

JRC CONFERENCE AND WORKSHOP REPORT

Corporate Venturing for R&I: Practitioner's views and policy questions

Summary report of the 6th GLORIA virtual workshop

R. Compaño, L. Napolitano, F. Rentocchini, C. Domnick, P. Santoleri, A. Tübke, and P. McCutcheon

2022



This publication is a Conference and Workshop report by the Joint Research Centre (JRC), the European Commission's science and knowledge service. It aims to provide evidence-based scientific support to the European policymaking process. The scientific output expressed does not imply a policy position of the European Commission. Neither the European Commission nor any person acting on behalf of the Commission is responsible for the use that might be made of this publication. For information on the methodology and quality underlying the data used in this publication for which the source is neither Eurostat nor other Commission services, users should contact the referenced source. The designations employed and the presentation of material on the maps do not imply the expression of any opinion whatsoever on the part of the European Union concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

This Summary report of the 6th GLORIA virtual workshop: Corporate Venturing for R&I: Practitioner's views and policy questions has been published within the context of the Global Industrial Research & Innovation Analyses (GLORIA) project that is jointly carried out by the European Commission's Joint Research Centre —Directorate B, Innovation and Growth— and the Directorate General for Research and Innovation —Directorate E, Prosperity. GLORIA has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101015509. The main expected impact of GLORIA is the better understanding of corporate Research & Development (R&D) efforts in relation to the green deal and sustainability objectives, starting from the top R&D investors in their global competitiveness perspective.

The JRC.B and DG R&I.E would like to express their thanks to everyone who has contributed to this project.

Contact information

European Commission - Joint Research Centre Directorate Growth and Innovation - Knowledge for Finance, Innovation & Growth Unit Edificio Expo; c/ Inca Garcilaso, N° 3 E-41092 Seville (Spain)

Name: Ramón Compañó Email: <u>ramon.compano@ec.europa.eu</u> Any comments can be sent to: <u>jrc-b7-iritec@ec.europa.eu</u> More information, including activities and publications, is available at <u>https://iri.jrc.ec.europa.eu/home/</u>

EU Science Hub

https://ec.europa.eu/jrc

JRC130034 Seville: European Commission, 2022 © European Union 2022



The reuse policy of the European Commission is implemented by the Commission Decision 2011/833/EU of 12 December 2011 on the reuse of Commission documents (OJ L 330, 14.12.2011, p. 39). Except otherwise noted, the reuse of this document is authorised under the Creative Commons Attribution 4.0 International (CC BY 4.0) licence (<u>https://creativecommons.org/licenses/by/4.0/</u>). This means that reuse is allowed provided appropriate credit is given and any changes are indicated. For any use or reproduction of photos or other material that is not owned by the EU, permission must be sought directly from the copyright holders.

All content $\ensuremath{\mathbb C}$ European Union 2022

How to cite this report: R. Compaño, L. Napolitano, F. Rentocchini, C. Domnick, P. Santoleri, A. Tübke, & P. McCutcheon, *Corporate Venturing* for R&I: Practitioner's views and policy questions, European Commission, Seville, 2022, JRC130034.

Contents

1	Introduction and Background		2
2	Polic	Policy Background4	
		ary report of the workshop6	
	3.1	Welcome	6
	3.2	Setting the scene	6
	3.3	Energy sector	7
	3.4	Industrial sector	9
	3.5	Other sectors	11
	3.6	Policy Session	13
	3.7	Survey	14
4	Anne	hary report of the workshop	
5	Anne	ex: Privacy Statement and Data Protection	20

Abstract

Recognising the increasing role that corporate venturing (CV), in general, and corporate venture capital (CVC), in particular, play in company innovation strategies, the European Commission organised on 23rd May 2022 a workshop with CVC practitioners to better understand the features of and rationales for CVC / CV and the role public policy could play to facilitate its expansion.

The workshop confirms the Growing Phenomenon of CV in Europe; an increasing number of recurring CVC investors and growing investments, reaching 14.5b\$ in 2019 from 3.6b\$ in 2013. Despite this increase, CVC investments in start-ups are still modest with regard to the overall size of the VC market. They are modest also with regard to the corporate's investment in internal R&D, representing about 2,6% of the sum spent on corporate R&D.

In line with the overall venture capital (VC) market, corporate VC is also less mature in the EU than in the USA. The panel discussed options to improve this situation, geared to create an efficient pan-European market for cross-border deals, such as promoting VC networks, improving the visibility of start-ups (particularly outside the country of the headquarters of the mother company) or measures to strengthen linkages between start-ups and corporates at early stages.

1 Introduction and Background

This workshop was organised as part of the **Global Research & Innovation Analyses**¹ (GLORIA) project undertaken jointly between the Commission's Joint Research Centre and the Directorate General for Research & Innovation (R&I). **GLORIA workshops** are held in order to discuss policy-relevant issues addressed in the analytical work of this project² and obtain feedback from different stakeholders from academics, policymakers, and industrialists about the relevance of the results and analysis obtained in the GLORIA activities and their policy implications. Up to now, thirteen workshops have been held.³

The EU **Green Deal**⁴ aims to boost Europe's competitiveness based on cutting-edge innovation in a broad sense. It constitutes an integral part of the Commission's strategy to implement the **United Nations 2030 Agenda** and the **Sustainable Development Goals**. The Commission emphasises the need for **structural transformation** of our Economy and need for crosscutting policy support towards **competitive sustainability**⁵ where EU companies play a central role in the transition to a more environmentally friendly path. The **European Research Area**⁶ will continue to incentivise R&D investment from the private sector. This is emphasised in the **roadmap**⁷ that aims to revitalise ERA underlining the importance of a transformative R&I policy that shapes technological and societal change to deliver a sustainable European society. Part of the Commission's strategy is the **Digital Compass**⁸ emphasising the role of digital technologies for innovation and the Green Deal's twin transition.

