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The Role of Research and Innovation Organizations on Supporting the Investment Plan for Europe Initiative

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Abstract. Authors intend to introduce some key discussions around the Investment Plan for Europe initiative also named "The Junker Plan". Such joint action of European Commission and European Investment Bank aims at creating an Europe-wide investment-friendly environment focusing on strategic and innovative projects. As the Plan relates to "bankable projects", it proposes opportunities for long-term loans instead of the granting approach typical for Horizon 2020 framework. In this sense, the role of research organization (including universities), that today access to Horizon 2020 calls, should be discussed having in mind that for the majority of research centers any debt opportunity cannot be applied (and for some countries even prohibited). In this paper, authors provide a clear understanding of the Plan jigsaw, considering possible short and mid-term actions to get benefits of this relatively new approach to innovation, with the aim of exploiting the knowledge created with the support of Horizon 2020 as building block within EFSI projects.

Keywords: Junker Plan, EIB, European Fund for Strategic Investment, EFSI, Research Organization.

1. Introduction

The global economic and financial crisis has slackened essential investment in infrastructure, innovation and the private sector. Currently, investment in Europe is 15% below pre-crisis levels [1]. The European Commission has proposed addressing the aforementioned issue with four main actions:

- Implementing regulatory and structural reforms to remove bottlenecks and ensure an investment friendly ecosystem.
- Creating the European Fund for Strategic Investments (EFSI), in partnership with the European Investment Bank (EIB), to address the market failure in risk-taking.
- Creating the European Investment Advisory Hub (EIAH), as a joint initiative with the EIB, to help strengthen and accelerate investments via a single point of entry for technical assistance and advisory services on project preparation and implementation, use of financial instruments and capacity building.
- Creating the European Investment Project Portal (EIPP), a transparent pipeline of investable projects in the EU, designed to attract both private investors and project promoters.

These actions represent the main pillars of the Investment Plan for Europe, adopted in November 2014, as the first major initiative of the Juncker Commission (for this reason also known as "Juncker Plan"). The Plan has been developed with the aim of pushing Europe to remedy this investment gap, to recover from the crisis and strengthen its global competitiveness. The core of the Juncker Plan is the EFSI, the armed branch to overcome current market failures by addressing market gaps and mobilizing private investment. Liquidity, in fact, is available but many projects are unable to secure adequate funding. Investor confidence is low due to economic volatility, along with regulatory and other uncertainties. As a result, whilst the conditions for investment exist, the money is not finding its way to economically viable projects [1].

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The EFSI Regulation entered into force in July 2015 with the aim of mobilizing at least €315 billions in additional investment over the next three years: activating private investments with a leverage factor of 15, against the 16 billions coming from the European Commission and the 5 billions from the EIB. Via the EFSI, in fact, the EIB is able to respond quickly to financing needs in areas where alternative sources of financing are scarce or unavailable. The EIB's presence often provides reassurance to other financiers to provide co-financing [2]. In order to have the chance to be funded, the EFSI projects need to be economically and technically viable, consistent with EU policies, provide additionality (e.g. they could not be realized without the backing of the EU guarantee), and maximize the mobilization of private sector capital. Applying these condiciones sine quibus non, the EFSI is supporting strategic investments in key areas such as infrastructure, education, research and innovation, as well as risk finance for small businesses.

The EFSI is helping to finance infrastructure and innovation projects as well as SMEs and mid-caps. More than 85% of the finance mobilised so far comes from public and private sources outside the EIB Group. More in details, in the following table, the state of play as of July 2016.

	Number	**Financing under the EFSI**	**Total expected investment triggered**
Infrastructure and innovation projects approved	97	€13.6 billion	€115.7 billion
SME financing agreements approved	192 agreements benefitting more then 200,000 mid caps, SMEs and start-up.	€6.8 billion	

Fig. 1: EFSI state of play - July 2016

As anticipated, in June 2015, the EFSI came into force and, in order to be established, 2.2 billion euros were taken out of Horizon 2020 - the EU's current framework programme for research and innovation whose important beneficiaries are European universities and the academia [5]. This move warned the European University Association (EUA) for the risks that EFSI's opportunities could be off-limits for the Academia. The European Commission argued that EFSI would also benefit universities and research and thus tried to justify the cut to Horizon 2020.

In the meantime, July 2016, the European Commission issued a communication [2] to take stock of the Investment Plan for Europe and announce its next steps without having a clear definition of the role of the Academia in this scenario. The aim of this paper is contributing in the analysis of the possible roles of Research, Development and Innovation (RDI) in the Juncker Plan and in the forthcoming *"Junker Plan 2.0"*.

