European Commission

A Public-Private Fund to Support the EU IPO Market for SMEs

Final Report

Centre for Strategy & Evaluation Services LLP
October – 2020

Centre for Strategy & Evaluation Services

EUROPEAN COMMISSION

Directorate-General for Economic and Financial Affairs
DDG2.L — InvestEU and financial institutions

Contact: Pierfederico Asdrubali

E-mail: *Pierfederico.Asdrubali@ec.europa.eu*

European Commission
L-1882 Luxembourg

A Public-Private Fund to Support the EU IPO Market for SMEs

Final Report

Directorate-General for Economic and Financial Affairs
InvestEU and financial institutions

PDF	ISBN 978-92-76-34382-0	doi: 10.2765/962994	KC-09-21-099-EN-N

Manuscript completed in November 2020

First edition

Luxembourg: Publications Office of the European Union, 2021

Abstract

The assignment 'A Public-Private Fund to support the EU IPO Market for SMEs' was carried out for the European Commission by the Centre for Strategy & Evaluation Services (CSES) during 2020. The backdrop to the study are the market failures preventing SMEs from fully exploiting the potential to raise capital on EU stock markets to support their growth.

Overall, and after consultations with stock markets, financial institutions and others, the study concludes that there is strong support for an EU fund to promote SME IPOs. The study argues that it should be established as a crossover fund that invests in SME shares at different stages of the IPO process (pre-IPO, IPO and post-IPO). The target group should be SMEs and small mid-caps from any sector with up to 500 employees but also other firms with up to 3,000 employees if they are innovative. The proposed Fund should operate on an EU-wide basis. Various options with regard to the Fund's structure are evaluated (intermediated equity investment, fund-of-funds, special purpose vehicle). The study makes a number of recommendations with regard to the design and size of the fund, leverage of private sector investment, and also examines possible costs and benefits.

Résumé

L'étude intitulée « Un fonds public-privé pour soutenir le marché européen des introductions en bourse pour les PME » a été réalisée en faveur de la Commission européenne par le Centre pour les services de stratégie et d'évaluation (CSES) en 2020. L'étude a pour toile de fond les défaillances du marché empêchant les PME d'exploiter pleinement le potentiel de mobilisation de capitaux sur les marchés boursiers de l'Union Européenne afin de soutenir leur croissance.

Après consultation avec les marchés boursiers, les institutions financières et autres parties prenantes, l'étude est arrivée à la conclusion qu'il existe dans l'ensemble un fort soutien en faveur d'un fonds européen destiné à promouvoir les introductions des PME en bourse. Cette étude soutient que ce fonds devrait être établi en tant que fonds croisé (*crossover fund*) qui investirait dans des actions de PME à différentes étapes du processus d'introduction en bourse (pré-OPI, OPI et post-OPI). Les groupes cible du fonds devraient être les PME et les entreprises à capitalisation moyenne 'mid-caps' de tout secteur économique comptant jusqu'à 500 employés, mais également d'autres entreprises comptant jusqu'à 3000 employés si elles sont innovantes. Le futur fonds devrait également être mis en œuvre à l'échelle européenne. Diverses options concernant la structure du fonds sont évaluées (investissement en actions intermédiées, fonds de fonds, véhicules à usage spécial). Cette étude formule un certain nombre de recommandations concernant la conception et la taille du fonds, l'effet levier des investissements du secteur privé et examine également ses coûts et ses possibles avantages.

TABLE OF CONTENTS

Executive Summary

Below we provide a summary of the main findings of the assignment 'A Public-Private Fund to support the EU IPO Market for SMEs'. The assignment was carried out for the European Commission by the Centre for Strategy & Evaluation Services (CSES) during 2020.

1. Study Objectives

According to the European Commission's terms of reference, the study's objectives were to:

- Review existing best practices and lessons learned on the implementation of public-private funds in the EU IPO segment.
- Model different EU SME IPO Fund option.
- Assess how the proposed features of the EU Fund can address the market failures at the different stages of the IPO process.

The various deliverables to be produced were an inception report, an interim report and a (draft) final report. The assignment was carried out over a period of six months although some adjustments to the original timescales within this overall period were agreed. The research involved a combination of desk research to examine IPO statistics and the factors explaining recent IPO trends, an interview programme involving 60 key stakeholders, focus groups with a total of 33 participants, and a survey implemented by a number of European associations that elicited 65 responses. We worked with an external expert who undertook modelling aspects of the assignment. Because of COVID-19, video-conferencing technology was used for the research involving discussions with stakeholders.

2. Problem Definition

The number of SME IPOs on EU-27 stock exchanges increased in the years following the financial crisis but there has been a downward trend since 2014. During the 2013-19 period there were on average 164 SME IPOs per year on EU28 exchanges, 80 of which were conducted on average each year in London. SMEs raised an overall EUR 29.9bn through IPOs which means an average of EUR 26.2m per IPO in the 2013-19 period. These averages fluctuated only slightly, from EUR 19.3m per SME IPO in 2016 to EUR 31.0m per SME IPO in 2018. Our analysis of past SME IPO trends distinguishes between EU-27 and London Stock Exchange activity because the proposed EU Fund would operate in EU-27 markets but it is nevertheless helpful to gain a comprehensive overview of the situation before 2019 across all European markets.

There is already a lot of research on the factors influencing the extent to which IPOs are used by SMEs to raise growth finance. In general, Europe lacks an 'equity culture'. Other factors leading to a relatively modest level of SME activity on EU-27 stock exchanges include regulatory constraints and developments in the business environment, together with market failures on both the IPO 'demand' and 'supply' sides. The severity of the various market failures varies in terms of the IPO stage (pre-IPO, IPO, post-IPO) and across different EU Member States depending on how well developed an 'equity culture' is and the extent to which stock exchanges and the supporting 'ecosystems' have developed and matured. The intervention logic for the proposed EU Fund is pitched at the EU level but, as we explain in the report, the EU Fund's role will need to be adapted to the specific circumstances and priorities in different markets.

3. Key conclusions and Recommendations

Overall, the research and consultations for this study indicate that there is wide support for the establishment of an EU fund to help promote SME IPOs. There are, however, differing - but not mutually exclusive - views on the most appropriate model.
In addition to addressing IPO market failures, the proposed EU Fund is seen as making a potentially significant contribution to promoting a shift from a long-term tendency in Europe for SMEs to rely on debt financing to a situation where there is a greater use of equity instruments and a more developed 'equity culture'. The COVID-19 crisis, and its economic consequences, are seen as reinforcing the need for such a shift because many firms are likely to increase their debt to very high levels as a result of the crisis in 2020-21, and converting this debt into equity will therefore help ensure longer-term financial sustainability. The EU Fund could also contribute to reducing the fragmentation of equity markets in Europe by adopting a regional approach to interventions.

3.1 EU Fund Role and Target Groups

The research suggests that there is a need for EU intervention at different stages of the listing process (pre-IPO, IPO and post-IPO). This would, in effect, mean that the EU Fund would operate as a 'crossover' fund, supporting investment across all three phases of the IPO process. The pre-IPO stage is seen as especially important because an EU Fund's investment before SMEs go public would help to increase investor appetite by giving other investors the confidence to enter the market. The consensus amongst those consulted for this study is that an EU SME IPO Fund could help address an 'equity gap' affecting SMEs, i.e. above the amounts typically provided by venture capital companies but below the thresholds for private equity and/or investment bank support (this equity gap varies to some extent depending on the market). Ideally, the EU Fund should also support secondary issuances, thereby performing the role of a medium-term 'anchor' investor.

Recommendation 1: the EU Fund should be established as a crossover fund with a flexible mandate to invest in SME shares at different stages of the IPO process (re-IPO, IPO and post-IPO). 'Lock-up' arrangements should be negotiated with private investors, ideally for a period of at least 6-12 months, to discourage them from exiting at an early stage after an IPO, thus ensuring greater price stability for newly listed SMEs.

The EU Fund's target group should be SMEs and small mid-caps with up to 500 employees but also other mid-caps with up to 3,000 employees if the firms concerned are innovative, as determined by the EU Fund's screening criteria. This will mean adopting a broader definition of an SME than is the case with the Commission's official definition. Innovation in this context should be broadly defined to include not just SMEs that are innovative in a technological sense but innovative across different sectors of the European economy.

In relation to all types of SMEs, the EU Fund should invest in IPOs involving firms that are seeking to raise growth capital and have solid long-term prospects. These are likely to be SMEs that have progressed beyond the early stages in their development and that have a stable business model with products and services that are selling well, and which have the potential for further sustainable growth. The consensus of opinion amongst the stakeholders that were consulted for the study is that the EU Fund should be open to all sectors rather than investing in specific sectors. However, the EU Fund's investment guidelines could include several sectors as priority sectors (e.g. digitalisation, green economy) that are likely to be especially relevant in a post-COVID-19 environment.

Recommendation 2: the EU Fund should target SMEs with growth potential and with fewer than 3,000 employees. The Fund's investment guidelines should be flexible and not have any particular sectoral restrictions. There could, however, be several sectors as priority sectors, for example concerning the promotion of digital technology, the green economy and COVID-19 related priorities.

3.2 EU Fund Structure and Geographical Scope

With regard to the EU Fund structure and modus operandi the study identified three basic options: Option A where the Implementing Partner would invest across EU Member States directly in existing SME equity funds and similar investment vehicles that can be used to promote IPOs; **Option B**, namely a Fund-of-Funds (FoF) at the EU-level which would, in turn, invest in a number of sub-funds. Ideally, there would be private sector participation in the FoF at the EU level and also in the sub-funds; and **Option C**, i.e. a Special Purpose Vehicle (SPV) at the EU level with investment alongside the EU by a number of private sector financial institutions. The SPV would be used to invest directly in SME equity funds and other similar investment vehicles across EU Member States. It could also be a vehicle for direct investment in SME IPOs. A variation on Option C would be to establish SPVs at the national level and/or for multi-country groupings.

The different EU Fund options each have advantages and disadvantages. One of the key findings from the Phase 3 market testing exercise is the fact that the initially selected Fund structure may not be the permanent one but could potentially evolve over time. Given the complexities and risks of setting up an EU SME IPO Fund, especially in the current COVID-19-influenced market conditions, one possibility would be to implement Option A as a first step in a process that could involve the EU Fund structure subsequently evolving into Option B or Option C.

Different EU Fund options could suit different market conditions across the EU and a flexible approach to implementation involving several models should not therefore be ruled out. As argued in Section 3 of the report, an Option B FoF could be especially well-suited to less-developed markets because it would involve setting up sub-funds in different countries that could mobilise a more diverse range of private sector institutions, thereby strengthening the local SME IPO financial infrastructure in a way that is less likely to occur under Options A or C. Option C could potentially also mobilise private sector investment at the EU and national levels (like Option B) but would need to reply on the existence of equity funds as an intermediary structure although some investment directly in SME IPOs via the SPV could also be possible. As such, Option C is probably better suited to the more developed markets. A 'decentralised' Option C could also be foreseen with SPVs being established in different countries/country groupings, and this would replicate many of the benefits of Option B. Below we summarise the advantages and disadvantages of the three EU Fund options:

Conclusions – Advantages & Disadvantages of the Main EU SME IPO Fund Options

Option	Advantages	Disadvantages
Option A	Based on an existing model and therefore quickest to implement	Leverage of private investment only at one level
Option B	Leverages greater private investment in less-developed markets	Relatively complex and requires new legal structures at EU and national levels
Option C	Potentially leverages greater private investment in developed markets	Requires new EU legal structure (SPV) and several layers of costs

Recommendation 3: The EU Fund should be launched in the form of Option A (assuming the EIF is selected as the IP). The possibility of the EU Fund structure subsequently developed to allow for additional types of intervention (i.e. Options B and C) to run alongside an Option A fund in certain geographical/market settings should not, however, be ruled out. Equally, if Option A establishes 'proof of concept' and works well in different geographical/market settings it could be that the relatively short horizon of InvestEU implementation would mean that alternatives are not needed, or feasible. Ideally, this would be the case given the relative short horizon of InvestEU implementation and potential complexities of implementing different models.

In terms of geographical scope, our research indicates that the EU Fund should have an EU-wide mandate but with the flexibility to vary its investment objectives to reflect the particular situation with regard to SME IPOs in different EU Member States. Thus, whilst a focus on pre-IPOs and IPOs is likely to be a priority in many if not most countries, in others with relatively well-developed stock markets, the EU Fund could place more emphasis on participating in secondary issuances. Some stakeholders argue that the EU Fund should target regional groupings of Members States to help overcome the reluctance of major institutional investors to enter smaller markets, which lack critical mass and visibility, and to help develop an IPO 'eco-system' that is conducive to capital market development. In this respect, Option B and/or a decentralised version of Option C could contribute to addressing the challenges posed by the differing needs of the EU-27's different market geographies.

Recommendation 4: the European Commission should discuss the EU Fund's specific investment objectives with national authorities and the private sector to encourage their buy-in and to help determine an appropriate role and model tailored to different market conditions and priorities. Although the initiative is intended to be purely market-based and national authorities are unlikely to have a role in establishing the Fund, they may nevertheless have views on the priorities of such a Fund in their countries and could also be in a position to implement measures to strengthen the wider SME IPO 'ecosystem'. The report identifies a number of possible supporting measures.

Looking at the broader picture of the EU's **fragmented equity market landscape**, the EU Fund could play a role in reducing this fragmentation by focusing its investment strategy on the various stock exchange groups. A few of these groups dominate the growth market landscape including Euronext, Nasdaq First North, Deutsche Boerse, and the LSE Group. The EU Fund could promote equity market integration by selecting fund managers according to their experience of working across the exchanges in each group, by creating dedicated sub-funds or through a variation of Option C, i.e. establishing SPVs serving each of the main stock exchange groups. This approach of focusing the EU Fund's interventions on stock market groupings would need to be complemented by country/regional coverage for parts of the EU where stock markets are not part of a grouping.

3.3 Engagement of the Private Sector

There is strong private sector interest in the idea of an EU Fund for SME IPOs. If an EU Fund can help to make investments in SME IPOs more cost-effective (although it will not be able to address risk weighting concerns), then participation by institutional and retail investors in the initiative would become a potentially attractive proposition. Pension funds across Europe could also be a source of institutional investment in an EU SME IPO Fund. As a longer-term aspiration for the EU Fund, another source of investment that could potentially be tapped into is the retail investor market and here, crowdfunding platforms could have a role alongside more traditional investment vehicles (e.g. smaller company investment trusts). Some stakeholders who were consulted were sceptical about the prospect of attracting this form of investment but the Phase 3 market testing suggested that it should not be discarded as a longer-term possibility, albeit perhaps only in relation to a 'decentralised' version of the Option C SPV structure.

The extent to which the private sector leveraged contribution will be forthcoming depends on a variety of factors including the EU Fund structure (in particular whether it allows for leverage at one or two levels); the amount of funding contributed by the EU and its leverage effect; and the relationship between EU and private sector capital. Our assessment suggests that if the EU should invest in SME equity funds on a 'pari passu' basis, as this would not disincentivise greater private investment. A minority EU participation in equity funds and individuals SME shares is seen as an appropriate approach.

Recommendation 5: To ensure optimal private-public sector engagement, the EU Fund should invest alongside the private sector on a 'pari passu' basis. The EU Fund should also only invest on a minority basis in SME shares that are floated via an IPO.

3.4 EU and Private Sector Investment in the Fund

Section 3 of the report we provide various estimates of the EU Fund investment costs based on four scenarios for the 2022-27 period. There are different ways in which the costs of an EU Fund can be estimated, notably in relation to the financial resources needed to fulfil an ambition with regard to increasing the number of SME IPOs in coming years or, conversely on the basis of the amount of EU budgetary resources that the EU is willing to commit to the Fund and what can be achieved with this in terms of IPO volumes and values. We have also provided illustrative scenarios regarding the costs of operating the EU Fund and the return on investments.

Recommendation 6: InvestEU resources should be used to contribute to the EU Fund. We estimate that to achieve a 10% increase in SME IPOs during the 2022-27 period compared with earlier trends (Scenario B in our report) would require an EU investment of EUR 738 million assuming this represented 25% of the Fund value with the other 75% being leveraged from private sector sources. This is based on the definition of the target market as being innovative SMEs with up to 3,000 employees. We view this as a reasonable estimate given COVID-19 and uncertainties regarding the economic and market prospects for 2021. We have assumed that there would be several funding rounds with the EU Fund's capital being raised in stages during the 2022-27 period. Clearly, if the InvestEU funding is higher or lower, and the extent of private sector leverage remains the same, this would have a proportionate impact on the number of IPOs supported. The EU Fund should be open for at least 5-7 years to allow the investment rate to build up from what will probably be a slow beginning in the immediate post-COVID-19 period and to allow share prices to reach a level where disinvestment can take place on a profitable basis. Private sector co-investors should be asked to agree to a lock-up period of ideally 6-12 months after an IPO.