However, this **transition of EU industry** is **not isolated from global competition**. As outlined in the revamped **industrial strategy**,⁹ ensuring Europe's **technological leadership is key towards maintaining industrial competitiveness**, which should be ensured via a stronger Single Market for recovery, monitoring of industrial innovation and private R&D targets. And this happens on the background of the **Recovery Plan for Europe**, supporting EU recovery from the COVID19 pandemic via modernisation and innovation to relaunch the economy.

¹ See: <u>http://iri.jrc.ec.europa.eu/home/</u>. The activity is undertaken jointly by the Directorate General for Research and Innovation (DG RTD.E; see: <u>https://ec.europa.eu/info/research-and-innovation en</u>) and the Joint Research Centre, Directorate B Growth & Innovation (JRC-B; see: <u>https://ec.europa.eu/irc/en/science-area/innovation-and-growth</u>).

² See: <u>https://iri.jrc.ec.europa.eu/scoreboard/2019-eu-industrial-rd-investment-scoreboard</u>

³ See: <u>https://iri.jrc.ec.europa.eu/events</u>

⁴ COM(2019) 640 final

⁵ Competitive sustainability is at the heart of Europe's social market economy and should remain its guiding principle. Moving towards a sustainable economic model, enabled by digital and clean technologies, can make Europe a transformational frontrunner. Leadership on environmental protection and a strong, innovative industrial base must be seen as two sides of the same coin, giving the EU a competitive first-mover advantage. A stable economy, allowing for long-term policies, and a just transition for those most affected by the transformations are prerequisite for success. (See COM 2019/650 final, pp. 3 and corresponding figure).

⁶ COM(2020) 628

⁷ <u>https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12495-Communication-on-the-future-of-research-and-innovation-and-the-European-Research-Area</u>

⁸ COM (2021) 118

⁹ COM (2021) 350

Within the apparent tension between the transition of EU industry vs. technological leadership, **corporate R&D investment is key to ensure EU competitiveness**. Here, companies can pursue **different strategies beyond direct investment**. Investments through **Venture Capital (VC)** are becoming drivers of the global tech-race and scouting of new radical innovations in the market. VC funding is vital for innovation, because it allows promising innovative firms to scale up and prosper.

This GLORIA workshop focussed on **Corporate Venturing for R&I: Practitioner's views and policy questions**. The virtual workshop was by invitation only and held on 23 May 2022 in the afternoon. The **policy roundtable with Q&A session** concluded the workshop and identified possible ways forward.

2 Policy Background

From a company's point of view, establishing and operating a CVC fund serves several strategic interests. Firstly, it can serve as a vehicle to complement the firm's internal innovation capability or widen their product portfolio.¹⁰ Investments in start-ups, and eventually their subsequent acquisition, may also serve to fix emerging internal weaknesses in the internal innovation capability of the company.¹¹ In addition, investing in start-ups can be a relatively low-risk approach to diversifying the product portfolio by exploring new, potentially attractive, lines of business. In both cases, it is a strategy to tap into external knowledge and review the availability of new talents. Often the economic reasoning is that it may be more efficient and economical (quicker or cheaper) to buy-in the knowledge rather than to develop it in-house. Furthermore, it preserves an 'organizational opportunity cost' since start-ups enjoy a high degree operational agility that large firms do not always possess.

CVC can be of particular importance for innovative companies. For instance, when focusing on the CVC activities of the main "Scoreboard companies",¹² the following insights come to light:

- Growing Phenomenon. 62% Scoreboard companies have invested into start-ups. The number of recurring CVC investors is increasing. CVC investments have grown from \$3.6b (2013) to \$14,5b (2019)¹³
- CVC as R&D strategy. CVC investments in start-ups are still modest with regard to investment in corporate R&D. CVC investments in start-ups and scale-ups equal on average 2,6% of the sum spent on corporate R&D or 3,5% of the investment on M&A by the same Scoreboard companies. Corporate investments in CVC are steadily, but moderately increasing with regard to in-house corporate R&D.
- There is an apparent correlation between in-house R&D investments and investments via CVC. In particular an increase in the internal R&D stock by 1%, leads to an increase of CVC investment by 0,4-0,6%
- Sectorial focus. CVC follow a similar trend as private independent venture capital to invest predominantly in sectors with expected short to medium-term returns such as Fintec, Software (AI, SaaS, etc.) and less in longer-term deep tech. CVC are less active in 'traditional' sectors (aero, chemistry, construction, etc.)
- Regional differences. We observe considerable variations between countries and within countries. The reason may be related to several factors. First, the sectorial

¹⁰ MacMillan, I. C., Roberts, E. B., Livada, V., & Wang, A. Y. (2008). *Corporate venture capital (CVC) seeking innovation and strategic growth: Recent patterns in CVC mission, structure, and investment.* National Institute of Standards and Technology, US Department of Commerce.

¹¹ Ma, S. (2020). The life cycle of corporate venture capital. *The Review of Financial Studies*, *33*(1), 358-394.

