 1985-99 | EU13 | 39% | 33% |
| | US | 51% | 52% |
| 2000-09 | EU13 | 12% | 19% |
| | US | 26% | 30% |

Bruegel on the basis of Kraeussel and Krause (2011). Note: success by infant firms is defined as the share of all VC backed (seed/start-up/early stage) infant firms which exited by going public or through M&A. Similarly, success by mature firms is defined as the share of all VC-backed later-stage firms which had an exit by going public or through M&A.

been? The most important US government programme includes the Small Business Innovation Research (SBIR) programme. SBIR funding is directed towards small companies to support commercially viable high-risk innovative projects. The SBIR is a highly competitive funding mechanism. Owing to the high rejection rate, and the high quality of the evaluation panels (which include former venture capitalists and company CEOs), the awards are recognised by private investors as being a good signal of quality on which to base funding. Lerner's (1999) analysis of the SBIR subsidy programme showed that the positive effects of SBIR awards were confined to companies based in areas with substantial private VC activity.

The UK government also has a long-standing range of instruments to support the VC market, and has evaluated these interventions (NESTA, 2009a). Overall, the UK evidence about hybrid VC programmes seems to be positive, but the size of the positive impact remains small. The current solutions on offer have not (to date) produced the disproportionately higher performance of VC funds seen in US. High quality deal flow and development of expertise at the funds is still lacking. Constraining funds by restricting their investments regionally, or preventing them from 'following-on' their investments in high potential portfolio companies, has proved to be bad practice. This holds true particularly for hybrid micro funds. Insufficient fund size and restrictions on the size and location of investments limit the ability of these funds to generate commercial returns. The evaluation also revealed conflicting

4. Other studies have found similar lower returns on early stage deals in Europe (Murray and Marriot, 1998; Raade and Machado, 2008; Hege *et al.*, 2009).

5. Also in the United States, government programmes have provided a substantial amount of money invested in early-stage technology firms, a sum about equal to the total investments of 'business angels' and about two to eight times the amount invested by private venture capital firms (Auerwald and Branscomb, 2003).

'Politicians have over-estimated their power to redress the early-stage equity gap in Europe. They severely underestimated the difficulties involved in rapidly building a viable venture capital industry. Developing a viable VC and venture investing sector is a long term project.'

objectives between commercial success and non-financial returns, such as local development. These non-financial returns remain often implicit, without clear mechanisms in place to assess how different funds perform with respect to these activities.

5 LESSONS FOR POLICYMAKING

In the past, politicians over-estimated their power to redress the early-stage equity gap in Europe, looking for quick fixes. They severely underestimated the difficulties involved in rapidly building a viable VC industry. Developing a viable VC and venture investing sector is a long term project. American experience suggests that a venture capital system in its initial build up stage is very fragile and needs decades of experience and public support to function effectively (NESTA 2009). Shocks to the system, such as the current global credit crunch, can easily imperil its stability.

Views are polarised on how the government should intervene to address the underdeveloped venture capital market in Europe. If one accepts that the supply of capital is a problem, then government sponsorship of venture funds makes sense, because it increases the available capital supply. But, if the problem is the supply of viable proposals – or that firms are not 'investor ready' – then public sponsorship of funds will not necessarily directly increase the willingness of investors to invest. There is evidence for both points of view. As the previous sections have shown, the problem of Europe's early-stage VC markets cannot be exclusively related to an equity gap, nor to an investment readiness gap, but to 'thin markets' (NESTA, 2009). In thin markets, even if there are available VC funds and high levels of potential projects, they may not be matched.

Below we list some of the characteristics, beyond patience and perseverance, that policy intervention needs in order to effectively address the thin market for early-stage VC in Europe, and to improve access to finance for aspiring yollies.

- VC policy should be embedded within a broader innovation policy so that there is a sufficient supply of profitable projects to fund. Successful early-stage VC funds require a strong deal flow of high-potential firms in which to invest. A strong deal flow will allow VC funds to specialise and to build the technical and commercial knowledge required to identify and support aspiring yollies.
- VC policymakers should be the lubricant for the funding escalator. Different policy interventions are needed at each stage of the funding escalator. Policy tools need to be part of a holistic strategy, so that support is continuous through the stages. A holistic approach includes, in addition to support for private capital investments, grants for pre-competitive R&D, policies promoting business angel groups, public procurement based innovation contracts and government-backed lending.
- VC policy should avoid the 'short is beautiful' trap. Policies and programmes that focus exclusively on filling narrow funding gaps can be counter-productive as they can create artificial barriers between successive rounds of funding.
- VC policy should avoid the 'small is beautiful' trap. Small micro funds are often not viable and have insufficient financial resources to cover their high fixed costs (especially expert management), diversify their portfolios or provide the follow-on funding to the most promising investments in their portfolios.
- VC policy should avoid the 'local is beautiful' trap. Limiting funds to investment in geographically defined areas is likely to have a negative impact on the size of the pool of firms they can invest in.

Overall, these characteristics call for a significant reorientation of the all-too-often pursued policies in many European countries, which support sub-critical regional funds aimed at supporting a tail of average or below-average potential growth firms. Rather than the quantity of VC available, what matters more is how effectively the market

allocates VC to the most promising projects.

6 SUGGESTING CONCRETE EU POLICY PROPOSALS

The critical size for a viable, fluid, thick European VC market can only be reached when VC markets operate at an integrated European scale and are open to the world. Removing fragmentation in the EU venture capital market should therefore be high on the policy agenda. Furthering market integration also holds with respect to European stock markets for young firms, being a critical exit for VC funds. And to improve deal flows, EU integration should also be pushed further in terms of innovative procurement and lead-user markets, raising the prospective returns on innovative projects.