Section 3 of the report highlights a range of benefits that could arise from the EU Fund's interventions to EU stock markets, SMEs and the wider economy. Only some of the expected effects can be quantified and this involves assuming similar growth rates in SME employment and turnover post-IPO during the 2022-27 period as were the case according to our analysis of trends in the 2014-20 period. However, feedback from the key stakeholders who were consulted for this study points to other significant potential benefits to the European economy.

Last and not least, many of those we consulted argued that in addition to establishing an EU Fund, steps should be taken to strengthen the wider IPO 'ecosystem'. This is unlikely to be a role for the Fund itself as its interventions will focus on investing in SMEs' capital but could be supported by a combination of EU technical assistance, and measures implemented by States and other key stakeholders such as the European Bank for Reconstruction and Development (EBRD).

Résumé exécutif

Un résumé des principales conclusions de la mission « un fonds public-privé pour soutenir les introductions en bourse des PME sur le marché européen » est présenté ci-dessous. Cette étude a été réalisée pour la Commission européenne par le Centre de Services de Stratégie et d'Évaluation (CSES) en 2020.

1. Objectifs de l'étude

Selon le cahier des charges produit par la Commission européenne, les objectifs de l'étude étaient de :

- Passer en revue les bonnes pratiques actuelles et tirer des enseignements sur la mise en œuvre des fonds publics-privés dans le segment des introductions en bourse au sein de l'UE.
- Modéliser différentes options de fonds pouvant supporter l'investissement dans les OPI[1] pour les PME européennes.
- Évaluer comment les caractéristiques de ce fonds européen pourraient remédier aux défaillances du marché le long des différentes étapes du processus d'introduction en bourse.

Les livrables finaux de cette étude incluent un rapport initial, un rapport intérimaire et un projet de rapport final. Cette étude s'est déroulée sur une période de six mois, bien que certains ajustements de calendrier se soient avérés nécessaires. Les activités de recherche se sont déroulées autour d'un ensemble de revues documentaires afin d'examiner les données statistiques concernant les introductions en bourse, ainsi que les facteurs expliquant les tendances plus récentes dans les introductions boursières des PME en Europe, un programme d'entretiens mobilisant 60 parties prenantes clés, des groupes de discussion avec un total de 33 participants, ainsi qu'une enquête réalisée par plusieurs associations européennes qui a généré 65 réponses. Un expert externe a également contribué à cette étude en réalisant les aspects de modélisation du fonds. En raison de la situation sanitaire liée au COVID-19, les discussions avec les parties prenantes se sont déroulées par visioconférence.

2. Définition du problème

Le nombre de PME introduites sur les bourses de l'UE-27 a augmenté dans les années qui ont suivi la crise financière, néanmoins il y a eu une tendance à la baisse depuis 2014. Au cours de la période 2013-19, il y a eu en moyenne 164 introductions de PME en bourse par an sur les bourses de l'UE-28, dont 80 en moyenne chaque année à Londres. Ces PME ont généré au total 29,9 milliards d'euros grâce à leur introduction en bourse, soit une moyenne de 26,2 millions d'euros par introduction en bourse au cours de la période 2013-19. Ces chiffres n'ont que légèrement fluctué, passant de 19,3 millions d'euros en 2016 à 31 millions d'euros par introduction de PME en bourse en 2018. Notre analyse des tendances passées concernant les introductions des PME en bourse a établi une distinction entre les activités de l'UE-27 et celles de la bourse de Londres ; il est cependant utile d'avoir une vue d'ensemble de la situation avant 2019 sur la totalité des marchés européens.

Il existe déjà de nombreuses études sur les facteurs qui influencent la mesure dans laquelle les PME se saisissent des introductions en bourse afin de lever des fonds de croissance. De façon globale, il n'y a pas de culture d'actionnariat forte en Europe (ou «

equity culture » en anglais). Parmi les autres facteurs conduisant à un niveau relativement modeste d'activité des PME sur les bourses de l'UE-27 figurent les contraintes réglementaires et l'évolution de l'environnement commercial, ainsi que les défaillances du marché du côté de la « demande » et de « l'offre » des introductions en bourse. Le degré de différence des défaillances du marché varie en fonction du stade de l'introduction en bourse (avant, pendant ou après cette introduction) et varie selon les différents États membres de l'UE en raison de leur propre culture nationale de l'actionnariat et de la mesure dans laquelle les bourses et les « écosystèmes » de soutien à l'investissement en bourse se sont développés et ont mûri. La logique d'intervention du fonds européen proposée est définie à l'échelle européenne mais, comme il est expliqué dans ce rapport, le rôle du fonds européen devra être adapté aux circonstances et aux priorités spécifiques des différents marchés européens.

3. Principales conclusions et recommandations

Dans l'ensemble, les travaux de recherche et les consultations menés dans le cadre de cette étude indiquent qu'il existe un large soutien en faveur de la création d'un fonds européen pour aider à promouvoir les introductions en bourse des PME au sein de l'Union Européenne. Il existe néanmoins des points de vue divergents – cependant pas toujours incompatibles – sur le modèle le plus approprié. Outre l'objectif de remédier aux défaillances du marché lié aux introductions en bourse des PME, le fonds européen proposé représente également une contribution potentiellement significative à la promotion d'une tendance à long terme en Europe pour les PME – qui ont actuellement tendance à s'appuyer sur le financement par emprunt **–** vers une situation où il y a une plus grande utilisation des instruments de capitaux et une culture de l'actionnariat plus développée. La crise du COVID-19 et ses conséquences économiques sont perçues comme renforçant la nécessité d'un tel changement car de nombreuses entreprises sont susceptibles de voir leur dette atteindre des niveaux très élevés en raison du ralentissement économique entre 2020 et 2021. Convertir cette dette en capital contribuera donc à garantir la viabilité financière à long terme des PME. Le fonds européen pourrait également contribuer à réduire la fragmentation des marchés boursiers en Europe en adoptant une approche régionale lors de sa mise en œuvre.

3.1 Rôle du fonds européen et groupes cibles

Les résultats de cette étude suggèrent qu'il y a un besoin pour une intervention de l'UE à différentes étapes du processus d'inscription en bourse (pré-OPI, OPI et post-OPI). Cela impliquerait que ce fonds européen fonctionne comme un fonds dit « croisé » (crossover fund), en soutenant les investissements tout au long des trois phases du processus d'introduction en bourse. La phase de pré-introduction en bourse est considérée comme particulièrement importante dans la mesure où les investissements du fonds pendant cette étape contribueraient à accroître chez les investisseurs la confiance nécessaire pour pénétrer les marchés des actions. Le consensus parmi les personnes consultées durant cette étude est qu'un fonds européen pour l'introduction en bourse d'un plus grand nombre de PME pourrait aider à combler un « déficit de fonds propres » (*equity gap*) affectant les PME, c'est-à-dire au-dessus des montants généralement fournis par les sociétés de capital-risque et en dessous des seuils pour le capital-investissement et / ou le soutien des banques d'investissement (ces écarts de fonds propres varient en fonction du marché). Dans l'idéal, le fonds européen devrait également soutenir les émissions secondaires, jouant ainsi le rôle d'investisseur « de référence » (*anchor investor*).

Recommandation 1: Ce fonds européen devrait être créé en tant que fonds croisé doté d'un mandat flexible afin d'investir dans des actions de PME à différentes étapes du processus d'introduction en bourse (pré-OPI, OPI et post-OPI). Des clauses de verrouillage (« lock-up ») devront être négociées avec les investisseurs privés, idéalement pour une période allant de 6 à 12 mois, afin de les dissuader de désinvestir à un stade précoce après une introduction en bourse, garantissant ainsi une plus grande stabilité des prix pour les PME nouvellement cotées.

Le groupe cible du fonds européen devrait représenter les PME et sociétés à capitalisation faible ou moyenne qui ont jusqu'à 500 employés, mais également les autres entreprises de taille moyenne comptant jusqu'à 3 000 employés si les entreprises concernées sont considérées innovantes, conformément aux critères de sélection du futur fonds. Cela impliquera qu'il faudra adopter une définition plus large des PME, ce qui n'est actuellement pas le cas dans la cadre de la définition officielle de la Commission Européenne. Dans ce contexte, l'innovation devrait être définie au sens large du terme afin d'inclure non seulement les PME innovantes au sens technologique, mais également dans d'autres secteurs de l'économie européenne.

En ce qui concerne l'ensemble des PME, le fonds européen devrait investir dans des introductions en bourse impliquant des entreprises qui cherchent à mobiliser des capitaux de croissance et qui ont de bonnes perspectives de croissance au long terme. Il s'agira donc probablement de PME qui ont dépassé les premiers stades de leur développement et qui ont un modèle d'entreprise stable avec des produits et des services profitables et qui bénéficient de la possibilité de poursuivre une croissance durable. Le consensus parmi les parties prenantes consultées dans le cadre de cette étude est que le futur fonds européen devra être ouvert à tous les secteurs ; cette solution est préférable au fait d'investir dans des secteurs spécifiques. Toutefois, les lignes directrices d'investissement du fonds européen pourraient inclure plusieurs secteurs en tant que secteurs prioritaires, comme par exemple le numérique et le développement durable, qui sont susceptibles d'être des secteurs particulièrement pertinents dans un contexte post-COVID-19.

Recommandation 2: Le fonds européen devrait cibler les PME ayant un potentiel de croissance et comprenant moins de 3 000 salariés. Les directives d'investissement du fonds devront être flexibles et ne comporter aucune restriction sectorielle particulière. Il pourrait cependant y avoir plusieurs secteurs définis comme secteurs prioritaires, par exemple les secteurs du numérique, de l'économie durable, ainsi que les priorités immédiates liées à la crise sanitaire du COVID-19.

3.2 Structure du fonds et champ de mise en œuvre géographique

Concernant la structure et le mode de fonctionnement du fond européen, l'étude a permis d'identifier trois options de mise en œuvre principales :

L'option A envisagerait un scenario où les partenaires de mise en œuvre investiraient directement au sein des États membres de l'UE dans des fonds de capital-investissement pour PME privés, ainsi que dans des véhicules d'investissement similaires pouvant être utilisés pour promouvoir les introductions en bourse.

L'option B envisagerait l'établissement d'un fonds de fonds (FoF) à l'échelle européenne qui, à son tour, investirait dans un certain nombre de nouveaux 'sous-fonds' d'investissement compartimentaires. Dans ce scénario, il y aurait idéalement une participation du secteur privé dans le FoF au niveau européen, mais également au sein des sous-fonds annexes.

L'option C, quant à elle, envisagerait la création d'un véhicule à usage spécial (SPV) au niveau européen avec des investissements aux côtés de l'UE par un certain nombre d'institutions financières du secteur privé. Le SPV pourra être utilisé pour investir directement dans des fonds de capital-investissement pour PME ainsi que dans d'autres véhicules d'investissement similaires dans les États membres de l'UE. Il pourrait également servir comme vecteur d'investissement direct dans les introductions en bourse des PME particulières. Une variante de l'option C consisterait à établir des SPV au niveau national et / ou pour des groupements transnationaux.

Les différentes options de mise en œuvre du fonds présentent chacune leurs avantages, ainsi que leurs inconvénients. L'une des principales conclusions de l'exercice d'étude de marché de la phase 3 suggère que la structure du fonds initialement sélectionnée pourrait ne pas être implémentée de façon permanente, mais pourrait au contraire évoluer au fil du temps. Compte tenu de la complexité et des risques liés à la création d'un fonds européen d'introduction des PME en bourse, en particulier dans les conditions actuelles du marché influencées par la crise sanitaire liée au COVID-19, une possibilité serait de mettre en œuvre l'option A comme une première étape d'un processus qui pourrait impliquer une évolution ultérieure de la structure du fonds en intégrant l'option B ou l'option C.

Les différentes approches du fonds européen pourraient être adaptées à différentes conditions de marché dans l'UE et une approche flexible de la mise en œuvre impliquant plusieurs modèles ne doit donc pas être exclue. Comme cela est indiqué dans la troisième partie du rapport, l'option B (FoF) pourrait être particulièrement bien adaptée aux marchés moins développés car elle impliquerait la création de sous-fonds dans différents pays qui pourraient mobiliser un éventail plus diversifié d'institutions du secteur privé, renforçant ainsi l'infrastructure financière locale des introductions en bourse des PME d'une manière qui est moins susceptible de se produire dans le cadre des options A ou C. L'option C, quant à elle, pourrait également mobiliser des investissements du secteur privé aux échelles européenne et nationale (de façon similaire à l'option B), mais devra s'appuyer sur l'offre actuelle des fonds d'investissement comme structure intermédiaire, même si certains investissements directs dans les introductions de PME en bourse via le SPV pourraient également être envisagés. Ainsi, l'option C sera probablement mieux adaptée aux marchés plus développés. Une option C dite « décentralisée » pourrait également être envisagée avec la création d'un SPV dans différents pays / groupements de pays, ce qui conduirait à reproduire un grand nombre des avantages de l'option B. Les avantages, ainsi que inconvénients des trois options du futur fonds européen sont résumés dans le tableau ci-dessous :

Conclusions – Avantages et inconvénients des trois grandes options de mise en œuvre du fonds

Option	Avantages	Inconvénients
Option A	Basée sur un modèle existant et donc la plus rapide à mettre en œuvre	Effet de levier de l'investissement privé à un seul niveau
Option B	Augmente les investissements privés dans les marchés moins développés	Relativement complexe et nécessite de nouvelles structures juridiques aux niveaux européen et national
Option C	Augmente potentiellement les investissements privés dans les marchés développés	Nécessite une nouvelle structure juridique de l'UE (SPV) et plusieurs niveaux de coûts

Recommandation 3: Le fonds européen devrait être lancé en prenant comme point de départ l'option A (en supposant que le FEI est sélectionné comme partenaire opérationnel). La structure du fonds aura par la suite la possibilité d'intégrer d'autres types d'interventions supplémentaires (comme par exemple les options B et C) et de fonctionner parallèlement à un fonds de l'option A dans certains contextes géographiques et de marché. De même, si l'option A établi une « démonstration de faisabilité » et fonctionne bien dans différents cadres géographiques et de marché, il se pourrait que l'horizon relativement court de la mise en œuvre d'InvestEU signifie que des solutions de remplacement ne sont pas nécessaires, ni réalisables. Cela sera idéalement le cas, étant donné la période relativement courte de la mise en œuvre d'InvestEU et les complexités potentielles de la mise en œuvre des différentes options.

En termes de portée géographique, les recherches de cette étude indiquent que le fonds européen devrait avoir un mandat à l'échelle européenne, mais avec la flexibilité requise pour faire varier ses objectifs d'investissement afin de s'adapter aux contextes particuliers des introductions en bourse des PME dans les différents États membres de l'UE. Bien que dans certains pays l'investissement dans les phases pré-OPI et OPI pourrait être prioritaire, dans d'autres pays où les marchés boursiers sont relativement plus développés, le fonds pourrait mettre davantage l'accent sur la participation aux émissions secondaires. Certaines parties prenantes ont défendu l'idée d'un fonds qui ciblerait des groupements régionaux d'États membres de sorte à surmonter la réticence des principaux investisseurs institutionnels à pénétrer des marchés plus petits, pour lesquels il y a souvent un manque de masse critique et de visibilité. Cela pourrait aussi aider à développer un « écosystème » d'introduction en bourse qui soit propice au développement des marchés des capitaux. À cet égard, l'option B et / ou une version décentralisée de l'option C pourraient contribuer à relever les défis posés par les différents besoins des différentes aires géographiques du marché de l'UE-27

Recommandation 4: La Commission européenne devrait discuter des objectifs d'investissement spécifiques du fonds européen avec les autorités nationales compétentes, ainsi que les acteurs du secteur privé afin d'encourager leur adhésion et contribution à la définition d'un rôle et d'un modèle appropriés adaptés aux différentes conditions et priorités du marché. Bien que l'initiative soit essentiellement destinée au secteur privé, il est peu probable que les autorités nationales puissent jouer un rôle majeur dans la création du fonds. Néanmoins, ces dernières peuvent avoir des avis sur les priorités d'un tel fonds dans leur pays et pourraient également être en mesure de mettre en œuvre des mesures visant à renforcer « l'écosystème » plus large des introductions en bourse des PME. Ce rapport identifie un certain nombre de mesures de soutien possible.