¹² The term "Scoreboard" companies refers to the top 2,500 R&D investors, which are analysed every year by the European Commission. See Grassano, N., Hernandez Guevara, H., Fako, P., Tuebke, A., Amoroso, S., Georgakaki, A., Napolitano, L., Pasimeni, F., Rentocchini, F., Compañó, R., Fatica, S. and Panzica, R., The 2021 EU Industrial RandD Investment Scoreboard, EUR 30902 EN, Publications Office of the European Union, Luxembourg, 2021, ISBN 978-92-76-44400-8, doi:10.2760/472514, JRC127360. https://publications.jrc.ec.europa.eu/repository/handle/JRC127360

structure of the industrial structure of the regions (e.g. EU not strong in Software). Second, to the maturity of the VC industry (e.g. level of possible co-investments of CVC with private VC). Third, regulatory aspects (e.g. the USA and China benefit common regulations for large internal market). Fourth cultural considerations (e.g. a large number of professionals longstanding experience with VC instruments)

3 Summary report of the workshop

3.1 Welcome

Fernando Hervás (Deputy Head of Unit, JRC.B7 Knowledge for Finance, Innovation & Growth) opened the workshop describing the background of the work on industrial innovation & dynamics, where the JRC is monitoring the performance of the top global R&D investors. Regarding growth dynamics, the financing of innovative Research & Innovation (R&I) via e.g. Corporate Venturing (CV) has increased its role. The JRC has researched the scale-up gap, but identified a need to better understand company strategies and behaviours regarding Corporate Venture Capital (CVC). This is echoed in many EC policy initiatives by DG-GROW, CNECT and the upcoming Innovation Agenda. Specific measures, include the scaling-up in key sectors such as ICT and Health, while it is also and necessary to build on the EU industrial capabilities and base in medium and low-tech sectors.

3.2 Setting the scene

Ramón Compañó (Senior Expert, JRC.B7 Knowledge for Finance, Innovation & Growth) outlined the purpose of the workshop to understand whether and how policy can do more to promote CVC. The topic of CVC relates to open innovation and access to finance. He presented preliminary evidence on the CVC activities of the top global R&D investing companies monitored by the JRC. Matching CVC data with the Scoreboard data on R&D investment shows that on average, CVC amounts to 2.6% of the own-funded R&D, with regional differences (e.g. 2.4% in EU and 4% in US,). This raises the question of why CVC activity is modest (although increasing) and how significant it is for open innovation.

The data show that the lion's share of CVC is performed by US-based companies, which is largely attributed to a mature VC culture across the Atlantic since decades. A second reason is the industrial structure in the USA, with a high number of large ICT corporates, which traditionally tend to make more use of VC instruments than of the industrial sectors. EUbased corporates operate often via US-based subsidiaries, and take part in a lower number of deals with similar size. The data show a prevalent home-bias: Europe-based companies tend to invest preferentially in their home-country, with few exceptions, such as Finland or the Netherlands. Internal R&D activity is positively correlated with CVC investments, but the degree of correlation varies by sector. There is high complementarity of R&D and CVC in ICT and health, whereas in automotive the objective is to tap into new business models, whereas in financials it is towards open innovation. The strategic goals and the investment levels vary by industrial sector. Relating parent companies to the type of investment, there is growth in health and transport, but need to investigate further in other start-up types. Comparing sources and targets of CVC, there is generally less investment in technologies requiring long-term development cycles, notably deep tech related ones, than in sectors short to medium-term development such as software. In 2013-20, the CVC by EU-based companies in ICT and healthcare is lower than that of the US, this gap is widening in the former and stable in the latter. In financials, there is a widening gap in favour of the EU. The related policy questions may include: what are the reasons behind many EU-

headquartered CVC investing more in the US than in the EU? How could the EU public agencies foster intra-EU deals including cross-border ones? How could the EU could contribute to mitigate apparent structural industrial deficits in some regions?

3.3 Energy sector

The energy sector session was introduced by James Mawson (Mawsonia ltd.).

Federico Gonçalves (EDP Ventures) outlined their plans to invest €21bn CAPEX in green assets by EDP Group (until 2025) plus €1bn in innovation including CVC investment from EDP Venture (€100mn/year until 2025), with 25 companies in their portfolio. The main investment areas are in renewables, grid, mobility, storage, hydrogen and decarbonisation. These investments are concentrated in early-stage deals, up to €10mn euros, with currently 35 companies in their portfolio. The investment motive is both strategic and financial.

Alfonso Carranza (Elewit, Red Eléctrica de España - REE). Besides being an energy infrastructure provider, REE runs also fiber networks (Reintel) and satellites (Hispasat). Elewit is REE's innovation arm founded in 2019 and employing 19 staff with the objective to transform energy and telecommunication infrastructures. Elewit acts as an early-stage investor and has so far invested in five companies (since 2019), with ticket size ranging between 0.5 - 2.5m. It has also has participated in 26 proof-of-concepts (POCs) as part of their venture client programme. They are investing with a strategic mindset in the energy area, with potential financial returns coming later (Series B to Series A). They are launching their own CVC fund in 2022.

Erika Escolar Eguia (Capital Energy, Quantum) introduced Capital Energy, a Spanish green energy utility company, originating from project development work. The foreseen capacity is 8MWh in Spain and Portugal. Quantum is a fund investing in Seed and Series A and C rounds (ticket size $\in 0.2$ up to 2.5 mn, including potential follow-on tickets from up to $\in 3$ mn) in order to deliver financial return and create strategic value. Quantum has also established a venture programme to validate the underlying business model.