2. The Junker Plan Rationale

With the aim of pushing Europe to remedy its investment gap increasing competitiveness, the Plan tries in practice to engage the private sector on innovation and strategic but risky projects. This means engaging the private sector on projects with a Technology Readiness Level [4] going from 5 to 7.

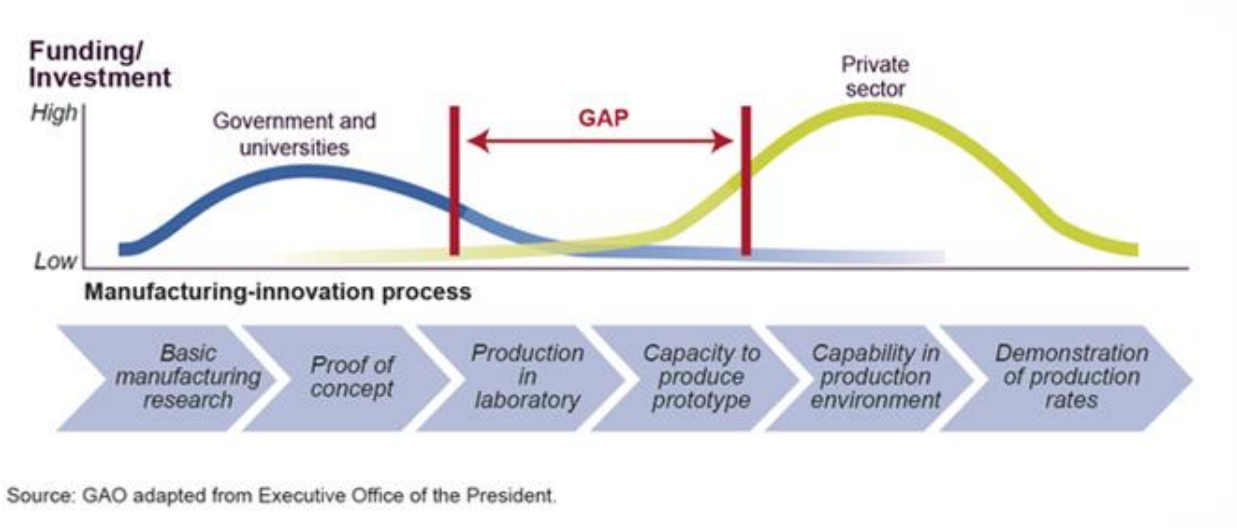

Fig. 2: Funding/Investment Gap in the Manufacturing-Innovation Process

Therefore projects will try to innovate starting from technology demonstrated in relevant environment and not simply bringing to market actual solutions proven in operational environment. The Fig. 2 clarifies this approach for the manufacturing case:

- Private sector (using resources from banks) usually invests on solutions that already demonstrate impact in production environment.
- Universities and RDIs operate on basic manufacturing research applying to call for proposal on Horizon 2020 (e.g. the Factory of the Future call for proposals).
- There is the need of some actors who can invest in bringing lab solutions into operational prototypes.

In the authors' view, the Junker Plan reduces the gap supporting the private sector in taking more risk on laboratory solutions (as reported in the next picture). At the same time, if private sector goes down in the TRL scale, the RDIs can be part of the supply chain.

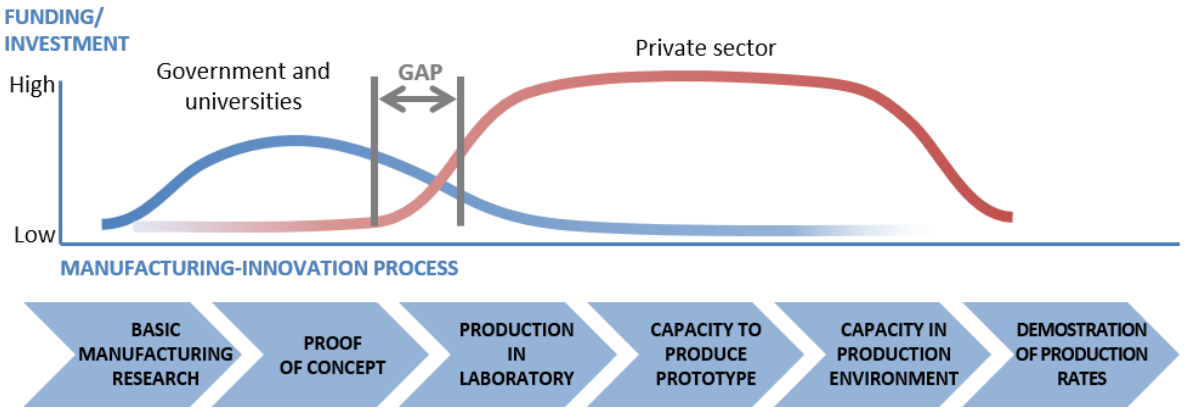

Fig. 3: Funding/investment gap in the Manufacturing-Innovation Process throughout EFSI