En examinant l'échelle plus large du **paysage fragmenté des marchés boursiers** de l'UE, le fonds européen pourrait jouer un rôle dans la réduction de cette fragmentation en concentrant sa stratégie d'investissement sur différents groupes boursiers. Certains de ces groupes dominent le champ des marchés de croissance, notamment Euronext, Nasdaq First North, Deutsche Boerse et le groupe LSE. Le fonds européen pourrait promouvoir l'intégration des marchés boursiers en créant des compartiments dédiés ou via une variante de l'option C, c'est-à-dire en établissant des SPV au service de chacun des principaux groupes boursiers, qui seraient par la suite confiés à des gestionnaires de fonds en fonction de leur expérience de travail dans les bourses de chaque groupe. Cette approche consistant à concentrer les interventions du fonds européen sur des groupements boursiers devrait être complétée par une couverture nationale / régionale pour les zones de l'UE où des marchés boursiers ne seraient pas assignés à un groupement donné.

3.3 Participation du secteur privé

L'idée d'un fonds européen dédié aux introductions en bourse des PME suscite un vif intérêt de la part du secteur privé. Si le futur fonds européen parvient à rendre les investissements dans les introductions des PME en bourse plus rentables (même s'il n'est pas en mesure de répondre aux problèmes de pondération des risques), alors la participation des investisseurs institutionnels et de détail à l'initiative pourrait devenir une offre attractive. Les fonds de pension à travers l'UE pourraient également constituer une source d'investissement institutionnel dans le futur fonds européen pour les OPI des PME. A plus long terme pour le fonds, une autre source d'investissement qui pourrait potentiellement être exploitée est le marché des investisseurs de détail et les plateformes de financement participatif qui pourraient jouer un rôle aux côtés de véhicules d'investissement plus traditionnels (comme par exemple, les fiducies d'investissement de petites entreprises). Certaines des parties prenantes consultées se sont montrées sceptiques quant à la perspective d'attirer cette forme d'investissement, cependant l'étude de marché de la phase 3 suggèrent que ces formes d'investissement ne devraient pas être écartées comme une possibilité à plus long terme, bien que peut-être uniquement en relation avec une version plus décentralisée dans le cadre de l'option C (SPV).

L'ampleur de la contribution du secteur privé et de son effet levier dépendra de plusieurs facteurs, notamment de la structure du fonds (en particulier si elle permet un effet levier à un ou deux niveaux), du montant du financement offert par l'UE et de son effet de levier, et de la relation entre les capitaux de l'UE et du secteur privé. Cette étude suggère que si l'UE devait investir dans des fonds d'actions pour les PME sur une base dite « pari passu », cela ne découragerait pas un montant plus important d'investissement privé. Une participation minoritaire de l'UE dans des fonds d'actions et des actions individuelles de PME est considérée comme une approche appropriée.

Recommandation 5: Afin de garantir une coopération optimale entre le secteur public et le secteur privé, le fonds devrait investir aux côtés du secteur privé sur une base « pari passu ». Le fonds européen ne devrait également investir que sur une base minoritaire dans des actions de PME qui sont créés via une introduction en bourse.

3.4 Investissement de l'UE et du secteur privé dans le Fonds

Dans la troisième section du rapport, diverses estimations des coûts d'investissement du futur fonds ont été proposées en se basant sur quatre scénarios envisageables. Les coûts d'un fonds européen peuvent être estimés de différentes manières, par exemple, en analysant les ressources financières nécessaires pour répondre à l'ambition en matière d'augmentation du nombre et de la valeur des introductions en bourse des PME dans les années à venir ou, au contraire, sur la base du montant des ressources budgétaires que l'UE serait disposée à allouer pour ce fonds. Nous avons également fourni des scénarios illustratifs concernant les coûts de fonctionnement du fonds européen et ses retours sur investissement.

Recommandation 6: Les ressources d'InvestEU devraient être mobilisées de sorte à contribuer au Fonds de l'UE. Nous estimons que pour aboutir à une croissance de 10% des introductions en bourse de PME pour la période 2022-2027 comparé aux tendances antérieures (Scénario B dans notre rapport) il faudrait un investissement de l'UE de EUR 738 millions en supposant que cela représente 25% de la valeur du Fonds, le 75% restant va provenir ensuite de sources privées. Cette approche repose sur la définition du marché cible comme étant celui des PME innovantes comptant jusqu'à 3 000 employés. Nous considérons qu'il s'agit d'une estimation raisonnable compte tenu du COVID-19 et des incertitudes concernant les perspectives économiques et de marché pour l'année 2021. Nous avons supposé qu'il y aurait plusieurs cycles de financement avec la levée de fonds du Fonds européen se réalisant par étapes au cours de la période 2022-2027. Certainement, si le financement d'InvestEU est plus ou moins élevé et que l'ampleur de l'effet de levier du secteur privé reste la même, cela aurait un impact proportionné sur le nombre d'introductions en bourse soutenues. Le fonds européen devra être opérationnel pendant au moins 5 à 7 ans afin de permettre au taux d'investissement de revenir à la hausse à partir de ce qui sera probablement un début lent dans la période suivant immédiatement la crise sanitaire du COVID-19, mais également pour permettre aux prix des actions d'atteindre un niveau où le désinvestissement pourrait avoir lieu sur une base rentable. Idéalement, les co-investisseurs du secteur privé devraient être invités à accepter une période de blocage de 6 à 12 mois après une introduction en bourse.

La troisième section du rapport met aussi en évidence une série d'avantages qui pourraient découler des interventions du fonds européen sur les marchés boursiers de l'UE, les PME et l'économie européenne plus généralement. Seuls certains des effets attendus peuvent être quantifiés et cela implique de supposer des taux de croissance similaires de l'emploi et du chiffre d'affaires des PME après l'introduction en bourse au cours de la période 2022-27, comme ce fut le cas dans notre analyse des tendances sur la période 2014-20. Cependant, les retours des principales parties prenantes qui ont été consultées dans le cadre de cette étude mettent en évidence d'autres avantages potentiels importants pour l'économie européenne.

Enfin, un nombre important de parties prenantes ayant contribué à cette étude ont fait valoir qu'outre la création d'un fonds européen, des mesures devraient être prises pour renforcer « l'écosystème » des OPI au sens stratégique. Il est peu probable que ce rôle soit rempli par le fonds lui-même, étant donné que ces interventions se concentreront sur l'investissement dans le capital des PME, mais ce renforcement de l'écosystème européen pourrait être soutenu par une combinaison d'assistance technique de l'UE et de mesures mises en œuvre par les États membres, ainsi que d'autres acteurs clés tels que la Banque européenne pour la reconstruction et le développement (BERD).

1 Introduction

This document contains the final report for the assignment ‘A Public-Private Fund to support the EU IPO Market for SMEs’. The assignment was carried out for the European Commission by the Centre for Strategy & Evaluation Services (CSES) during 2020.

1.1 Resume – Study objectives and scope

To quote the Commission’s terms of reference, the following tasks were to be carried out by the contractor:

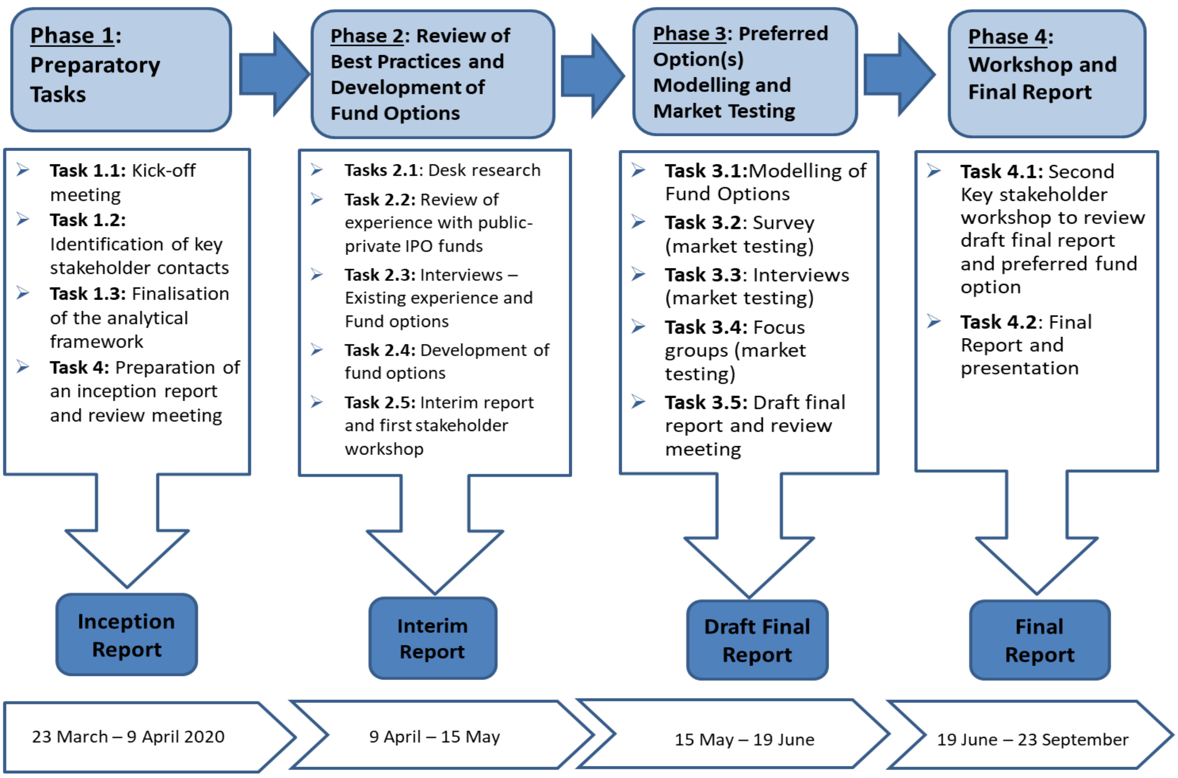
- Reviewing existing best practices and lessons learned on the implementation of public-private funds in the EU IPO segment.
- Modelling different fund options.
- Assessing how the proposed features of the Fund can address market failures at the different IPO stages.

The various deliverables to be produced were an inception report, an interim report and a (draft) final report with a 200-word abstract. The assignment was carried out over a period of six months although some adjustments to the original timescales within this overall period were agreed.

1.2 Research Plan

The study started towards the end of March 2020. Below we provide a summary of the research plan as set out in the tender and inception report.

Figure 1.1: Overview of the Research Plan



Following signature of the contract, a **kick-off meeting** with the European Commission took place via a conference call on 23 March 2020. Several points were made by the Commission relating to the study methodology and the fund options.

First, with regard to the research plan, the Commission stressed the need to speed up Phase 1 by making a start in contacting and lining up key stakeholders for the interview programme; second, it was suggested that the research should start with the general solution identified by the Commission (an EU fund) and work backward through various options or solutions to the market failures; and third, with regard to the overall timing, the aim should be to deliver the draft final report in the second half of June. This would mean some 'front-loading', i.e. producing key conclusions before they were fully tested, with the main market testing taking place after the draft report was submitted.

Following the kick-off meeting, a number of Phase 1 preparatory tasks were undertaken leading to submission of an **inception report** on 9 April 2020. Reflecting the Commission's feedback, a number of amendments were made to the report which was subsequently approved on 5 May.

Phase 2 of the study involved further **desk research** focusing on examining the rationale for an EU SME IPO Fund. This involved examining SME IPO statistics, market failures and existing proposals that relate to the proposed EU SME IPO Fund (these aspects are presented in Section 2 of this report). However, the main purpose of the Phase 2 research was to develop the proposed EU Fund options. To this end, Phase 2 involved an **interview programme with key stakeholders**, i.e. European associations, secondary stock markets, financial institutions and other contacts prioritised by the Commission. A total of 46 interviews were completed, almost all with senior people in their organisations. In most cases the interviews, which were undertaken using video-conferencing technology because of COVID-19, lasted around one hour and involved several people from the stakeholder organisations. We targeted organisations that provided reasonable coverage of different sub-groups of stakeholders (e.g. investment banks, other financial institutions, European associations, public agencies, etc).

The Phase 2 interviews involved discussing the situation with regard to SME IPOs in different markets, existing initiatives to promote IPO activity and what role an EU Fund could play. We found that whilst many interviewees had views on what role an EU SME IPO Fund could play at the various stages in the IPO process (pre-IPO, IPO, post-IPO), they did not have views on its specific features (i.e. Fund-of-Funds (FoF), Special Purpose Vehicle (SPV) or any other approach that could be foreseen such as a intermediated equity investment approach). As part of the Phase 2 research, we were also able to participate in a 'virtual' focus group discussion organised by the Federation of European Stock Exchanges with some 15 representatives of stock markets across Europe to discuss key issues.

The third research task defined in the Commission's terms of reference was to examine **'good practices'** that are relevant to the EU Fund. Ten schemes were identified in the inception report and several further schemes were subsequently added. The schemes were investigated during Phase 2 through a combination of desk research and interviews. Section 4 of this report contains the good practice assessment.

As part of **Phase 3 of the assignment (Modelling and Market Testing)** CSES conducted follow-up interviews with key stakeholders. Several focus groups were also held and five EU-level federations agreed to survey their members to obtain feedback on the EU SME IPO fund options as defined during Phase 2. In addition to the consultations, there were other inputs to the research. Several key stakeholders set out their position in writing, examining the difficulties with regard to SME IPOs and commenting on the role that could potentially be played by an EU SME IPO Fund. Written contributions were made by the FESE (including individual stock exchanges), NASDAQ First North, the OECD and the Borsa Italiana. In Section 3 of this report, where feedback on the various EU Fund options is assessed, it should be noted that whilst some quotes are reproduced verbatim, others have been reconstructed from notes taken during the interviews and have been edited by us to make them suitable for inclusion in the report.

Tables 1.1 and 1.2 provide a breakdown of the various consultations for the study. A list of the key stakeholders who made an input to the research is provided in Appendix B.

Table 1.1: Summary Interviews Completed and Arranged (28 August 2020)

Stakeholder groups	Contacted	Surveys Responses	Focus Group Participants	Interviews
(1) European Commission, EIB Group	8	0	0	7
(2) EU-level associations	36	65	25	16
(3) National and inter-governmental	7	0	1	5
(4) Private sector financial institutions	102	0	2	9
(5) Stock markets and secondary markets	9	0	3	10
(6) National promotional institutions	12	0	2	6
(7) Other contacts	21	0	0	7
Total	**195**	**65**	**33**	**60**

The interviews and focus groups were split between Phases 2 and 3 of the assignment (43 and 17 interviews respectively). One of the focus groups took place in Phase 2 (with the FESE) while others in Phase 3. The Phase 3 surveys were undertaken via a link to a SurveyMonkey questionnaire devised by CSES and also available in the form of a Microsoft Word document. A breakdown of the responses can be seen in the following table:

Table 1.2: Summary Survey Responses received (19 August 2020)

Associations	SurveyMonkey	Word	Total Responses
European Investors	53	0	53
AFME	2	0	2
BVI	5	0	5
EBF	2	0	2
CFA Institute	0	3	3
Total	**62**	**3**	**65**

An interim report was submitted to the Commission on 19 May 2020. This set out the early results of the Phase 2 research. A draft final report was submitted on 23 June 2020 with a first revision being submitted on 13 July. This document represents the second revision to the definitive final report.

1.3 Final Report

The final report has three main sections:

- **Section 2: Problem definition and intervention logic** – examines trends with regard to

SME IPO trends, identifies the key market failures and based on this, the intervention logic for an EU IPO fund. We also consider existing proposals with regard to the EU SME IPO Fund and relevant aspects of InvestEU.

- **Section 3: Definition of EU fund options –** considers at what stages in the IPO process EU intervention could add most value in addressing market failures, the three main options with regard to the EU fund and how it might be structured, the fund size and other issues including the market testing feedback obtained from stock exchanges, private sector financial institutions and other key stakeholders on the proposed fund.
- **Section 4**: **Assessment of good practices** – this section examines 12 funds and other schemes whose experience points to possible good practice for the proposed EU fund or that might operate in conjunction with it.

The report is supported by several appendices including a list of interviews (Appendix A) and a list of secondary sources (Appendix B). Table 1.3 below contains the list of questions from the Commission's terms of reference indicating where in this report the corresponding assessment can be found.