Jan Lozek (E.ON's Future Energy Ventures - FEV) explained his company's mission to provide a net zero energy system with a focus on software investments optimising the existing hardware. They have now 50 investments and a team of 15 in Palo Alto, Tel Aviv and Berlin, focusing on Series A and B rounds (with ticket sizes between \in 31-10 mn). FEV focuses on digital technologies for decarbonized, decentralized and digitally-interconnected systems, as well as technologies for smart and connected cities and invest in enabling technologies for cities and energy in the years to come, including the fields of AI and Machine Learning, Blockchain and Cyber Security.

Ternhi Vapola presented Helen Ventures, the investment arm of Helen Ltd, a Nordic energy company, investing in European Startups (Seed, Series A, Series B) in the sector eMobility, renewable energy, distributed energy solutions, smart grids, energy storage, decarbonisation techniques, etc. with an initial ticket size between \in 300k - \in 3m. With these

investments (Helen Ventures) aims at positing itself as the prime player software-based technologies in Northern Europe. She highlighted the value added they intend to provide regarding the understanding of the market being themselves energy provider to create value for both the mother company and the start-up itself.

Emilio Martínez presented Enagas Emprende, the venture branch of the Spanish national gas grid and transmission system operator. He believes that multinationals are best to scale-up tested ideas invented by start-ups. They help mainly in the Seed and early growth stages to test and start deploying technologies. Their investments include technologies related to biogas, sustainable mobility, hydrogen, energy efficiency, distributed generation, and energy storage. The investment strategy is based on a "funnel" approach that starts as broad as screening over 1.100 projects of which only 29 got deeply analysed and 18 are being currently being incubated. ENAGAS Emprende has a wide range of tools at their disposal, including an internal entrepreneurship programme (for Enagas employees), venture client projects, as well as direct investments into funds and corporates. Enagas also has an internal venturing programme and they invested €57,2m in 2 funds and 17 start-ups (14 still alive) generating 470 jobs.

Discussion

In the ensuing discussion, the first question was how CVC can provide support to the necessary energy transition and to reach the relevant policy targets. The panel emphasized that CVC can allow companies to tap into new emerging technologies that the company itself can often not, e.g. offshore wind ten years ago. Over the past two years, energy-related CVC have performed massive investments and CV vehicles have been created. As a matter of example, most energy corporates have a CVC unit and 20% of energy-related VC growth deals over the past two years involved at least one CVC. In 2021, 50% of all deals were with a CVC founded after May 2020.

The panelists consider that in the realm of the energy sector the prime added value of CVC to startups lies in the collaboration and access to technology beyond the mere financial investment. Specifically, the support of the holding company allows CVCs to give their target companies a wide range of support tools to reach their goals, including testing and validating products, access of networks of suppliers and clients etc. As the emission reduction targets cannot be reached with currently existing equipment, on one side, and technological alternatives may arrive late, on the other side, one strategy consists in interlinking existing equipment and increase performance through networked digital technologies. As it is estimated that 40% of technologies needed for the energy transition are still under development, another CVC approach is to accelerate the proof of concept of new technologies and to scale these up. Here, startups do contribute agility to the development processes by being quicker to tests new technologies and tools. This agility brings dynamism to the corporates.

3.4 Industrial sector

Alberto Pintado (Indra) introduced the CVC activities of the company, including €293M in R&D investment in 130 countries in the area of transport, defence and digital. R&D investment corresponds to 8,6% of sales (2021). The goal of the CVC unit is to allow the firm a more open, leaner and disruptive innovation. The focus is on digital, deep tech and early stage technologies which are aligned with the company main strategic expertise, mainly through Seed and Series A investments (up to €500k direct investment but also other forms possible). Indra invests in digital technologies, e.g. Blockchain, AI, Advanced Analytics, Edge/IoT, Cibersecurity, AR & VR and deep tech, e.g. Quantum Technologies, Photonics, Biometrics, Drones, Robotics, and Radar/Lidar/MW Technologies

Emma Hertin (Bring Ventures) highlighted the Nordic focus of the logistics group to which the CVC division belongs to. The CVC division was created 2 years ago with a strategic goal by the parent company Posten Norge, the Nordic postal service and logistics group founded in 1647. Posten Norge employs 12.516 people and their revenues 24.716 m NOK (2021) are split into logistics (79%) and mail (21%). The goal of Bring Venue is to turn their mother company into the greenest logistics provider. To this end they carry out internal innovation via incubating new business ideas (two startups incubated internally) and invest externally in early phase startups via their CVC division (nine investments). Funds for investment comes mainly from their balance sheet. Bring Ventures consists of five persons and they have made nine investments so far for a value between \in 200k and \in 5m.

Franziska Brossart (ABB Ventures) presented 54 investments totaling \in 500mn with ticket sizes between \in 2-10mn, and VC partnerships. ABB Ventures has been present on the CVC market since 2010. They focus mainly on early VC and Seed investments retaining at most 20% ownership. They also retain investments in ten different VC funds. Their area of expertise lies in transportation, industry and buildings/construction with most of the portfolio focused on US startup-ps. Today, the Morrow batteries investment together with Siemens for production of batteries in Norway was announced. This is a good example of an attempt at re-industrialisation (i.e., fund raising for sustainable start-up located in Norway).

Claude Sébastian Lerbourg (Saint Gobain) stressed the objective of the company of reducing the environmental impact in the construction sector. They have a team of 13 members in the US, China, Europe and Israel since 2006, with renewed activity since three years and accelerated processes for total investments of ≤ 20 mn/year. The current portfolio is about 30 companies with two additions per year. Initially they mostly performed investments in the US, but now they have a more widespread target, although the large majority is still in the US.