Beyond furthering the single market agenda, what follows are suggestions for new initiatives at the EU level that help redress Europe's deficit in financing aspiring yollies. Taking a subsidiarity perspective, such EU intervention should stimulate the development of better instruments in member states and/or design instruments at the EU level that can capitalise on economies of scale.

6.1 Supporting member state initiatives

Evidence from the US and the UK shows how policy learning effects have gradually improved policies (NESTA, 2009a). Experimenting with new instruments and regularly evaluating existing programmes, and abandoning or restructuring them when inefficient, should therefore be high on the policy agenda.

The difficulties that the US has had getting its support institutions to work, and its many unique environmental features, suggest that it is unrealistic to expect US-style institutions to be easily transferable to other countries. Nevertheless, lessons can be learned from cross-country comparisons. An important contribution that the EU level can provide to member states is the provision of a platform dedicated for learning VC policy lessons.

At EU level, the commissioners for innovation and competition policy should closely coordinate to

ensure that state aid rules governing member state support for VC funding effectively power innovation while safeguarding fair competition.

6.2 Re-aligning existing instruments into a holistic policy framework

The EU already has in place a number of specific venture capital policy programmes. The main financing initiatives at EU level are the European Investment Bank's Risk Sharing Finance Facility (RSFF) for large and mid-sized companies, and its freshly launched Risk Sharing Instrument (RSI) equivalent for SMEs, as well as the High Growth and Innovative SME Facility (GIF). In addition, the Structural Funds, through the European Regional Development Fund (ERDF) and various supporting initiatives (JEREMIE) have stimulated significant investment in national and regional early-stage and VC funds. Evidence for the effectiveness of the EU level instruments is poor and mixed.

A problem with the EU instruments is that they are not designed as part of a holistic approach to address the funding escalator for aspiring yollies. For example, the loans covered by the EIB's Risk Sharing Finance Facility have been recently evaluated as successful in addressing the need for financing of larger innovative projects at later stages⁶. This instrument is however for the moment not sufficiently addressing the need for loans of aspiring yollies after they have gone through rounds of early-stage venture funding. It remains to be seen if the recently launched RSI might redress this.

Grants for research and pre-competitive development are currently covered by the Framework Programme (FP), with the majority of this funding going into cross-border cooperative projects. Despite the increased efforts to involve innovative SMEs in these projects, this instrument is not rated to be a significant source of financing by young highly innovative companies (eg NESTA, 2009a). The costs of administration and coordination of partners are prohibitive. Beyond improving directly the access to grant funding for young highly innovative firms, Horizon 2020 (the next generation of the Framework Programme), grant funding needs to be integrated into a holistic policy approach addressing the finance escalator.

6. http://ec.europa.eu/research/evaluations/index_en.cfm?pg=rsff

To this end, grant selection and evaluation should help pave the way for financing the next stages of commercialisation of FP-funded ideas, without necessarily funding commercialisation itself, as the next suggestion will illustrate.

6.3 Filling the funding escalator with new EU initiatives

i) Grants for yollies to bridge the lab-to-market gap

Still missing at EU level is an instrument to address the shortcomings of the financial market at the pre-commercialisation phase that affects young highly innovative firms. Inspired by the US SBIR, a previous Bruegel Policy Brief (2009/01) proposed a similar EU system of grants for the high-risk innovative projects of young companies, during the critical start-up and development stages, when financial market barriers are at their highest. If implemented properly, the programme will not only enhance the chances of success of the projects being funded but will also, through 'certification', ease the access to private VC investment at later phases of the project. This implies a critical role for the selection and evaluation process for these grants, which should involve the expertise of entrepreneurs, business angels and venture capitalists.

ii) A fund-of-funds to leverage Europe's early-stage VC market

While the grants for yollies proposal would help to address the 'investment readiness' gap, simultaneously needed in Europe are VC funds of sufficiently critical scale that are willing and able to fund highly innovative projects from their early stages. The European Commission is proposing a fund-of-funds as part of Horizon 2020. This fund-of-funds should be given a clear mandate for targeted stake-taking in private VC funds in Europe, which have the potential to grow to critical scale. Restrictions on portfolio investments should be avoided so that they do not impede the build-up to critical scale.

iii) Leveraging member-state procurement budgets for innovative purposes

Revenues from contracts with early lead customers can be another important source of funding for aspiring yollies. In a number of markets, these early customers are public agents, who can through innovative public procurement help to alleviate the early-stage finance gap (see Technopolis, 2011). The US success in information technology is often attributed to a successful public-procurement role played by government agencies such as the Department of Defense and NASA. Small companies receive special attention through the SBIR procurement programme.

The development of European equivalents to the US SBIR procurement model, such as the UK Department of Health's research and development programme needs to be supported. The EU level should provide a forum for policy learning and diffusion of good practice relating to procurement policies for innovation. The EU should also consider providing financial support by topping-up member state programmes aimed at innovative procurement, which have been designed according to good practice guidelines.

iv) Increasing VC expertise

To increase the number of quality VC firms with professional managers with top abilities to select and support aspiring yollies, Europe should tackle VC education more seriously⁷.

Finally, as the evidence suggests that there are plenty of ineffective public schemes in Europe supporting mediocre deals at mediocre funds, evaluating and shutting down the failures would free up enough funds to allow a significant shift towards a more effective venture investing system focused on high quality VC meeting aspiring yollies at little additional cost and high expected returns to the European taxpayer.

⁷ The Kauffman Fellows Program could serve as inspiration. It provides a structured, experiential education programme with the purpose of identifying, developing and networking the next generation of global leaders in venture capital (see <http://www.kauffmanfellows.org/curriculum.aspx>).

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