Table 1.3: List of Questions and References to Section in the Final Report

List of Questions	Section
(1) What should be the EU Fund's targets (investment policy) and what should the optimal size of the fund be, i.e. (a) what is the minimum level of EU investment needed to launch an SME IPO fund? (b) Optimal size of subsequent fund-raising rounds? Optimal size at fund closure? (c) Is the SME IPO fund sizable enough to attract all types of investors or only specific investor types?	Sections 3.1 and 3.4
(2) Should the fund be direct or indirect, i.e., structured as a FoF and/or that draws on private sector expertise and co-investment? How could the benefits and costs of each option (e.g. the different fee structures) affect the final success of the initiative?	Section 3.2
(3) What should be the fund's governance structure? For example, what role should the implementing body play? What sort of Fund management should there be (a) Direct management; (b) indirect management to an entrusted entity; (c) indirect management to private sector?	
(4) Should the fund operate on a Pan-European basis, focusing on countries where IPO/SME growth markets are underdeveloped or non-existent, or leverage existing IPO markets (or both)?	Section 3.3
(5) Is there an optimal number of funds the EU fund should invest in?	Section 3.2
(6) Should the public stake be subordinated, in order to mitigate private investors' risk, and to what extent? Should there be other classes of shares?	Section 3.4
(7) What features should the fund possess (e.g. in terms of critical mass) in order to ensure its attractiveness for institutional investors (pensions, banks, insurers etc.)? What exits/IRRs and risk tolerance should be envisaged?	Section 3.4
(8) How could the benefits and costs of each Fund option (i.e. the different fee structures) affect the final success of the initiative?	Section 3.5
(9) What are the risks associated with this initiative? Is there a risk that investors in the public fund could see the value of their stock rise, creating a disproportionate advantage for them with respect to owners of other	Section 3.5

List of Questions	Section
stock not targeted by the fund?	
(10) To what extent is the current macro-financial environment in the EU, characterised by low interest rates, guaranteed credit, and high risk to corporate insolvency in the post-recession period detrimental for the potential success of the Fund?	Section 3.8

2 Problem Definition & EU Fund Intervention Logic

In this section we firstly analyse baseline data on SME IPOs for the 2014-20 period. We then assess the market failures and challenges faced by SMEs and investors in relation to IPOs, and the intervention logic for an EU Fund. The final sub-sections review current and planned initiatives of relevance to the proposed EU Fund.

2.1 Baselines for SME IPOs

Establishing a baseline for SME IPOs is a starting point in the problem definition but it is also important in helping to decide on the appropriate ambitions and targets for the proposed EU SME IPO Fund.

An initial assessment of the baseline situation and problem definition was provided in the CSES tender. To summarise, because of a number of market failures, SMEs often find it difficult to raise finance to support their growth and, in particular, to access equity capital markets. It is important to point out that while IPOs in general in Europe can be problematic, SME IPOs are a distinct category and face challenges over and above those faced by larger firms going through IPOs, as will be made clear in the following sub-section.

Assessing SME IPO trends on European stock exchanges is complicated by definitional issues. It is worth recalling that according to the Commission's definition, SMEs are made up of the categories of enterprises summarised in the table below, based on headcount, turnover and balance sheet totals.[2]

Table 2.1: European Commission's SME Definition

Company category	Staff headcount	Turnover EUR million	or	Balance sheet total EUR million
Medium-sized	< 250	≤ 50		≤ 43
Small	< 50	≤ 10		≤ 10
Micro	< 10	≤ 2		≤ 2

However, Article 4(1)(13) of the **Markets in Financial Instruments Directive (MIFID II)[3] states that for the purposes of that Directive an SME is defined as a company that has an average market capitalisation of up to EUR 200m** on the basis of end-year quotes for the previous three calendar years.[4] Arguably, it could be expected that **SMEs that embark on an IPO would be at the higher end of the SME size scale**, or alternatively would be intending to use the proceeds of an IPO to scale up to a larger size.

Following discussions with the Commission, it was agreed that for the purposes of this report the term 'SME' should cover firms falling into the EU definition in terms of employment (i.e. less than 250 employees) as well as those that are classified as smaller mid-caps (that is, with

[2] EU Recommendation 2003/361
[3] REGULATION (EU) 2019/2115 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27 November 2019
amending Directive 2014/65/EU and Regulations (EU) No 596/2014 and (EU) 2017/1129 as regards the promotion of the use of SME growth markets
[4] ESMA considers that SMEs with a history of less than three years should also be counted as SMEs if their market capitalisation on commencement of trading or based on the end-year quote after the first year of trading or the average of the end-year quotes after the first two years of trading is below EUR 200m.

up to 500 employees). **Enterprises with up to 3,000 employees** are also included as a potential target for the EU SME IPO Fund if they are innovative. Reflecting this, we undertook an analysis of SME IPOs based on the MiFID II definition of enterprises with a market capitalisation of up to EUR 200 million. This latter definition correlates quite well with the Commission definition for an SME as being an enterprise with a turnover of up to EUR 50 million.

The results of these analyses are presented in Table 2.2 below. It is important to bear in mind that the Commission company-size definitions are distinct from capital market terminology.[5] By way of example, the MiFID II definition includes nano-caps and the lower end of micro-caps. In this context it is worth noting that the InvestEU Regulation applies to both SMEs and small mid-cap companies (see Section 2.5.1).

In order to develop an **SME IPO baseline**, we used two datasets: the first was derived from data produced by the Federation of European Stock Exchanges (FESE) and the second data set came from the World Federation of Exchanges (WFE). The FESE data run from 2014 and include the EU-27 exchanges, whereas the WFE data start in 2012 and include the London Stock Exchange but not all the EU-27 exchanges. Moreover, the FESE dataset does not include the Borsa Italiana which merged with the London Stock Exchange. The WFE data also has the limitation that it is only possible to use the EUR 200 million capitalisation definition for SME IPOs as employment data for the firms undertaking an IPO is not available.

We have analysed the FESE data on IPOs in European exchanges based on the above definitions for the period 2014-20. The results are presented in Table 2.2. Since data for the year 2020 is only available for the first quarter, we have excluded this year for most of our analyses and only report it in Table 2.2 for the sake of completeness. We have based most of our analyses on FESE data, although the FESE data exclude the London Stock Exchange and the Borsa Italiana. Merging data from these two stock exchanges based on data from WFE was not possible for each analysis since WFE reports less information than FESE on the IPOs.

Table 2.2: Number of IPOs in the EU-27: SMEs 2014-2020

Year	Market capitalisation		Staff headcount							Total
	Up to EUR 200m	More than EUR 200m	Up to 250	More than 250	Up to 500	More than 500	Up to 3000	More than 3000	
	SME	Large	SME	Large	SME	Large	SME	Large	
2014	102	55	83	74	93	64	117	40	**157**
2015	112	75	98	89	112	75	143	44	**187**
2016	97	37	59	75	69	65	86	48	**134**
2017	107	56	105	58	113	50	131	32	**163**
2018	101	33	64	70	71	63	90	44	**134**
2019	62	24	55	31	58	28	65	21	**86**
2020 Q1	19	4	18	5	18	5	20	3	**23**

[5] Mega-caps: USD 200 billion and greater; large-caps: USD 10 billion up to USD 200 billion; mid-caps: USD 2 billion to USD 10 billion; small-caps: USD 300 million to USD 2 billion; micro-caps: USD 50 million to USD 300 million; nano-caps: under USD 50 million.

Source: Own calculations based on data from FESE (FESE data do not include the London Stock Exchange and the Borsa Italiana).

According to the FESE data, there were **884 domestic IPOs in the period from 2014 to the first quarter of 2020**. **Depending on the definition of SMEs used, there were 482 (up to 249 employees), 534 (up to 500 employees) or 652 (up to 3,000 employees) SME IPOs over that period**. When assessing trends in IPO data, the start and end dates are of course of major importance given the effects of cyclical influences.[6] The challenge involved in determining the overall trend is quite clear: for example, if 2014 is taken as a starting point, then the declining trend is less than if 2015 is taken as a starting point.

Table 2.3 combines the data from FESE and the WFE. **On average during the years 2014-19 there were 97 SME IPOs per year**, i.e. IPOs involving companies with a market capitalisation of up to EUR 200 million, on exchanges that are FESE members, while there were 66 SME IPOs on average per year on the LSE and 8 per year on the Borsa Italiana which, as noted above, merged with the LSE during this period. On average, 2 SME IPOs per annum involving companies located in the EU-27 were conducted on the LSE. Thus, we define the benchmark for the IPOs as 97 SME IPOs per year on FESE member exchanges, 8 IPOs per year on Borsa Italiana, and 2 IPOs per year of EU-27 companies on LSE, which comes to 107 IPOs per year in total.

Table 2.3: EU-27 and LSE Market capitalisation of SMEs undergoing an IPO (EUR million)

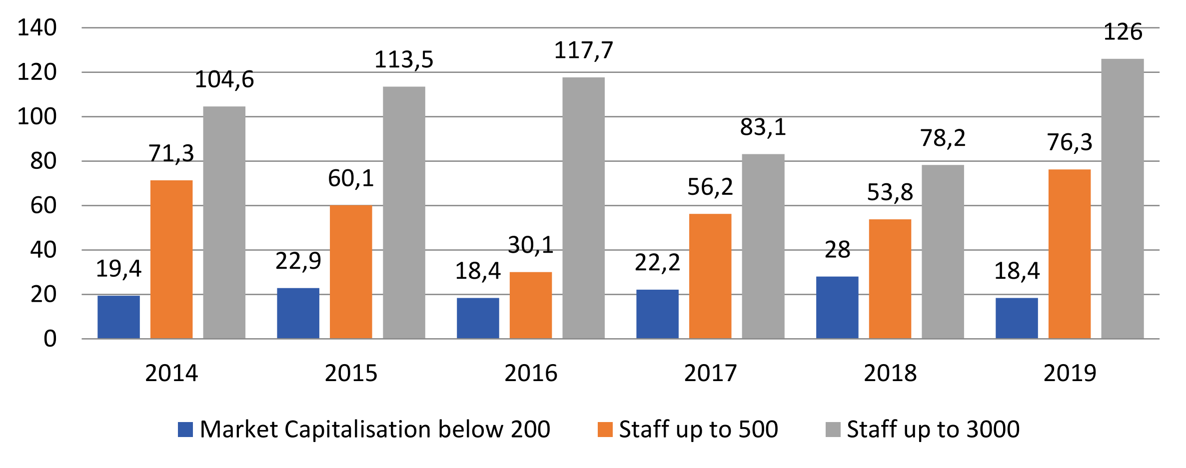
	Number of IPOs			Average market capitalisation per company at time of the IPO		
Year	FESE members	London Stock Exchange	Borsa Italiana / AIM Italia	FESE members	London Stock Exchange	Borsa Italiana / AIM Italia
2014	102	101	0	59.9	59.7	-
2015	112	54	19	56.7	60.7	49.1
2016	97	55	0	58.8	46.3	-
2017	107	79	0	57.2	56.2	-
2018	101	88	0	61.4	60.8	-
2019	62	21	31	43.8	66.3	27.7
Average 2014-19	**97**	**66**	**8**	**57.1**	**57.9**	**35.8**

Source: Own calculations based on data from FESE and World Federation of Exchanges. (SMEs defined as companies with a market capitalisation of up to EUR 200 million). Note: WFE data have been used as this is available for a longer period than FESE data.

Based on the FESE data (Figure 2.1), the average amount raised per IPO from 2014-2019 was EUR 21.6 million according to the MiFID definition, EUR 56.8 for enterprises employing less than 500 people and EUR 100.1 million if the enterprises employing up to 3,000 people are included.

[6] When assessing trends in IPO data, the start and end dates are of major importance given the cyclical influences at work. For example, if stocks are rising, it will be an incentive to do IPOs; in downswings, conversely, with declining stock values and lower interest rates, debt might be more interesting. If one adopts a start date for a time series as the climax or upper turning point of an upswing, and the end as the bottom of a cycle, it is inevitable that there will be a declining trend. Therefore, arguably, the longer the time series available, the better it is to make use of it as that will reflect long term structural development in the capital market, rather than medium term cycles and short term swings which can be ironed out over a longer period.

Figure 2.1: Average amount of capital raised through SME IPOs, EU27



Source: Own calculations based on FESE data

From Table 2.4 it can be seen that during the 2014-Q1 2020 period**, almost half of SME IPOs in the FESE exchanges across the EU27 were conducted through NASDAQ exchanges (47%). Some 18% came through Euronext and 12% Warsaw**. It should be noted, however, that these figures are based on FESE data, and these data do not include figures for exchanges such as Borsa Italiana.

2.1.1 Differences between EU-27 stock markets and London Stock Exchange

The **London Stock Exchange (LSE)**, in particular the Alternative Investment Market (AIM), accounts for a high proportion of SME IPOs in Europe. Whether or not the EU Fund will operate in the UK following the end of the Brexit transition period will depend on future EU-UK agreements. It is nevertheless helpful to compare EU-27 SME IPOs with those that have taken place on the LSE to understand the broader context since companies from the EU-27 also use the LSE to conduct their IPOs. As the following table shows, **during the period 2014-20, there were 600 SME IPOs on EU-27 stock exchanges (SME defined as a firm with a market capitalisation of up to EUR 200 million) compared with 403 on the LSE of which 11 IPOs involved companies located in the EU-27.** These were mainly companies from Ireland and Italy, reflecting the London Stock Exchange and Borsa Italiana merger.

Table 2.4: Number of IPOs broken down by Firm Size in the EU-27 and the UK (2014-20)

Years	EU-27 exchanges (FESE members)		London Stock Exchange			
	SMEs	Other Companies	SMEs	Other Companies	SMEs from EU-27	Other Companies from EU-27
2014	102	55	101	62	0	3
2015	112	75	54	39	2	3
2016	97	37	55	15	0	0
2017	107	56	79	40	3	4
2018	101	33	88	31	6	2

Years	EU-27 exchanges (FESE members)		London Stock Exchange			
	SMEs	Other Companies	SMEs	Other Companies	SMEs from EU-27	Other Companies from EU-27
2019	62	24	21	19	0	1
2020 (Q1)	19	4	5	3	0	0
Total 2014 to Q1 2020	600	284	403	209	11	13
Average p.a. 2014-19	**97**	**47**	**66**	**34**	2	2

Source: FESE, WFE, own calculations (SMEs defined as companies with a market capitalisation of up to 200 million Euro)

During the period we analysed, the average market capitalisation of an IPO on EU-27 stock exchanges was EUR 57.1 million for companies with a market capitalisation of up to EUR 200 million. This is almost identical to the LSE. Taking the other definitions used in this study, for companies with up to 500 employees the average market capitalisation is EUR 152.2 million, while the average market capitalisation of companies with up to 3,000 employees is EUR 312.4 million on the first trading day.

Table 2.5: EU-27 and LSE Capital raised through SME IPOs (EUR million per IPO)

	EU-27 exchanges		London Stock Exchange	
	Newly Issued Shares	Sum of Newly and Already Issued Shares	Newly Issued Shares	Sum of Newly and Already Issued Shares
2014	8.8	19.4	22.5	22.6
2015	18.0	22.9		32.8
2016	13.2	18.4		15.6
2017	17.4	22.2	29.4	33.3
2018	17.7	28.0	32.4	34.4
2019	11.8	18.4	29.1	31.2
Q1 2020	16.2	16.1	31.6	48.3
Averages 2014-19	**14.9**	**21.6**	**20.0**	**27.9**

Source: FESE, WFE, own calculations. (SMEs defined as companies with a market capitalisation of up to EUR 200 million). Note: For 2015 and 2016 there are no numbers reported for the LSE. Data for 2015 and 2016 are missing for the London Stock Exchange.

2.2 Factors Influencing the Trends in SME IPOs

The distribution of SME IPOs across the EU28 Member States' exchanges during the 2012-19 period is influenced by several factors including the size of the national economy, the number of listed companies and the size of the exchanges, but it also depends on the willingness of the companies to go public.