Discussion

The importance of investing in innovation projects more locally has received more attention due to recent complications and disruption of supply-chain. It has reinforced reindustrialisation of Europe is a key policy target. One measure to revert the past loss of industrial tissue, is to which extent EU headquatered multinationals are able to attract innovation foreign to talent and expertise. This challenge is both intra-European as well as world-wide one, i.e. attracting US or Chinese start-ups to expand in Europe. And the integration of foreign startups and making them succeed in different environment reveals quite difficult in practice. Here, European corporates have a substantial role to play linking the "supply" and "demanding" side. Bring Ventures, for instance, can attract good business to Norway because they know well their domestic market, while they comply with their mandate to look for good sustainability-driven ventures that offers also a good return in investment.

Internal R&D and open innovation via CVC are regarded as complementary vehicles for the strategic goals of big firms. However, they are not equal partners. For Scoreboard Companies, investments via CVC account in average only for about 2,6% of the sum allocated to internal R&D. Often, these limited resources and the fact that the economic and strategic return in CVC investments generally pay off at long time periods, forces CVC managers to be in a constant need to justify their investment via-à-vis the management board. They, therefore, consider that a key question is to measure strategic impact is important. Unfortunately, defining meaningful and measurable indicators reveals to be a very complex task in practice.

European-based firms do increasingly make use of CVC, both in terms of number of enterprises as well of investment amounts. The CVC culture in Europe seems to be evolving and shows signs of maturity in handling corporate venturing. This maturity refers to operational aspects, strategy and approaches. For established CVC, dealflow does not longer seem to be an issue nor its evaluation, where CVC tend to screen efficiently over 1,000 investment opportunities per year. The investment strategy, however, still seems to evolve and to adapt to the general corporate's strategy, to changes in the corporate (e.g. due to mergers or acquisitions), to the available financial envelope, to the new internal expertise, etc. For instance, Indra observes a shift towards investments closer to the core business and pre-M&A minority stakes, whereas previously it had been more focused on emerging technologies.

With regard to upcoming challenges, the panel report on the need to continue increasing awareness of CVC activities both internal and external to the corporations. With regard to the former, it is believed that the more deals get closed, the more network activity is created around CVC activities of multinationals. Hence, the parent company starts to become more aware and adapt, becoming more open towards opportunities. And with regard to the latter, more deals means not only bi-lateral relationships with specific startups but a denser innovation ecosystem in its ensemble. Policy-maker, ought to follow the CVC dynamics more closely in order to adopt the right measures to ensure that additional smart money will flow into the ecosystems

3.5 Other sectors

The session on other sectors was chaired by **Amparo San José** (European Institute of Innovation & Technology).

Mark Redshaw (Evonik Venture Capital) presented the activity of the fund, which is the VC arm of Evonik Industries, a stock-listed German chemicals company. Evonik spends \in 464m (2021) in R&D, corresponding to 3,1% of their annual revenues. The area of activity includes nutrition & care, speciality additives, smart materials and performance materials. Their CVC fund features a \in 250mn endowment and a team of 15 professionals across three different continents. The fund has a strategic approach with a financial goal. They analyse about 800 companies annually (dealflow) and perform about 25 deal per year. Since 2012, they have invested in 45 start-ups. One of the main benefits of their CVC activities is being able to test new business models thanks to the targeted start-ups, something that was not feasible before. Co-investors, VC networks and learning and education are relevant factors for CVC activity, tax incentives and accelerators not as such.

Hans Söhngen (KPN Ventures) presented his company as a minority investor that has a strategic goal to bring mutual benefit to both the company and the targeted start-up. KPN Ventures looks for high-quality ventures to help them scale-up and access the Dutch market. Since 2015, they have carried out 21 investments in series A and B between €1-3M ticket size.

Julius Norkunas (Digital Aero Technologies, Avia Solutions Group) introduced the CVC activity of the group, which is active in the aviation market, specializing in end-to-end capacity solutions for passenger and cargo airlines. Avia has 7.000 employees operating in about 100 sites in all continents. They have a portfolio of 11 companies and a budget of around \in 20m. They have also invested in creating Aerocity Tech Valley, a cluster where start-ups can co-locate and develop their technologies.

Clement Combal (Partner Orange Ventures) explained Orange Ventures currently has €350mn under management. The CVC selection is basically based purely on financial return. Strategic considerations comes into play in the geographical areas it operates. In particular, deals are mainly distributed in Europe (with a focus on late-stage investments), in the Middle East and Africa (focusing on early-stage deals), and on impact investing. They are a fully independent unit looking for high-quality start-ups that can provide benefit to Orange. So far, most of the targeted start-ups have been able to build synergies with the

group. One of the main goals of these partnerships with these ventures is to help digitalize the group.

Christian Teichmann (Burda Principal Investments) showed a similar setup to Orange with a CVC unit operating in an independent fashion and with a pure financial goal. They are highly internazionalized, with a presence in Singapore, London, Munich and Berlin. One third of their investment is in the US, one half in Europe and the rest in South East Asia. Their focus is on digital consumer tech, cyber security. Tickets are greater than \in 10mn and focus on series B financing. One advantage of their international presence is that start-ups can leverage their teams in other continents to more easily access those market. This allows them to build a global presence and to scale-up faster.

Discussion

The round table discussion addressed how corporate venturing could contribute to immense efforts needed for the green and twin transition.