3. Why R&D Organization should Strongly Consider the Junker Plan as an Opportunity

As already mentioned, the main goal of the Plan is financing projects, activating private investments with a leverage (multiplying factor) of 15. Such projects should be "innovative" as reported in the EFSI regulation 2015/2017 [1] that states: "one of the objectives is to support research, development and innovation, in particular through support to academia including collaboration with industry". The main reason to refer to universities and research organization resides in the fact that part of the EFSI budget comes from Horizon 2020 (approx. € 2.4B) and Connecting Europe, therefore such amount has been no longer dedicated to grants but turned into loans. On June 2016, European Universities Association published a review of the first year

of the Plan [5], underlining few criticalities on the reasons why the university-system cannot share with industries the foreseen benefits. In this paper, authors have considered such an analysis as the starting point of the work. The first issue is based on numbers: out of 57 running projects [7], there is no evidence of the presence of universities neither research organizations as formal members of consortia. European universities by law are allowed to borrow money under specific circumstances, but usually not for research projects. Same as for no profit research organization (even private), which do not have a commercial business mandate allowing long-term ROI capable of paying back passive interests.

Second issue is about the projects nature and size. Data provided by the Commission [6] shows that nearly 90% of projects were focusing on infrastructure development while 10% on RDI. Note that in none of this 10% projects, universities were present. And more, projects size goes from € 10M up to € several hundred million, making them not manageable for RDI institutions.

Another key point resides in the risk profile of the foreseen projects. Budget provided by the Commission throughout EFSI should guarantee projects with profile risk higher than standard EIB financed initiatives. In this way, a project too risky for EIB funding opportunities could be accepted as EFSI initiatives. But again, a recent study published by Bruegel [8] shows that out of the 55 EFSI projects, there are very similar non-EFSI EIB projects for 42 of them, while 10 of them showed no similarities. Note that the research is comparing past EIB projects with on-going EFSI initiatives. Clearly this is an issue: EFSI has been conceived to be additional to common EIB projects due to the fact that the guarantee comes from Horizon 2020.

All of these considerations, from the one hand, limit or exclude the participation of RDI organization as primary beneficiary but, at the same time, open opportunities to strengthening the Plan using exactly the same institutions. RDI participation can, in fact, accommodate the need of having challenging projects, so that RDI can bring to projects the necessary innovation added-value. And, at the same time, if RDI participates at the project execution, the probability of project success of the innovation initiatives increase.

4. Possible Action Plan for Research Organization

RDI organizations' potential role is based on several considerations:

- EFSI projects have to be innovative, therefore they are intrinsically risky but should be capable of generating impact. RDI bring to projects innovation but also the capability of managing innovation;
- RDIs usually transfer their innovations into companies using Horizon 2020 projects, therefore RDIs do have contacts with industries or SMEs capable of submitting EFSI proposals as a second step after successful Horizon 2020 projects;
- RDIs are independent institutions that can somehow "guarantee" the feasibility of the innovation content in an EFSI proposal reducing the intrinsic risk;
- Companies use local banks as intermediaries to engage EIB/EFSI, and such local bank have limited knowledge of potential industrial proposers; RDIs know the "innovation market" and can help the local intermediaries to increase their network.