Table 2.6 provides a list of the factors that have a negative impact on IPOs, as identified by the 2020 IPO Task Force and our additional research. From this list, some areas are indicated that might be targets for intervention by an EU SME IPO Fund. According to the IPO Taskforce Report 2020, the low weight of external equity funding in companies' balance sheets and the decline in the number of IPOs is due to a combination of factors:

Table 2.6: Factors influencing the development of IPOs by SMEs

General area	Factors	Potential Fund role?
Business environment	The **historically low level of interest rates** for the longest period ever together with the favourable tax treatment of debt are contributing factors to the decline in IPOs, as it makes it easier for companies to borrow and/or attract investment from private equity managers.	No
	Increasingly, companies tend to grow through **mergers and acquisitions.**	No
	Lack of an equity culture that makes company founders reluctant to open the shareholding structure of their companies and involve external investors.	Yes
	Lack of an equity culture in retail investors to invest in SME IPOs.	Yes
Business environment/ Regulation	**Lack of liquidity:** fewer institutional investors are willing or able to invest in smaller companies on the stock market. Retail investors are blocked by intermediaries from investing in smaller issuers.	Yes
Regulation	**Regulatory disincentives**, increasing the administrative and financial burden linked to the public listing and public offering.	No
	Regulatory minimum trading volume requirements for public investment funds that limit the ability to invest in small- and micro-cap stocks.	No
	Documentation requirements for public fund managers preventing them from performing small- or micro-cap investments.	No
	Regulation strongly restricts the possibility for retail investors to get **research or active advice** related to single stock investments.	No
	The decline of **free research on small- and micro-cap companies** due to the new industry structure under MiFID II, leading to small- and micro-cap companies increasingly having to pay for research or corporate access, as otherwise they would remain invisible to fund managers.	No
	Declining number of active fund managers due to MiFID II, which has driven the consolidation in the fund management industry.	No
	Companies are not listing because of the **sometimes excessive and unjustified scrutiny** that puts them at a competitive disadvantage vis a vis non-listed companies.	Indirectly
Outcomes resulting from the preceding challenges	**Insecurity about the success** of the IPO process, due to the above-mentioned factors and specifically to the decline of active fund managers, which generate concerns about the high costs and uncertain benefits of raising equity successfully.	Indirectly
	The **ecosystem** that traditionally serves the IPO candidates, especially the active sales force of intermediaries (broker-dealers), has undergone change due to regulatory impacts.	Indirectly
	The generally **low (and lower compared to the US) valuation level** of European equity markets, due to all the relevant negative factors mentioned in the IPO 2020 Task Force report	No

Source: European IPO Task Force (2020); European IPO Report 2020, plus additional elaboration

The declining trend in IPO activity is not only evident in Europe. **According to the OECD Asia Equity Market Review 2019, the number of IPOs has declined in the US as well while it increased in Asia.** The volume of total IPO values in the EU has declined from a yearly average of USD 78 billion in the 2000-08 period to USD 51 billion in the 2009-18 period, while it increased from USD 46 billion to USD 67 billion in Asia during the same time. While the increase in IPO values in Asia is due to catch-up effects, especially in the case of China.

According to the OECD, the decline in IPO activity in the US and the EU is due to structural factors.[7] Kahle and Stultz (2017) document the decline in public listings for the US, while Demary and Röhl (2017) find a similar decline in Germany, which they attribute to the various factors:[8,9] a decline in start-up activity; an increase of company acquisitions by private equity investors which act as a substitute for IPOs; an increasing shortage of stock market investors (banks, insurance companies, investment funds and retail investors); and a different investment policy from non-financial companies, which have reduced their holdings of stocks in other companies and increased purchases of whole companies instead.

Figure 2.2 reflects the issues identified in the preceding table and sets out the results of a survey by the Economist on why the use of public equity markets seem to be declining in popularity.

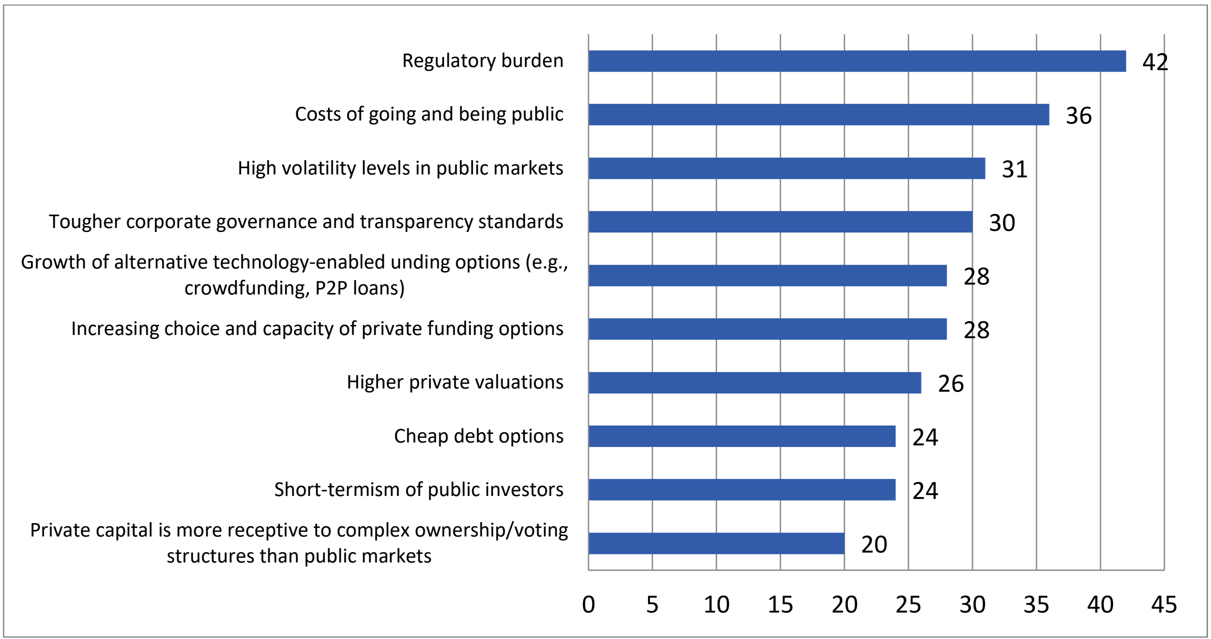
Figure 2.2: What has caused public equity markets to decline in popularity (%

[7] OECD, 2019, OECD Equity Market Review Asia 2019,

[8] Kahle, Kathleen and René M. Stulz, 2017, The Shrinking Number of Public Corporations in the US, LSE Business Review, https://blogs.lse.ac.uk/businessreview/2017/10/17/the-shrinking-number-of-public-corporations-in-the-us/

[9] Demary, Markus and Klaus-Heiner Röhl, 2017, Why are Fewer German Companies Choosing to Join the Stock Market, LSE Business Review, https://blogs.lse.ac.uk/businessreview/2017/12/08/why-are-fewer-german-companies-choosing-to-join-the-stock-market/

responses)?



Source: PwC, 2019, The Economist Intelligence Unit, 'Capital markets in 2030: The future of equity capital markets', p.12 EU IPO Task Force Report

As indicated in the chart, **various factors have an influence on whether firms wish to make use of external finance** including firm-specific factors, sector-specific factors, and country-specific factors.[10] Firm-specific factors include access to a wider pool of funds and investor base, reduced costs of capital, resilience through cyclical swings and the potential to exit for investors, which are all considerations that influence the decision to undertake an IPO. There are also other factors, including a higher profile and prestige in the market and the potential to use shares for new acquisitions.

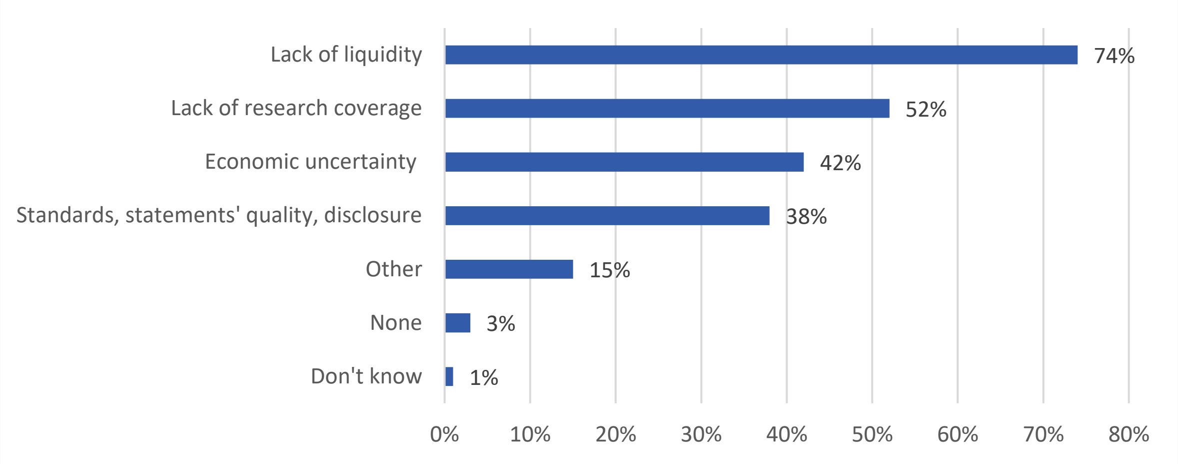
The **costs to be considered in relation to IPOs** are both direct and indirect: **direct costs** include: preparation for a public listing (changed legal status, preparation of relevant documentation, etc); the costs of sponsor and advisor fees (these are incurred both at the initial stage and throughout the listing); the costs of ensuring on-going compliance (audits); and administration and on-going fees charged by stock exchanges. There are also a number of **indirect costs** which include: establishing the required company governance structure, the opportunity costs of management time spent on compliance, investor relations, greater public visibility and accountability, as well as the perceived market short-termism and increased potential for share volatility. IPO costs are related to the amount to be raised. FESE has estimated the costs to lie in the range between 3% and 15% of the amount raised from the IPO.[11] The lower the value of the amount to be raised, the higher is the percentage share, which therefore has a strong impact on SME IPOs and the willingness of firms to go public.

In addition to the costs that might affect the demand for IPOs, there are challenges smaller companies face which are related to the **market perceptions that the suppliers of services that support IPOs have**. These include: service providers often finding SMEs less attractive

[10] WFE (2018): SME Financing and Equity Markets.
[11] 2020 IPO Task force, p.12. The estimates are: 10% to 15% of the amount raised from an initial offering of less than EUR 6 million; 6 to 10% from less than EUR 50 million; 5 to 8% from between EUR 50 million and EUR 100 million; 3 to 7,5% from more than EUR 100 million.

due to their not being able to afford higher fees; there is less coverage of SMEs because there is less information publicly available about them; and there can be less liquidity for the shares which can mean larger fluctuations in price and more difficulty in exiting from the shareholding. Figure 2.3 provides some feedback from a Dialogic/Oliver Wyman survey on the barriers to investor interest in SMEs.[12]

Figure 2.3: Barriers that affect investment in SMEs



Source: 2020 IPO task force report, p.19

The various barriers to SME IPOs can be summarised as follows:

- **Regulatory barriers:** these lie in the disproportionate burdens on SMEs in obtaining a listing compared to larger enterprises.
- **Financial barriers**: the barriers of a financial nature arise (from the investor's perspective) from the perceived risks and uncertain returns of investing in SMEs. From the SME perspective, the costs of an IPO are significant and constitute a deterrent to obtaining a listing. The lack of liquidity in primary and secondary markets means that it can be difficult for investors to exit from their investments which, in turn, raises the cost of equity and deters firms from initiating an IPO in the first place. The lack of liquidity in SME equity markets (both primary and secondary) is a genuine market failure and therefore calls for a policy intervention as there does not appear to be a market driven rationale for addressing this failure.
- **Information barriers:** the barriers arise from investors finding it difficult to evaluate SMEs with a short track record, partly due to a lack of research coverage. SMEs further lack information about the costs, such as the regulatory burden, and the benefits of an IPO. SMEs generally also lack an 'equity culture'.
- **Structural barriers:** there are also a number of structural barriers, notably the fact that the EU's junior markets are fragmented and lack scale, which affects both SMEs and investors, and means that information is not shared between them.

These and other factors mean that there is a market failure in the provision of equity finance to smaller firms with financial institutions being often unwilling to invest in them because of a perception that the risk-reward ratio is not favourable compared with alternative investment opportunities, notably in larger firms or other asset classes. Equally, many smaller firms are

[12] 2020 IPO task force report, p.19

unaware of equity financing possibilities and their merits (and drawbacks) or do not want to make use of such financing, for example because of a fear that this might lead to a loss of ownership and control over the business.

2.3 IPO Process and Market Failures

IPOs offer a way for SMEs to raise growth capital and perhaps for the entrepreneur-owner to extract cash from a business.

However, an IPO is not always the best source of capital for SMEs. For some SMEs, bank debt, a trade sale or private equity could be a better option. Factors such as size, growth rate, geographical focus and type of business all have a bearing on the IPO decision. A trade sale or the private equity option may be preferable to an IPO and the regulatory scrutiny and possibly the loss of control that accompanies a public listing. The high costs of maintaining a listing can also be an issue and has led to some SMEs de-listing. However, for companies that need to raise large amounts of funding to support growth and scale-up, possibly even eventually on a world-wide scale, an IPO is a way of enabling them to tap into large public financial markets. For investors, IPOs are a way of accessing potentially profitable investment opportunities, or to exit from existing investments (e.g. venture capital and private equity).

With a view to identifying intervention areas for an EU IPO Fund, it is useful to consider the IPO process and its various market failures. The IPO process consists of three main stages: pre-IPO, the IPO itself and post-IPO stages.

2.3.1 Pre-IPO stage

The pre-IPO stage is when an SME starts the process of floating its stock publicly. This usually occurs in the later early growth stage in a company's development when the products and services it produces have demonstrated promising potential and the possibility of scaling up. At the pre-IPO stage, the company will appoint advisers, prepare the necessary information for a listing, and ensure that the business is ready for market exposure. A year or two before the IPO a private placement of shares is likely to occur before the public floatation.

Across most EU Member States, a constraint on IPOs is the lack of an equity investment culture, and awareness and understanding among SMEs of the benefits of equity financing[13]. Existing research suggests that SMEs' reluctance to enter equity markets is partly a result of a lack of knowledge of the IPO process (prior to as well as after listing).[14,15] On the investors' side, a lack of an equity culture in many countries also constitutes an obstacle to the flow of investments into SME equities.[16,17] Financial know-how is necessary to understand financing options through capital market instruments, assess the appropriateness of risk finance and respond to listing requirements. This also requires knowledge about planning, financial

[13] Nassr, I. K., & Wehinger, G. (2016). Opportunities and limitations of public equity markets for SMEs. OECD Journal: Financial Market Trends, 2015(1), 49–84. doi: 10.1787/fmt-2015-5jrs051fvnjk
[14] Nassr, I. K., & Wehinger, G. (2016). Opportunities and limitations of public equity markets for SMEs. OECD Journal: Financial Market Trends, 2015(1), 49–84. doi: 10.1787/fmt-2015-5jrs051fvnjk
[15] New Approaches to SME and Entrepreneurship Financing: Broadening the Range of Instruments. (n.d.). Retrieved April 7, 2020, from https://www.oecd.org/cfe/smes/New-Approaches-SME-full-report.pdf
[16] Schuller, M. (2014), Stimulating SME Equity Financing? Change The Culture, OECD Insights Blog,
3 December 2014; available at http://oecdinsights.org/2014/12/03/stimulating-sme-equity-financingchange-the-culture/
[17] Nassr, I. K., & Wehinger, G. (2016). Opportunities and limitations of public equity markets for SMEs. OECD Journal: Financial Market Trends, 2015(1), 49–84. doi: 10.1787/fmt-2015-5jrs051fvnjk

reporting, investor relations, forecasting, and tax.[18] All these considerations presuppose the existence of specialist IPO advisory services as part of a supporting 'ecosystem' of investment companies and professionals. A further constraint is that SME IPOs on many markets are 'below the radar' for many large institutional investors, i.e. the risk-reward ratio and the costs of research to identify and screen investments in smaller firms may not be justified by the likely returns. At the same time, SME owners can be reluctant to give-up control over their enterprises as an IPO increases the number of shareholders and makes the governance structure more complex. Owners may also want to avoid the requirements related to regular reporting and scrutiny which can not only be costly and time consuming but can also constrain business behaviour and options.

Capital investment in SMEs from external sources such as Venture Capital (VC) and Private Equity (PE) may occur at the pre-IPO stage. Indeed, there are strong links between venture capital and IPOs.[19] Venture capitalists supply SMEs with equity capital and may remain as anchor investors in firms undergoing an IPO.[20] VC and PE may also provide strategic support to SMEs by improving their performance ('money with management'), enhancing 'investment readiness' and their suitability for an IPO.[21] Previous research has also suggested that VC and PE-backed IPO firms are less financially 'distressed' after going public than non-backed firms.[22] VC and PE further adds value to SMEs by, for example, providing coaching and business contacts.[23] VC and PE-backed IPOs can also result in reduced 'Under-Pricing' (UP) following an IPO and a superior long-run performance.[24]

2.3.2 IPO and Post-IPO stages

Whilst most IPOs proceed, some SMEs may start the IPO process but not complete it. Research by Helbing et. al (2019) found that there are several factors influencing the possibility of IPO withdrawals. These include: the extent of VC or PE involvement offering more rewarding options; concerns that the desired fund-raising may not be achieved as investors may withdraw if they are sceptical on whether targets will be achieved; and market conditions and the likelihood of the desired price for the shares being reached.[25] Market sentiment and confidence regarding the firm's reputation may also have a significant effect on an IPO: negative news coverage is more frequent for companies that withdraw their IPO than for successful companies.[26] Moreover, IPO costs, both financial and organisational, and increased public scrutiny are further considerations that can lead to a firm deciding not to go ahead with an IPO.