For the digital transition, Mark Redshaw (Evonik Venture Capital) argued that generally CVC groups often cannot stem the efforts and investments needed until the final stages. CVC serve as the most agile entry point within a corporate to test the viability and scale-up of digital business models. The next steps to implement and monitor these models, however, lies in the realm of the corporate structure.

For the sustainable transition, Redshaw argued that, given the urgency of addressing climate change, it would be worth reconsidering the priorities and find a more adequate balance between shorter-term and long-term solutions. In particular, it would be worth putting more emphasis on those start-ups that improve existing technologies rather than fueling the pool of possible new alternatives that would require very long time periods to reach commercialization. Julius Norkunas (Digital Aero Technologies, Avia Solutions Group) remembered that strategies to reduce emissions are important, but they have also to bring value to the company. Hans Söhngen (KPN Ventures) highlighted that they do not have a specific strategy on sustainable investment, but that start-ups are already more energy-efficient than the typical company. Investing with a sustainable focus requires resources and capabilities that take time to develop. Christian Teichmann (Burda Principal Investments) explained that ESG reporting is sought for in the whole organisation, which includes also the CVC investments. A few companies, such as Orange, have commitments to SDGs which are linked to additional internal performance measurements such as impact investing.

While CVC approaches might vary somewhat in the different world region, large scale deals generally always start by networking first on the ground and looking for investment partners that share similar values. This process may be tedious and may take 24 months from initial contact to actual investment for large deals. The process gets leaner and quicker when operated by an established network of investors, which may involve corporate

and independent venture capitalists. Such networks relying on the deep knowledge of the profesionals increase the quality of the deals. Networks are not necessarily geographic, but often more thematic, and large multinationals rely on their colleagues to signal opportunities. Joint scouting efforts along defined value chains would strengthen the outcome, but depend on individual networks at the moment. From a policy point of view, one potential measure may consist in supporting the creation of new pan-European networks or the widening existing ones

3.6 Policy Session

The Policy session was moderated by **Christian Suojanen** (Broadreach Global). The panel consisted of Mark Redshaw, Emma Hertin, Alberto Pintado, and Claude-Sébastien Lerbourg, as representatives of the previous sessions. The panel was complemented with Nicolas de la Vallée Poussin, Verónica Beneitez, and María Abad. The aim of the discussion was geared to understand if there was any need for policy action and in case this would be the case to discuss possible measures that would enable a more vibrant CVC landscape in Europe. In preparation to this session, the organizers had prepared a short survey that participants had responded to prior to the workshop. The findings of the survey is briefly summarized in section 3.7 and served as kick-off of the workshop. After a brief introduction, the moderator passed the floor to the panelists.

Nicolas de la Vallée Poussin (European Investment Fund – EIF) briefly introduced the mandate of the EIF to support SME though providing guarantee schemes and fund equity products.¹⁴ He drew the attention to the new InvestEU programme that will provide the vehicles for investments in the coming seven years. As the InvestEU activities are numerous and the particularities of the InvestEU Fund complex to be discussed in this workshop summary, we refer to the official InvestEU website.¹⁵

Verónica Beneitez (Executive Agency for Small and Medium-sized Enterprises) introduced the European Innovation Council (EIC) established under the EU Horizon Europe programme with a budget of €10.1 billion to support game changing innovations throughout the lifecycle from early stage research, to proof of concept, technology transfer, and the financing and scale up of start-ups and SMEs. The EIC provides different support schemes: the EIC Pathfinder, the EIC Transition, and the EIC Accelerator. The EIC Pathfinder programme supports the exploration of radically new technologies with grants of up to €3–4 million support early stage development of future technologies up to proof of concept. The EIC Transition funds innovation activities that go beyond the experimental proof of principle in laboratory with grants of up to €2.5 million to develop market readiness. The EIC Accelerator supports start-ups and spinout companies to develop and scale up game-changing innovations, from TRL5 to market deployment and scale-up. The EIC Accelerator offers grants up to €2.5 million for innovation development costs (TRL5 to 8) and equity investments from €0.5 million up to €15 million managed by the EIC Fund for market deployment and scale up (TRL9 onwards).

María Abad (European Institute of Innovation & Technology - EIT) presented the Food Impact Fund. EIT-food can provide up to \in 300,000 funding per venture to implement innovative-associated projects. In addition, the EIT access to finance scheme offers to

¹⁴ For a summary we refer to the EIF site: https://www.eif.org/what_we_do/equity/index.htm

¹⁵ https://investeu.europa.eu/what-investeu-programme/investeu-fund_en

selected candidates' access to the EIT Food Investors community and one-to-one investor meetings, coaching and scale-up support.

3.7 Survey

In preparation of this workshop, the organizers prepared a questionnaire to collect information about the participating CVCs. The results of the survey were presented to the workshop participants by Ramón Compañó. In the following we report about the major finding of the 27 companies that responded to the survey and interpreted some results in the light of the workshop discussion.