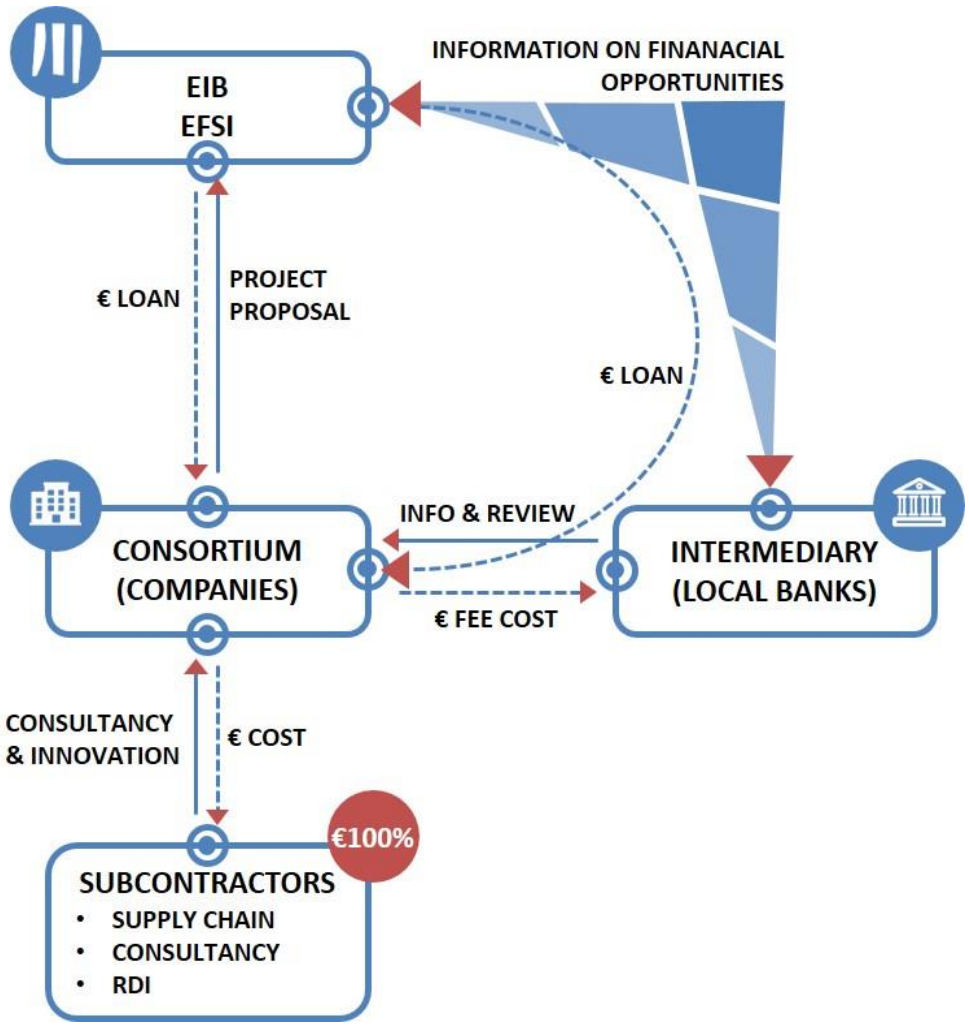

Fig. 4: Possible action plan for Research Organization

As drafted in the Fig. 4, on the basis of previous considerations RDI organization should:

- Act as subcontractor/consultant within the consortium providing at the first a vision on the innovation roadmap for the proposal.
- Bring its value/portfolio of innovation as background IPR (e.g. RDI devoted to ICT can generate positive impact in many areas like IoT for agriculture/food).
- Execute the work packages related to innovation aiming at mitigating the risk.
- Establish a partnership with local intermediaries especially for small size projects (e.g. lower than € 7M).

5. Juncker Plan 2.0: 2020 and after

On 1 June 2016, the Commission issued a Communication entitled "Europe investing again – Taking stock of the Investment Plan for Europe and next steps" [3] outlining the achievements of the Investment Plan so far and the envisaged next steps, including the extension of the duration of the European Fund for Strategic Investments (EFSI) beyond its initial three-year period, the scaling-up of the SME window within the existing framework and the enhancement of the EIAH. On 28 June 2016, the European Council concluded that "the Investment Plan for Europe, in particular the EFSI, has already delivered concrete results and is a major step to help mobilise private investment while making smart use of scarce budgetary resources" [10]. The legal extension presented on 14 September 2016 covers the period of the current Multiannual Financial Framework and, considering the success of the EFSI, had the aim of providing a total of at least half a trillion euro investments by 2020, doubling the EFSI, both in terms of duration and financial capacity.

More in details, the aim of the EFSI will continue to be to support investments that could not have been carried out in the same period or not to the same extent by the EIB, the EIF or under existing Union financial instruments without EFSI support. In line with the initial investment period, private investment should be attracted to the maximum extent possible, and SMEs will be a key beneficiary of the support provided for under this proposal. Particular attention will also be paid to projects that contribute to reaching the objectives of COP21 [11], supporting the transition to a resource efficient, circular and zero-carbon economy. The extension of the duration of the EFSI will not only allow the prolongation of a successful scheme, it represents as well an important message to project promoters and encourage them to submit projects to the EIB [10].

6. Conclusion

As concluding remark, authors intend to highlight that EFSI has to be correctly promoted within academic and scientific research community. It can be an additional instrument for linking together companies and universities. The knowledge created with the support of Horizon 2020 has to be seen as building block within EFSI projects, especially considering the interest confirmed by the European Commission for the future of EFSI in the forthcoming years.

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