---

[18] Nassr, I. K., & Wehinger, G. (2016). Opportunities and limitations of public equity markets for SMEs. OECD Journal: Financial Market Trends, 2015(1), 49–84. doi: 10.1787/fmt-2015-5jrs051fvnjk

[19] Nassr, I. K., & Wehinger, G. (2016). Opportunities and limitations of public equity markets for SMEs. OECD Journal: Financial Market Trends, 2015(1), 49–84. doi: 10.1787/fmt-2015-5jrs051fvnjk

[20] Croce, A., Martí, J., & Murtinu, S. (2012). The Impact of Venture Capital on the Productivity Growth of European Entrepreneurial Firms: Screening or Value added Effect? SSRN Electronic Journal. doi: 10.2139/ssrn.1705225

[21] Nassr, I. K., & Wehinger, G. (2016). Opportunities and limitations of public equity markets for SMEs. OECD Journal: Financial Market Trends, 2015(1), 49–84. doi: 10.1787/fmt-2015-5jrs051fvnjk

[22] Megginson, W. L., Meles, A., Sampagnaro, G., & Verdoliva, V. (2016). Financial Distress Risk in Initial Public Offerings: How Much Do Venture Capitalists Matter? SSRN Electronic Journal. doi: 10.2139/ssrn.2723620

[23] Ilyabeylin. (2016, March 29). Financial Distress Risk in Initial Public Offerings: How Much Do Venture Capitalists Matter? Retrieved April 6, 2020, from https://clsbluesky.law.columbia.edu/2016/03/29/financial-distress-risk-in-initial-public-offerings-how-much-do-venture-capitalists-matter/

[24] Bessler, W., & Seim, M. (2012). The performance of venture-backed IPOs in Europe. Venture Capital, 14(4), 215–239. doi: 10.1080/13691066.2012.702447

[25] Helbing, P., Lucey, B. M., & Vigne, S. (2019). Online Appendix: The Determinants of IPO Withdrawal - Evidence from Europe. SSRN Electronic Journal. doi: 10.2139/ssrn.3335810

[26] Helbing, P., Lucey, B. M., & Vigne, S. (2019). Online Appendix: The Determinants of IPO Withdrawal - Evidence from Europe. SSRN Electronic Journal. doi: 10.2139/ssrn.3335810

After a successful IPO, a company becomes subject to various new obligations that stem from being listed on a public stock exchange, and admission and listing costs are often quite significant for SMEs.[27,28] As noted earlier, some estimates suggest that the costs are typically around 10% of the capital that is raised in an IPO of less than EUR 6 million.[29] Listing in junior markets can reduce these costs. However, Vismara et. al (2012) found that the average long-run performance of IPOs on second markets is worse than for IPOs in the main markets, although they provide SMEs with the opportunity to raise funds during the IPO and in follow-on offerings. The relative success of London's AIM but also the MiFID special alleviations for SME growth markets, has led other European stock exchanges to establish similar markets. However, most of the IPOs on these markets are offered exclusively to institutional investors and some have argued that they are in some respects equivalent to private placements. Moreover, these IPOs, which frequently raise only a few million euros, rarely develop liquid trading.[30]

Post-IPO, investors can buy and sell shares in SMEs on secondary markets. At a later stage, the SME may issue additional shares through a further public offering. Indeed, it could be that the IPO itself is used to test the market and that follow-on share issuances are more significant in terms of the capital raised. A key consideration in the post-IPO phase is that as SME shares tend to be illiquid, investors often have less scope to exit their investments.[31] This, in turn, can deter investors from entering the market in the first place. A further challenge to SMEs post-IPO relates to the possibility of scaling up to the point where a listing on one of the main stock markets becomes a realistic prospect.

2.3.3 Different types of stock markets

SME IPOs generally take place on 'junior' stock markets and the extent to which these are developed varies considerably across Europe (this is reflected in the analysis of IPO data presented earlier).

A company may be able to choose between getting listed on either the main stock markets or the junior markets. A **main market** consists of both standard and 'premium' listings, where stocks and other securities are traded, and which require a full prospectus to be submitted to national listing authorities, as well as specific company market capitalisation, float size, financial reporting and management statement requirements.[32] Premium listings, in addition, need to comply with corporate governance codes.

To address the market failure issues outlined above, the European Commission has promoted the development of **junior stock markets** (or second-tier stock markets) for SMEs. The junior stock markets are characterised by simplified listing processes and information standards in comparison to the standards of the main markets mentioned above, which are often less stringent or non-existent for junior markets. Junior markets are also not considered officially regulated markets but are considered 'exchange-regulated' markets instead, where national

---

[27] Nassr, I. K., & Wehinger, G. (2016). Opportunities and limitations of public equity markets for SMEs. OECD Journal: Financial Market Trends, 2015(1), 49–84. doi: 10.1787/fmt-2015-5jrs051fvnjk
[28] European IPO Report 2020. (n.d.). Retrieved April 6, 2020, from https://fese.eu/app/uploads/2020/03/European-IPO-Report-2020.pdf
[29] European IPO Report 2020. (n.d.). Retrieved April 6, 2020, from https://fese.eu/app/uploads/2020/03/European-IPO-Report-2020.pdf
[30] Vismara, Silvio & Paleari, Stefano & Ritter, Jay. (2012). Europe's Second Markets for Small Companies. European Financial Management. 18. 10.2139/ssrn.1957140.
[31] Nassr, I. K., & Wehinger, G. (2016). Opportunities and limitations of public equity markets for SMEs. OECD Journal: Financial Market Trends, 2015(1), 49–84. doi: 10.1787/fmt-2015-5jrs051fvnjk
[32] Flynn, D. (2018). AIM listing vs standard listing on the Main Market: What's the difference?

listing authorities are not required to approve the prospectus for listings offered to institutional investors which do not involve a public offering. Most of the IPOs on these exchange-regulated markets are equivalent to private placements.

In terms of listing activity, the most successful junior market model is the UK's Alternative Investment Market (AIM). The AIM has acted as a model that other stock markets in Europe have used to launch their own junior markets, such as the Alternext (now Euronext Growth). Vismara et. al (2012) found that the average long-run performance of IPOs on second markets is less positive than for IPOs in the main markets, although they do of course provide SMEs with the opportunity to raise funds during the IPO and in follow-on offerings.[33]

The **SME Growth Markets**, which are Multilateral Trading Facilities (MTFs) outside the regulated markets, were created through the MiFID II Regulation. SME Growth Markets is the EU label for junior markets that can receive additional regulatory alleviations if they fulfil certain criteria. Their aim is to facilitate access to capital for SMEs by offering reduced Market Abuse Regulation and Prospectus Regulation compliance requirements for SMEs as defined by Article 4(13) in MiFID II for markets that have applied for that status according to Article 33 of MiFID II. At least half the companies that issue bonds or shares on that market must have a market capitalisation of less than EUR 200 million for the market to qualify as one for SMEs. The aim of SME Growth Markets is thus to cut red-tape for SMEs trying to list and issue securities and to promote the liquidity of publicly listed SME shares. The new MiFID rules introduced a more proportionate approach to support SME listings while at the same time safeguarding investor protection and market integrity. SME Growth Markets that are already operating in Europe are the Euronext and Nasdaq First North exchanges.

With 36 stock markets (represented by the FESE), **Europe's equity markets are quite fragmented**. One factor that has driven this fragmentation is MiFID which has fostered competition between stock exchanges and alternative trading systems by removing the possibility for EU Member States to establish that equities must be traded only on regulated markets (so-called 'concentration rule'). A number of studies have been undertaken that argue that whilst this situation has promoted a degree of competition and improved liquidity, which has benefits for both investors and investees, there are also drawbacks. Evidence from European and US research suggests that the drawbacks include differences in the pricing of the same shares (where they are traded on several exchanges) and other inefficiencies such as reduced transparency and a reduced capacity for accurate price discovery.[34] Furthermore, it is argued that the MiFID framework, by promoting greater choice and lower trading fees, has tended to favour the largest and most liquid stocks, leading to a greater concentration of activities covering blue-chips, whilst adversely shifting investment away from smaller companies.[35] One of the adverse effects of this, it is argued, is that the number of IPOs in Europe has fallen. The Capital Markets Union seeks, amongst other things, to promote more integrated capital markets with investors having fewer barriers to investing in smaller firms and across different markets.

[33] Vismara, Silvio & Paleari, Stefano & Ritter, Jay. (2012). Europe's Second Markets for Small Companies. European Financial Management. 18. 10.2139/ssrn.1957140.

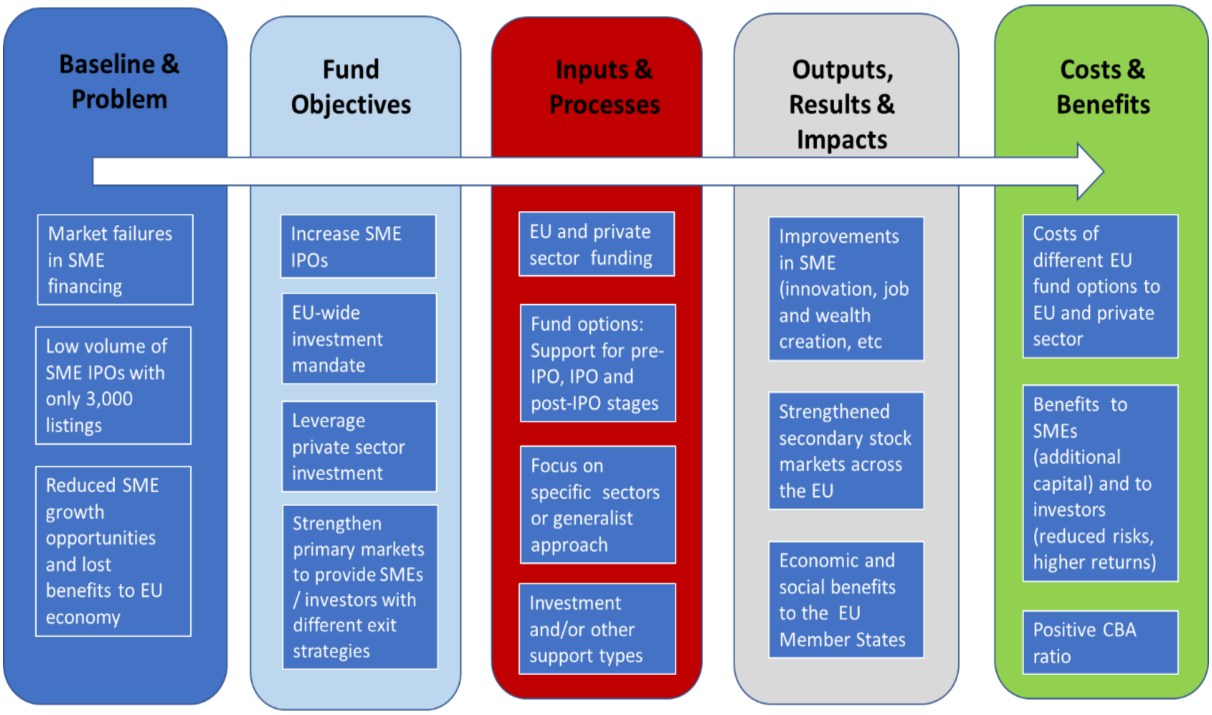
[34] See, for example, an early study that examines market fragmentation: S.F. Fioravanti, M. Gentile 'The impact of market fragmentation on European stock exchanges' (2011). The main findings are that fragmentation increases liquidity, but it reduces market efficiency. A subsequent study highlighted equity market fragmentation within countries with a mixed picture where some primary exchanges were increasing their market share (CAC, FTSE, OMX-S) while the opposite trend applied in others (DAX, SMI, MIB). There was also a mixed picture across different markets for top of book spreads, UK stocks having narrower spreads across all trading venues whereas French and Swedish spreads generally widened (https://www.bestexecution.net/analysis-european-equities-market-fragmentation-2/ (2015).

[35] Federation of European Stock Exchanges, Capital Market Union by 2024 – A Vision for Europe', 2019.

2.3.4 Case for EU Intervention

The purpose of an 'intervention logic' is to provide a framework or reference point for an intervention, i.e. defining why an intervention it needed, what should be achieved and how. The intervention logic can then subsequently be used to monitor and evaluate the extent to which, in practice, the performance of an intervention is in line with objectives. An intervention logic for the proposed EU SME IPO Fund is summarised below.

Figure 2.4: EU SME IPO Fund Intervention Logic



Ultimately, the **justification for EU intervention lies in the existence of market failures that cannot be resolved through action by the private sector and/or national authorities alone, or where EU intervention is likely to significantly enhance the effectiveness of actions taken by other stakeholders.** The existence of market failures in relation to SME financing is well established and documented, and therefore not repeated here. Market failures in relation to the functioning of equity markets and IPOs are examined in Section 3 in assessing the potential role of an EU SME IPO Fund.

An important aspect of the intervention logic for the EU SME IPO Fund is defining the desired outcomes. In addition to helping to ensure that the intervention has a clear strategy, the desired outcomes can provide a basis for defining Key Performance Indicators (KPIs) that can be subsequently used to assess the extent to which goals are being achieved. In relation to the basic case for EU intervention:

- The desired **'output'** can be defined as the additional SME IPOs that take place because of the EU Fund's investment.
- On this basis, the **'result'** would be the SME growth that is brought about by selling shares and raising capital on a stock exchange, and the improvements in their performance.
- The **'impacts'** would be the wider economic and social benefits brought to the European economy.

For this assignment, we have sought to develop various scenarios with regard to 'outputs' (see Section 2.1.3 on costs and benefits), but 'results' and 'impacts' have to be primarily estimated qualitatively. Some more specific KPIs relating to the EU Fund itself are considered in Section 3. The precise way in which the 'outputs', 'results' and 'impacts' are defined will depend on the stage(s) in which the EU fund intervenes, i.e. pre-IPO, IPO or post IPO. Another factor to be considered is whether the EU SME Fund will take the form of a Fund of Funds (FoF), Special Purpose Vehicle (SPV) or other instrument, as this will also influence the definition of outcomes.

2.4 Current Developments and Proposals

It is of course important to take current developments at the EU level into account to help ensure that any new EU intervention adds value.

In its latest report, the **European IPO Task Force** made a number of recommendations to improve conditions for European IPO markets.[36] Some of the recommendations do not relate directly to the idea of establishing an EU Fund and depend on action from Member States or industry rather than the Commission and other EU institutions.[37,38] However, of the 40 main recommendations in the Task Force's 2020 report, four could be implemented with the help of the EU and a further five could help support their implementation indirectly.

While not directly tasks for the new EU IPO Fund, these recommendations (listed in Table 2.7) are important to help create a favourable environment in which an EU SME IPO Fund might operate. The recommendations are in six key areas: (i) improve the IPO ecosystem; (ii) promote investor participation in IPO markets; (iii) create a European equity culture; (iv) improve tax incentives for investment in IPOs and equity; (v) build a regulatory framework that fosters technological innovation and can handle potential regulatory adjustments; and (vi) provide capital market support for the green transition.

Table 2.7: Relevant IPO Taskforce Recommendations

Possible EU Interventions	Supporting Measures
• Launch programmes to cover the costs of SME research coverage. • Further the European Commission's proposal for a private-public fund for IPOs which provides European Commission capital and private funds to companies which could support equity research, provide repayable loans and stimulate secondary market liquidity. • Provide targeted assistance and proportional requirements for smaller markets to reach their full potential (e.g. technical training and assistance to support the implementation of	• Establishing user-friendly platforms for analysts to share their reports on SMEs. • Lower equity capital charges under Solvency II to remove an important bias against equity investment and ensure institutional investors can invest in equity.[39] • Launch public campaigns to support companies' financial education about capital market financing and investment. • Share best practices among Member States to promote equity investments.

[36] European IPO Report 2020: Recommendations to improve conditions for European IPO market (2020).
[37] For example, "End tax discrimination of equity compared to debt and adopt measures to instead favour equity investments" is aimed at Member States
[38] For example, the following recommendation is aimed at industry: 'Encourage better dialogue between European companies and their investors during the IPO process and listing. Using digital means to this effect should be encouraged'.
[39] However, a study for the Commission found that there was no a particular impact from Solvency II on insurers' ability to invest in equity: https://ec.europa.eu/info/publications/191216-insurers-pension-funds-investments-in-equity_en

Possible EU Interventions	Supporting Measures
EU laws at the national level). • Channel retail savings into capital markets and equity investments and support retail investors in making provisions for their retirement savings.	• Conduct a study on tax incentives for SMEs, specifically when they are seeking debt or equity financing.