As expected from data from other European corporates, there is large variety of open innovation schemes run by the respondents. Some firms run corporate internal accelerators programmes; others run these in conjunction with other partners and other not have any (see Figure 1). Not only there is a variety in the open innovation activities, there are also differences in the investment approach; spanning from punctual direct investments in startups to setting up a fully-fledged CVC fund. In the latter case the way of operation may change considerably from being managed internally with the corporate, independently from the mother company or trusted to an independent third party

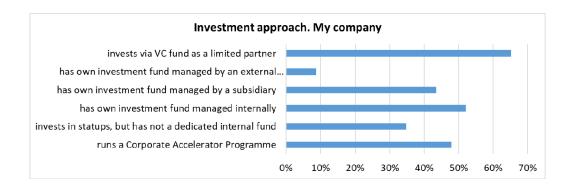


Figure 1: Degree of Open Innovation activities

While there is a large variety on how to run open innovation schemes within a corporate, the motivation for corporate venturing, the why, is more similar for most corporates, Figure 1. The most important driver is the search for new business models and to diversify the corporate's product or service portfolio. Looking for technological alternatives or substitutes comes next. While most companies consider their investment choice to be primarily strategic, an important criterion is to guarantee a return in investment of the portfolio (Figure 2)

What is the purpose of your company's corporate venturing activities

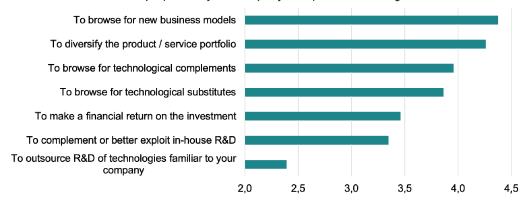


Figure 2: CVC Strategic Outline (Scale from no important (0) to very important (5).

The vast majority of the investment (ca 90%) have a direct impact on the corporate's inhouse R&D activity; often seeking the collaboration between the internal R&D departments and the external startup. While the initial investments serves to "test the waters", most of the corporates do take into consideration in the early stages whether there is a strategic alignment for a possible complete acquisition in case of a successful venture.

Another finding is that Corporates share the risks and often co-invest with other partners. Figure 4 shows a breakdown by nature of the co-investing party, being an independent VC, other industrial companies or governmental-backed VC.

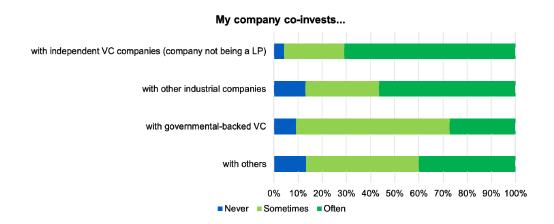


Figure 3: Investment patterns

The policy question of which measures could lead to more investment in startups and scaleups by European corporates is addressed in Figure 4

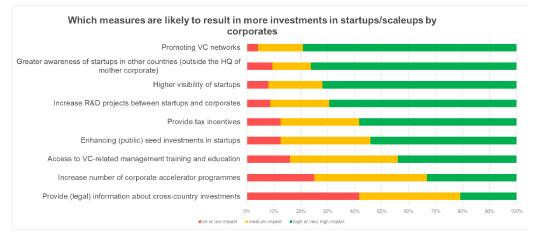


Figure 4: Policy Measures

The measure top at first place is promoting VC networks. This is in the line with the view of several panelists who consider that corporates need to diminish their risk taking. Given that over the past years the valorization for startups have risen quicker that the CVC fund (particularly in growth investment rounds, Series B and beyond), this has contributed some CVC to look more often for co-investors, either other CVC or independent VC. Here, a denser network of trusted investors, particularly by industrial sector would be beneficial for all stakeholders.

A higher visibility of startups, particularly outside the country of the headquarters of the mother company, comes next. Awareness and promotional measures of suitable startups and investment opportunities might serve to increase the dealflow across national borders. The European Commission already supports a number of coordination and support actions with the objective to bring startups and potential investors closer together. Similar activities are offered also by the EIT (European Institute of Technology) KICs (Knowledge and Innovation Community) in their respective sectors. In addition, the European Innovation Council has recently set up a partnership programme with corporates with the objective to raise the awareness of EIC funded scaleups. These so-called corporate days are match making between startups and corporates. These three activities are examples of public support to enhance cross-boarder deals, but they are insufficient to generate a wellfunctioning pan-European market. Therefore, big corporates also rely upon local teams that familiar with the local innovation ecosystem, knowledgeable on the national framework and can run pre-screening of potential interesting ventures. This kind of service may covered by corporate's subsidiaries or outsourced to a third party. Unfortunately, running such a service is unaffordable for most (particularly smaller) firms. Therefore, continuous public support to increase the awareness of startups in EU member states other than the corporate's home country would be highly appreaciated

The fourth measure would be increase further the public support to **industrial R&D projects** aiming at tightening the linkages between startups and corporates. All EU member states run industrial R&D programmes and at transnational level Horizon Europe stands out.

While **VC-related training** does not come on top of the list, many panelist mentioned the need for good VC education. They emphasised that the corporate VC has to be set up and run professionally from the beginning, otherwise it is unlikely to deliver the expectations. At the extreme risking to cancel initial efforts due to unfulfilled strategic alignment of no

return in investments. Recruiting right persons is difficult as experienced, hands-on professionals are scare. Increasing the pool of professional, goes along with the necessity to change the cultural mindset, starting from the freshman at the universities up to the highest levels of decision making in industry and public authorities.

4 Annex: Agenda

Online Workshop on Corporate Venture Capital (23rd May 2022)

14.00 Welcome

Fernando Hervás, European Commission, Deputy Head of Unit JRC.B7

14.05 Setting the Scene

Ramón Compañó, European Commission, Senior Researcher JRC

Motivation for the workshop. Presentation of CVC-relevant insights arising from research analysis performed at the JRC.

14.14 Learning from Corporates on CV / CVC

The objective is for CVC practitioners to brief about their strategies, drivers, barriers and future perspectives, as well as complement other relevant corporate activities. The session is grouped by industrial sector.