Source: European IPO Report, 2020

The issue of finding ways to support IPOs by SMEs has received attention at EU level since at least the Commission's key initiative to mobilise and develop deeper and more integrated capital markets through the **Capital Markets Union (CMU) initiative**. In September 2015, the European Commission adopted an action plan setting out a list of over 30 actions and related measures to establish the building blocks for an integrated capital market in the EU by 2019. An important element of this initiative is the mobilisation of capital to channel it to companies, including SMEs, across the whole spectrum of productive activities. With the adoption of a CMU action plan, as highlighted in the subsequent 2017 Mid-Term Review, some progress has been achieved by facilitating access to finance for companies at an early development stage.

The 2015 EU IPO Report **'Rebuilding IPOs in Europe Creating jobs and growth in European capital markets'** put forward a wide range of recommendations under five headings:

- **Create a more flexible regulatory environment for small and mid-cap quoted companies**, also known as "Emerging Growth Companies", including lowering the barriers to entry and the cost of equity capital.
- **Relax constraints that restrict investors' ability to access IPO markets** and to invest in venture capital / private equity.
- **Improve the ecosystem of IPOs and market structures** to better serve companies at different stages of growth and different types of investors.
- **Create an equity culture in Europe**, including through the provision of education and non-legislative initiatives.
- **Improve tax incentives for investment into IPOs** and equity more generally.

While some of the proposals have been implemented, such as those related to Growth markets that help emerging growth companies, they have not yet all been implemented and have been revised and, where relevant, included again in the **European IPO Report published in 2020.**

A new **Prospectus Regulation** has also been introduced which is notably aimed at making it easier for SMEs to access capital markets by lowering administrative burdens and costs and increasing the threshold under which a prospectus is not required. In addition, simplified rules for secondary issuances were introduced as well as specific rules for SME Growth Markets.[40]

[40] REGULATION (EU) 2017/1129 of 14 June 2017 on the prospectus to be published when securities are offered to the public or admitted to trading on a regulated market, and repealing Directive 2003/71/EC.

Following the 2017 Mid Term Review it was decided that additional steps to promote the CMU were needed. In a regulatory initiative from May 2018, new rules were proposed to give SMEs easier and cheaper access to financing through public markets, to help them expand while safeguarding market integrity and investor protection. The aim was to cut red-tape for SMEs trying to list and issue securities on **SME Growth Markets** and to promote the liquidity of publicly listed SME shares.[41] The new rules introduced a more proportionate approach to supporting SME listings while at the same time safeguarding investor protection and market integrity.

In April 2019, the regulation on the promotion of SME growth markets was adopted as an initiative to complete the Capital Markets Union, and this endorsed the above points. The main changes to SME listings rules relate to:

- Adapting current obligations to keep **registers of persons that have access to price-sensitive information** to avoid excessive administrative burden for SMEs, while ensuring that competent authorities can still investigate cases of insider dealing.
- Allowing issuers with at least two years of listing on SME Growth Markets to produce a **lighter prospectus** when transferring to a regulated market.
- Making it **easier for trading venues specialising in bond issuance to register as SME Growth Markets**. This will be done by setting a new definition for debt-only issuers, which would be companies that issue less than EUR 50 million of bonds over a 12-months period.
- Creating a **common set of rules on liquidity contracts for SME Growth Markets** in all Member States, in parallel to national rules. This refers to agreements between issuers and financial co-investors (a bank or an investment firm) for buying and selling shares of and on behalf of the issuer. By so doing, the co-investor enhances the liquidity of the shares.

This initiative encompasses a legislative proposal which brings technical amendments to the Market Abuse Regulation and the Prospectus Regulation, and further technical amendments to delegated acts under the **Markets in Financial Instruments Directive** (MiFID II). The proposed amendments should boost companies' listing on SME Growth Markets in a way that preserves the core EU rules established to restore confidence in financial markets after the financial crisis.

Under the **Political Guidelines** for the new European Commission (2019-24) it was indicated that the aim will be to complete the Capital Markets Union to ensure SMEs have access to the financing they need to grow, innovate and scale up. An element of this is the creation of a private-public fund specialising in SME IPOs and addressing their market failures with an initial EU investment, which would then leverage additional private investment.

Since the 2019 Political Guidelines were published, a number of proposals have been published with regard to the EU IPO Fund. Thus, the **FESE** suggests that the creation of an EU IPO fund could potentially be a game changer for European equity markets. It argues that the composition of the proposed EU IPO fund should be dedicated to professional fund managers that are involved in a company's pre-, post-and IPO stages. The fund should operate for a period of 3-5 years with a view to give companies 12-18 months of additional maturity before listing. This would favour specialised and active cornerstone investors at IPO who would be incentivised to commit with a longer lock-up period.

[41] A new category of multilateral trading facility created by the *Markets in financial instruments directive* (MiFID II) as of January 2018.

The FESE argues that it would be important that the set-up of the fund is adapted to work in different markets as the local dimension (especially for smaller markets) is essential to cater for the specific needs of SMEs. Moreover, regional exchanges across Europe host a larger share of IPOs for smaller companies as these companies are likely to be local and seek investors more familiar with their business. It sees the EU IPO Fund operating like a crossover fund that can be used in order to bridge the gap between private and public equity to smoothen the company's transition from one to another. A key advantage of crossover funds is, according to the FESE, that they offer SMEs the possibility to expand their shareholder base prior to the IPO, allowing them to include traditional institutional public company investors.[42]

The **Borsa Italiana** AIM Italia has proposed the establishment of an EU 'Fund of Funds' in order to foster the creation of a 'community of investors dedicated to small caps. This is seen as being involving both existing and new equity funds in Italy. Such proposal has been tested with the local asset management industry and SMEs advisory and brokerage community to assess the feasibility and define the technical structure. The 'Fund of Funds' model proved to work in Italy to sustain private equity, private debt and venture capital (Fondo Italiano di Investimento). Borsa Italiana argues this could be easily be applied to public equity as well, in order to attract long term asset owners. The purpose of the 'Fund of Fund' would be to invest in investment vehicles that specialize in SMEs (mainly micro-small caps quoted on regulated markets or growth markets). The master fund would provide seed investment backed up by public resources as well as the private sector (e.g. pension funds, banks and insurance and other institutional investors) in a number (20-40) of investment vehicles. It is argued that key objectives could be met starting with a 'Fund-of-Fund' with EUR 1-2bn. Both the master fund and the sub-funds could be listed on a regulated market.[43]

In Sweden, **Nasdaq** together with representatives of other listing venues (Spotlight Stock Market, Nasdaq First North Growth Market and NGM MTF) prepared a proposal in May 2020 focusing on SMEs that are already listed or about to be listed. It is argued that for unlisted companies, Almi Företagspartner and Almi Invest already have functioning structures and are experts in this type of investment. Almi Invest, a Swedish Government-supported VC fund has received SEK 3bn in capital to lend to Sweden's SMEs as part of measures to combat the effects of COVID-19. The paper argues that Almi Invest should invest in the shares of listed SME companies via its regional companies and possibly a new national Almi fund, providing up to SEK 10 million per company and per investment opportunity, matched by at least 50% from private investors. It is envisaged that there will an exit from IPOs within 12-24 months in a large proportion of cases. A condition is that the principal owners and the management of listed companies financed through this initiative should agree to lock-up agreements and should hold at least 90% of their shares for 12 months.[44]

In the UK, convertible debt is advocated as a way of helping SMEs to survive the COVID-19 crisis. This would be a short-term debt that converts to equity at the next funding round. Investors loan money to the business, with the convertible notes either subsequently being redeemed (for a profit) at the end of the pandemic by start-up owners and shareholders or converted into discounted shares when the start-ups undergo their next round of financing. The proposal is for the creation of a GBP 300m **UK 'Runway Fund'** that would provide convertible loan notes with discounts of up to GBP 500,000 to start-ups for at least nine more months of operations before then converting into equity at the next round. It I envisaged that this fund could invest initially in around 600 start-ups. For companies further along the funding

---

[42] FESE, FESE position on the use of private-public funds for the IPOs of EU SMEs, 9 June 2019.
[43] Borsa Italiana: Fund of Funds: A proposal for the Italian Market (2020)
[44] Nasdaq Ideas IPO Fund Structure, May 2020

path the British Venture Capital Association have proposed that the Government finances a GBP 500m bridge funding facility for early stage companies supplemented by GBP 125m from the private sector to provide up to GBP 5m per company in the form of a convertible loan in the digital, biotech and life science sectors.[45]

2.5 InvestEU and Existing EU Equity Instruments

It is envisaged that the new EU SME IPO Fund will be supported by InvestEU. Below we briefly outline the key features of InvestEU and highlight aspects of that are of particular relevance to the proposed EU Fund. We then consider existing EU equity instruments as it is clearly important that the Fund build on these and adds value to them.

2.5.1 Invest EU

InvestEU builds on the European Fund for Strategic Investments (EFSI) by providing an EU budget guarantee to support investment and access to finance across EU Member States in the period 2021-27. The **InvestEU Fund** will support various EU priorities including the promotion of SMEs.[46] It is envisaged that the InvestEU Fund will be market-based and demand-driven, i.e. it is meant to target economically viable projects in areas where there are market failures or investment gaps.[47]

The InvestEU Fund will mobilise public and private investment through an EU budget guarantee. Following the European Council meeting in July 2020, the budget allocation for the InvestEU programme was curtailed to EUR 9.1 bn (of which EUR 6.1 bn is allocated to Next Generation EU and EUR 3.1 bn under the MFF). The level of the guarantee capacity of InvestEU and the target for mobilised investments still have to be agreed.

The InvestEU Fund will be implemented through **financial partners** that will invest in projects using the EU guarantee. The main partner will be the EIB Group (which has implemented and managed the EFSI). In addition to the EIB Group, international financial institutions such as the European Bank for Reconstruction and Developments (EBRD), the Council of Europe Development Bank (CEB) and National Promotional Banks (NPBs) will also have direct access to the EU guarantee. The InvestEU Fund will also feature a Member State 'compartment' for each policy area that enables national authorities to add to the EU Guarantee's provisioning by voluntarily channelling some of their Cohesion Policy funds to these compartments.

The **EIB Group** will remain the Commission's main Implementing Partner under InvestEU and implement 75% of the EU guarantee. For the remaining 25%, the institutions with direct access to the EU Guarantee can also become Implementing Partners. The possibility of other Implementing Partners being approved exists if they satisfy a 'Pillar Assessment'.[48]

State aid issues could arise if national sources of finance (e.g. from the NPIs) are used alongside EU funding to support the EU SME IPO Fund. In June 2018, the Commission proposed an amendment to one of the Council Regulations governing EU State aid control which was subsequently adopted by the Council. This revised enabling regulation allows the

[45] Colin Mason, European Commission, Joint Research Centre, 'The Coronavirus economic crisis: its impact on venture capital and high growth enterprises, April 2020.
[46] According to the Regulation (p.29), although the SME policy window should primarily focus on benefitting SMEs, small mid-cap companies should also be eligible under the SME Window. Mid-cap companies should also be eligible for support under the other four policy windows.
[47] European Commission, Proposal for a Regulation of the European Parliament and of the Council establishing the InvestEU Programme (COM (2020) 403 final), 29 May 2020. The original version of the proposed Regulation was published in May 2018. This is still only a Commission proposal which at the time when this report was prepared was going through the legislative process and may hence be subject to changes. In addition to the InvestEU Fund, there are two other components - the InvestEU Advisory Hub and the InvestEU Portal.
[48] https://ec.europa.eu/commission/presscorner/detail/en/MEMO_19_2135

Commission, subject to certain conditions, to exempt Member State funding channelled through the InvestEU Fund or supported by the InvestEU Fund from the requirement to notify such interventions to the Commission prior to their implementation.

2.5.2 Existing EU Equity Instruments

It is important to understand how the proposed EU SME IPO Fund would fit into the wider picture with regard to EU equity instruments. In recent years, the EU has made an extensive use of equity instruments to help promote SMEs' access to different types of finance and there is now a quite long history of initiatives in this field.

Recent or current initiatives include equity financing schemes as part of **Horizon 2020.**[49] These provide access to risk finance for early-stage R&I-driven SMEs and small mid-caps by supporting multi-stage risk capital funds that invest mainly on a cross-border basis in individual enterprises. The type of financial intermediaries that are supported include Venture Capital funds, Business Angel funds, technology transfer funds and fund-of-funds (for InnovFin Fund-of-Funds). Another EU programme that has contributed to the development of equity finance for SMEs is **COSME**, which aims to make it easier for SMEs to access finance in all phases of their lifecycle. COSME supports the 'Equity Facility for Growth (EFG)' which is a window of the Single EU Equity Financial Instrument. Through the EFG, the EIF invests in selected funds – acting as EIF's financial intermediaries – that provide Venture Capital and mezzanine finance to SMEs. The **European Fund for Strategic Investments** (EFSI) Equity Instrument is also an important source of risk capital for SMEs. Another scheme is the **VentureEU fund-of-funds** which provides support for the development of venture capital finance. We review this scheme in Section 4 of the report, but the fund-of-funds was launched in 2018 with the aim of mobilising the support of private sector financial institutions.

The EIB Group, and specifically **the European Investment Fund (EIF),** is the EU's main equity financing mandatee. The EIB Group operates on the basis of mandates that are given to it to implement particular initiatives.[50] The main mandate form is the so-called Investment Mandates, which entail the EIB Group investing third-party funds or its own funds in a risk-sharing or blending regime. Mandates have investment guidelines which can be modified and updated, given that they can have a long life (more than 15 years for some mandates). There are three main types of mandates that the EIF operates – EU mandates that are granted by the European Commission, regional mandates usually covering a specific country (the average size is around EUR 10-50 million), National Promotional Institutions (NPI) mandates which the EIF signs with NPBs (average size is around EUR 50-90 million) and EIB mandates. The **EIB's Risk Capital Resources (RCR) mandate** is one of the EIF's main equity instruments and supports its venture capital and growth segments strategies. The RCR supports technology and innovation SMEs by investing in specialist funds targeting early to small mid-cap firms, through the provision of equity as well as hybrid debt/equity financing.[51] These investments are restricted to closed end vehicles with a maximum duration of 15-20 years. EIF investments in venture capital funds are made on a 'pari passu' basis with private investors, which should contribute up to 50% of capital for the funds.

Examples of EIF investments include the Croatian Growth Investment Programme (CROGIP) which is a EUR 70 million equity investment programme launched in January 2019. The funding is being invested alongside private investors and will support Croatian SMEs, small midcaps and midcaps' access to growth equity capital. To take another example, the Dutch

[49] InnovFin Equity which also encompasses InnovFin Technology Transfer, InnovFin Business Angels, and InnovFin Fund-of-Funds.

[50] Mandate are defined as a "formalised cooperation entered into by the EIB with external partners for the purpose of achieving shared objectives and which are based on financial support pledged by a third party."

[51] Under the RCR, most of the capital comes from the EIB, the EIF also provides its own funds as well as receiving EFSI funds to reach EUR 9.5 billion in total.

Growth Co-Investment Programme, launched in 2017, is a EUR 100 million equity co-investment scheme developed by EIF and the Netherlands Investment Agency (NIA) and managed by EIF, to be invested alongside existing equity funds and other private investors with the objective of leveraging at least another EUR 100 million into target companies. These and other EIF-supported schemes are relevant to the proposed EU IPO Fund and examined in more detail in Section 4 of this report.

2.6 Conclusions – Problem Definition and Intervention Logic

The number of SME IPOs on EU-28 stock exchanges increased in the years following the financial crisis but there has been a downward trend after 2014. During the 2013-19 period there were on average 164 SME IPOs per year on EU28 exchanges, 80 of which were conducted on average each year in London. SMEs raised EUR 29.9bn through IPOs which means an average EUR 26.2m per IPO for the 2013-19 period. These averages fluctuated only slightly, from EUR 19.3m per SME IPO in 2016 to EUR 31.0m per SME IPO in 2018. Our analysis of past SME IPO trends distinguishes between EU-27 and London Stock Exchange activity because the proposed EU Fund will operate in EU-27 markets, but it is nevertheless helpful to gain a comprehensive overview of the situation before 2019 across all European markets.

There is already a lot of research on the factors influencing the extent to which IPOs are used by SMEs to raise growth finance and so this section has been limited to providing a summary. The factors include regulations and developments in the business environment, together with market failures on both the IPO 'demand' and 'supply' sides. As we argue in Section 3, the severity of the various market failures varies in terms of the IPO stage (pre-IPO, IPO, post-IPO) and across different EU Member States depending on how well developed an 'equity culture' is, and the extent to which stock exchanges and the supporting 'ecosystems' have developed and matured. The intervention logic for the proposed EU Fund set out in Section 2.3 is pitched at the EU level but, as we explain in Section 3, the EU Fund's role will need to be adapted to the specific circumstances and priorities in different markets.