14.15 Sectors: Energy

Moderated by James Mawson, Global Corporate Venturing (Mawsonia ltd)

Short testimonials by practitioners (30 min)

- Federico Gonçalves, Energías de Portugal
- Alfonso Carranza, ELEWIT Red Eléctrica Corporación
- Erika Escolar Eguia, Capital Energy Quantum
- Jan Lozek, Future Energy Venture backed by E.ON Group
- Terhi Johanna Vapola, Helen Ventures
- Emilio Martínez Gavira, Enagas

Short round table discussion (15 min) – indicative question

- How does corporate venturing contribute to corporate efforts in the shift to renewables and GHG emission reductions per the energy transition?

15:00 Sectors: Industrials

Short testimonials by practitioners (30 min)

- Alberto Pintado, Indra
- Emma Hertin, Bring Ventures
- Franziska Bossart , ABB
- Claude-Sébastien Lerbourg, Saint-Gobain

Short round table discussion (15 min) – indicative question

- How does corporate venturing contribute to corporate efforts in variously; strategic autonomy, the "re-industrialization" of Europe and the twin transition?

15.45 Comfort Break

16.00 Sectors: Other Sectors

Moderated by Amparo San José, European Institute of Innovation & Technology Short testimonials by practitioners (30 min)

- Mark Redshaw, Evonik
- Hans Söhngen, KPN Ventures
- Clement Combal, Orange
- Julius Norkunas, Avia Solutions Group
- Christian Teichmann, Burda Principal Investments

Short round table discussion (15 min) – indicative question

- How does corporate venturing contribute to corporate efforts in variously competitiveness, "greener" chemistry for the circular economy and the twin transition?
- How does corporate venturing contribute corporate efforts in realising the digital transition?

16.45 Policy Considerations

The objective of this roundtable discussion is to understand the drivers and barriers of corporate venture and the role of public policy measures to identify which policy measures could foster increased CV activity in the EU

Moderated by Christian Suojanen, Broadreach Global

Introduction with Panellists responding to questions provided to the moderator

- Nicolas de la Vallée Poussin, European Investment Fund
- Veronica Beneitez, Executive Agency for Small and Medium-sized Enterprises
- María Abad, European Institute of Innovation & Technology
- Mark Redshaw, Evonik
- Emma Hertin, Bring Ventures
- Alberto Pintado, Indra
- Claude-Sébastien Lerbourg, Saint-Gobain

With the participation of the audience

18.00 Close of workshop

Wrap-up, preliminary conclusions and closure of the event. Patrick McCutcheon, European Commission, Senior Expert, RTD

5 Annex: Privacy Statement and Data Protection

Privacy Statement and Data Protection

The European Commission is committed to personal data protection. Any personal data collected and processed are for scientific, statistical or historical research purposes and fall under <u>record</u> <u>DPR-EC-01063</u> on processing of personal data linked to meetings and events organised by the European Commission and its services. The personal data collected and further processed are:

- Company/organisation: name, sector/type of activity, company/organisation contact details
- Contact Person: full name, job title, phone number, e-mail

The information provided by participating to the event will be treated as strictly confidential. It will only be used within the objectives of this activity and in an aggregated form. The collected personal data and all information related to the above mentioned activity is stored on servers of the JRC, the operations of which underlie the Commission's security decisions and provisions established by the Directorate of Security for these kind of servers and services. The information you provide will be treated as confidential and aggregated for the analysis.

In case you want to verify the personal data or to have it modified respectively corrected, or deleted, please write an e-mail message to the address mentioned below under "Contact information", by specifying your request. Special attention is drawn to the consequences of a delete request, in which case any trace to be able to contact you will be lost. Your personal data is stored as long as follow-up actions to the above mentioned survey are necessary with regard to the processing of personal data.

Contact information

This activity is organised by European Commission's Joint Research Centre (JRC), Directorate B (Growth & Innovation), Unit B7 (Knowledge for Finance, Innovation and Growth). In case you have questions related to this survey, or concerning any information processed in this context, or on your rights, feel free to contact the JRC B7 at the following email address: JRC-B7-SECRETARIAT@ec.europa.eu.

Recourse

Complaints, in case of conflict, can be addressed to the European Data Protection Supervisor (EDPS) at <u>www.edps.europa.eu</u>.

GETTING IN TOUCH WITH THE EU

In person

All over the European Union there are hundreds of Europe Direct information centres. You can find the address of the centre nearest you at: <u>https://europa.eu/european-union/contact_en</u>

On the phone or by email

Europe Direct is a service that answers your questions about the European Union. You can contact this service:

- by freephone: 00 800 6 7 8 9 10 11 (certain operators may charge for these calls),
- at the following standard number: +32 22999696, or
- by electronic mail via: <u>https://europa.eu/european-union/contact_en</u>

FINDING INFORMATION ABOUT THE EU

Online

Information about the European Union in all the official languages of the EU is available on the Europa website at: https://europa.eu/european-union/index_en

EU publications

You can download or order free and priced EU publications from EU Bookshop at: <u>https://publications.europa.eu/en/publications</u>. Multiple copies of free publications may be obtained by contacting Europe Direct or your local information centre (see <u>https://europa.eu/european-union/contact_en</u>).

The European Commission's science and knowledge service Joint Research Centre

JRC Mission

As the science and knowledge service of the European Commission, the Joint Research Centre's mission is to support EU policies with independent evidence throughout the whole policy cycle.



EU Science Hub ec.europa.eu/jrc

- @EU_ScienceHub
- **f** EU Science Hub Joint Research Centre
- in EU Science, Research and Innovation
- EU Science Hub