Section 2.4 highlights the various developments that are relevant to the proposed EU Fund including several suggestions on possible priorities. It is clearly important that proposals regarding the EU Fund take into account existing thinking and that the possible interventions complement and added value to other initiatives.

3 Definition of EU Fund Options

In this section we define the EU SME IPO Fund options and features. The section is structured around the key issues from the Commission's terms of reference:

Box 3.1: Overview of Section 3 – Definition of Fund Options

- **Section 3.1: Role of the EU Fund** – drawing on the feedback from the interviews and other research, this section examines the possible role of the EU Fund in relation to the various stages of the IPO process and the SME target group.
- **Section 3.2: Fund Structure and Governance** – here we define the three main EU Fund options in terms of its legal form and structure (i.e. intermediated equity investment, fund-of-funds and special purpose vehicle), explaining in each case the main advantages and any drawbacks.
- **Section 3.3: Geographical Scope** – this section examines the merits of either focusing the EU Fund's interventions broadly across different Member States with varying degrees of emphasis on the pre-IPO, IPO and post-IPO stages depending on market conditions, or a more concentrated approach aimed at leveraging existing IPO markets that are already well developed.
- **Section 3.4: Private and Public Sector Engagement** – considers the extent of interest from banks, pension funds and asset managers in investing alongside the EU in the proposed fund, and the critical issues from their point of view. In this section we also consider the scope for leveraging retail investment, at least as a longer-term aspiration.
- **Section 3.5: Size of the Fund and Cost Benefit Assessment** – here we develop various scenarios with regard to the EU budgetary resources to be invested in the proposed SME IPO Fund, private sector participation and the IPO outcomes that could be envisaged. Based on these cost models we then examine the likely benefits to investors and the wider European economy.
- **Section 3.6: Investment Guidelines and Scoreboard** – examines issues that will need to be considered in defining the EU Fund's investment objectives and the scoreboard criteria for investment.
- **Section 3.7: Strengthening the Wider SME IPO Ecosystem** – summarises some of the key measures that should be taken to create a more supportive environment for SME IPOs but which the EU SME IPO Fund itself cannot directly address.
- **Section 3.8: Macroeconomic Context and the EU Fund's Operations** – in the final sub-section we consider the economic environment, in particular the effect of the COVID-19 pandemic on the launch and operations of the EU Fund.

At the end of this section we provide a tabular summary of the different aspects of the proposed EU Fund set out in this section, comparing the three main fund options against each other.

3.1 Role of the EU Fund

Box 3.2: Key Points – Role of the EU Fund

- *An EU Fund could help address market failures and the equity gap that have led to relatively low levels of SME IPOs in Europe.*
- *In terms of the IPO process, the research presented in this study suggests that the focus of the Fund's investment activities should be on all the phases of listing process (pre-IPO, IPO and post-IPO). This would mean that the EU Fund operates as a 'crossover' fund.*
- *The EU Fund's target group should be SMEs and smaller mid-caps with up to 500 employees and larger mid-caps with up to 3,000 employees if the firms concerned are innovative.*
- *The EU Fund should invest in IPOs for SMEs that are seeking raising growth capital, have progressed beyond the early stages in their development, that have a stable business model with products and services that are selling well, and that have the potential for sustainable growth in the future.*
- *The EU Fund should have a 'generalist' focus rather than targeting SMEs in specific sectors. There could be several post-COVID-19 cross-sectoral priorities (e.g. digitalisation, green economy).*

3.1.1 Role of the Fund in addressing market failures and the equity gap

As explained in Section 2, financial institutions are often reluctant to invest in SMEs because of the risks and uncertain returns. For these and other reasons, institutional investors adopt thresholds (usually defined in terms of market capitalisation) that restrict investment to firms above a certain size.

Specifically, in relation to IPOs, there are both **demand and supply-sides market failures** that have resulted in quite low volumes in recent years. These market failures are examined in Sections 2.2 and 2.3 but to summarise: on the demand-side, SMEs can be reluctant to undertake an IPO because of the costs involved, the loss of control over the business, and the higher regulatory scrutiny; on the supply-side, SME IPOs are 'below the radar' for the major international financial institutions while local markets often lack firms specialising in SME and small mid-cap equity investment. Taken together, the low liquidity volumes generated by the thinness of many IPO markets causes excessive price volatility and greater uncertainty regarding the possibility of exiting, thereby deterring investors. There are of course variations across Europe in the extent of the IPO market failures with these being less pronounced in, for example, Scandinavia and more pronounced in southern Europe.

As one asset manager who we interviewed for this study pointed out, there are deep-seated **differences between Europe and the US** where there has historically been a much stronger 'equity culture' and a far higher degree of interaction between SMEs and financial institutions. This is reflected in the level of turnover in portfolios (the duration of US mutual funds investment in IPOs averages three months compared with two-and-a-half years in the EU), which means that there is a lower level of investing and disinvesting in Europe. One of the investment bank interviewees went so far as to describe SME IPOs as a 'failing asset class' with many financial institutions finding that it is not worth their while to focus on this market segment. As noted in Section 2, institutional investors have thresholds below which it is not regarded as cost-effective to carry out the research needed to identify and screen investment opportunities (MiFID II is seen by many as contributing to this problem). Likewise, the risks and uncertain returns are not seen as justifying the investment monitoring costs and risks of investing in SME IPOs.

Against this background, the consensus amongst those we have consulted is that **an EU SME IPO Fund could help mitigate these issues by addressing the 'equity gap' between the early SME growth phase and the later growth phase**, i.e. what interviewees referred to as the funding gap between the EUR 5 to 15 million size investment tranches, where the funding required is higher than the amounts typically provided by Venture Capital companies but below the thresholds for Private Equity and/or investment bank support. Support for the creation of an SME IPO Fund was confirmed by several surveys that were launched by EU-level federations on our behalf as part of the Phase 3 market testing exercise, with some three-quarters of respondents answering yes to the question: **'In your view, is there a need for EU intervention to help increase the use of IPOs as a way for SMEs to raise growth capital?'**

3.1.2 Role of the Fund in the IPO process

In terms of the IPO process, key stakeholders agreed that the focus of the EU Fund's investment activities should ideally be on **all the phases of the listing process (pre-IPO, IPO and post-IPO).** However, the emphasis on the different stages of the IPO process could vary across different EU Member States depending on local market characteristics (see Section 3.3).

Pre-IPO stage

Investing in **the pre-IPO stage is important in laying the basis for successful IPOs in the future**. As argued in Section 2, the pre-IPO phase is crucial given that it is the phase where an SME starts considering an IPO, develops the governance and reporting capabilities needed to operate in public markets, identifies potential IPO investors and starts the process of going public.

The EU Fund's intervention at this stage could involve purchasing shares (via SME equity funds or FoF sub-funds depending on which Fund option is selected) in selected SMEs 6-12 months before the planned IPO via a private placement to give SMEs confidence in going public and to encourage investment from other sources. To maximise the added value of EU intervention, it will be important for the EU Fund to focus on investing in SMEs where intervention can make a significant difference to the prospects of an IPO going ahead. This would mean not investing in SMEs that have already planned to go public and have the potential to achieve a successful IPO because of private investor interest, at the one end of the scale, and avoiding investments in firms that could not float without EU support because private sector investors are not willing to invest in the IPO. Between these two extremes, there are SMEs that should be supported and that have the potential for a successful IPO, but which have not succeeded in attracting (enough) private sector interest to do so. In this situation EU intervention could add value by having a catalytic effect, i.e. giving credibility to an IPO and giving other investors the confidence to support it, or by topping up private sector investment where exposure limits have been reached on a particular IPO.

If an equity stake is taken by the EU Fund during the pre-IPO phase (or in the IPO itself), then the **general view is that the EU IP should only take a minority stake**, perhaps equivalent to around 10-25% of a firm's share capital. This would also be consistent with the InvestEU window and limits on exposure to SMEs. In this respect, the interventions of an EU IPO fund would differ from those of Private Equity investors who generally take a majority stake in the companies that they invest in, which is one reason why SME owners can be reluctant to rely on this type of financing in the IPO process.

According to several stakeholders we consulted, the use of convertible loans (i.e. loans that are subsequently converted into equity shares) could be another way of financing SMEs in the run-up to a flotation. This would avoid the need for the SME owner to relinquish any control over their businesses, at least through the sale of shares during the pre-IPO period. This approach also has advantages for investors, especially in the cases where a conversion would be possible on a discounted share price. A conversion could take place at any stage, on case-by-case basis, up to and including the IPO. It is possible that the EU Fund could offer convertible loans as an option. Several examples of schemes offering convertible loans are provided in Section 4. However, it will need to be clarified whether convertible loans could be offered via InvestEU.

The Phase 3 market testing exercise for this study confirmed the **importance of the EU Fund being active at the pre-IPO stage as this phase is critical in determining the likelihood of a successful IPO**. Indeed, around half the Phase 3 interviewees stressed that it is in many ways the most important phase in the IPO process. Moreover, according to some of the interviewees, including a large investment bank, a pre-IPO intervention just six months or less before an IPO might be too late to have any real benefit and an EU investment vehicle should consider investing in SMEs even earlier, preferably at least 12 months before an IPO. The importance of the pre-IPO phase was further confirmed by the surveys that were undertaken as part of the Phase 3 market testing, where it was judged as being 'very important' by most respondents. This view was confirmed overall by the different respondent categories we surveyed, which included retail investors (EU investors), European banks (EBF), the financial markets (AFME), asset managers (BVI), and finance professionals (CFA). A more detailed breakdown of the survey results can be seen in the table below:

Table 3.1: Survey Results for Question 1 on the importance of each phase of the IPO process

Phase	Most Important	Important	Least Important	Total
Pre-IPO	27 (48%)	14 (25%)	15 (27%)	56 (100%)
IPO	10 (18%)	21 (38%)	25 (44%)	56 (100%)
Post-IPO	12 (22%)	21 (38%)	22 (40%)	55 (100%)

Note: Survey results for 62 Respondents

Examples of the responses from the interviews and survey highlighting the importance of an EU Fund intervening in the pre-IPO phase, as well as other comments, can be read in the following box:

Box 3.3: Market Testing Feedback – Pre-IPO Phase

- 'The right approach would be to support growth companies across all phases, including the pre-IPO phase. Investing in SMEs 6 months ahead of an IPO is too short, there needs to be more flexibility, including investing more than 12 months pre-IPO.' **– Investment Bank's interview feedback**
- 'In the case of Poland, a focused intervention at the pre-IPO level would be crucial in stimulating the wider capital market ecosystem and promoting more IPOs.' **– Strategic Fund-of-funds' interview feedback**
- 'Intervention at the pre-IPO level is crucial. There should not be a separation between listed and non-listed companies in terms of focus.' **– Fintech Platform's feedback during focus group**
- 'There should be an emphasis in supporting companies in the pre-IPO stages, by

supporting late venture capital funds as opposed to private equity capital, as these provide more support to pre-IPO SMEs.' **– Stock Exchange Representative's feedback during focus group**

- 'The pre-IPO support was listed as least important, given that companies in the pre-IPO level need to become specialised and attract renowned investors onboard. If they cannot manage to convince a few crossover investors they will not be able to convince public investors.' **– European Investors survey respondent's feedback**

IPO and post-IPO stages

At the IPO stage, the EU fund would participate in the **purchase of shares (via SME equity funds/FoF sub-funds, depending on the Fund option) in selected SMEs**. These share purchases could involve the same SMEs that were supported during the pre-IPO stage. In these cases, the stakes acquired by the EU Fund and other investors at the pre-IPO stage (convertible debt or equity) would be converted into publicly-listed shares as a way of providing continuing 'anchor' investment in selected SMEs beyond the IPO itself. However, in some if not most cases, shares could be purchased in SMEs that have not been invested in during the pre-IPO period.

In some circumstances, it could be that the decision is taken to **use the IPO as a way of exiting from a pre-IPO investment**. The EU Fund might wish to do this if, for example, it is clear that an IPO is going to be over-subscribed and other investors may wish to exit as a way of realising profits from their pre-IPO investment in an IPO. Assuming that in these cases, the IPO nevertheless goes ahead successfully with new investors buying shares, exiting via an IPO would not be inconsistent with the EU policy aim of promoting IPOs as a way for SMEs to raise growth capital. The EU Fund would, in effect, have helped to create confidence in the market for an SME's shares. Assuming, however, that there is no exit at the IPO stage, many stakeholders we consulted argue that the **EU Fund should play a continuing role of an 'anchor investor' after the IPO**. Their argument is that the EU IPO fund should ideally remain invested in selected SMEs (through the funds it invests in) for 3-5 years with other investors being asked to agree to a 12-18-month **'lock-up' arrangement** before they consider selling their shares. One reason for doing this is to help stabilise the share price. Another reason for doing this, as argued in Section 2, is that follow-on investments in the shares of selected SMEs (particularly where IPO is for relatively limited capital raising) through secondary issuances can be more important than the IPO itself in terms of the investment raised. The role of 'anchor investor' would therefore be replicated for secondary issuances to help raise further growth capital.

Whilst a focus on pre-IPOs is likely to be a priority in some countries, in others with relatively well-developed stock markets, the EU Fund could place more emphasis on helping to promote IPOs and secondary issuances. This means that while in some cases or markets, the EU Fund might support equity funds to finance SMEs throughout the pre-IPO, IPO and post-IPO stages, in other cases it may back funds investing specifically in later IPO stages.

The Phase 3 market testing exercise confirmed that while an EU Fund should intervene at the pre-IPO stage and this should be the priority, a continuing involvement as an 'anchor investor' in the IPO and post-IPO stages in a company's floatation process is highly desirable. The **importance of both these phases was recognised by a significant portion of the respondents to the surveys that were undertaken during Phase 3** (see Table 3.1) with the IPO and post-IPO phases being respectively considered 'most important' or 'important' by well over half of the respondents. There were no significant variations between different respondent groups. Examples of the feedback from our interviews and surveys on the need for an EU Fund to intervene at the IPO and post-IPO stages, both supportive and sceptical, are highlighted in the following box:

Box 3.4: Market Testing Feedback – IPO and Post-IPO Phases

- 'There is scepticism over the need for an EU Fund and a fear that it could take liquidity out of the stock market, concentrating the share registers and allowing a few Private Equity funds to play a dominant role.' **– Small Issuers Committee Member's feedback during focus group**
- 'There is a risk of investing in SME IPOs that do not need public support.' **– Fintech Platform's feedback during focus group**
- 'The EU IPO Fund should help invest in existing quoted companies.' **– Investment Bank's interview feedback**
- 'An EU's fund focus on the IPO stages might be misguided, there shouldn't necessarily be a need to encourage firms to IPO.' **– International Financial Institution's interview feedback**
- 'The biggest hurdle is the IPO itself, so support in the flotation is the most important one. Post-IPO support can also be very important, especially for companies that have a lower market cap/liquidity.' **– European Investors survey respondent's feedback**

3.1.3 Type of investment and role of private equity

The EU Fund's role described above means that it would operate as a **'crossover' fund**, i.e. the Fund, operating through equity funds, would take an interest in a company at various stages before, during, and after an IPO. In a purely commercial setting, the crossover investor's strategy is to buy at different stages of the life cycle to maximise returns.[52] This aspect could also apply to some of the equity funds the EU Fund invests in, which would be investing in SMEs at different stages of the IPO process to minimise the detrimental effects of market failures.

Crossover funds have been used in the US for some time and are starting to emerge in Europe with some sector-specific funds.[53] Existing research points to a number of benefits of a crossover approach. Thus, in addition to the investor perspective, crossover financings can benefit companies seeking to become public by expanding their shareholder base prior to the IPO to include institutional public company shareholders. These shareholders are often buyers in the subsequent IPO, and having them already in the company shareholder base allows the company to significantly increase the likelihood that these investors will purchase a meaningful portion of the IPO, providing a strong base to the deal and momentum for the roadshow. Additionally, having recognisable public company investors, who have conducted

[52] By investing in a company prior to its IPO, crossover investors obtain a stake in the company at what is expected to be a lower valuation than the IPO price (benefiting from a private company liquidity discount), place themselves in a better position to receive their desired allocations in the IPO and have an opportunity to conduct diligence, understand the company's science and get to know management at an in-depth level that is not possible in the IPO roadshow process. One of the risks crossover investors take on in participating in crossover rounds is that they will not have immediate liquidity for their shares like they do when investing in already public companies, and so they have a strong interest in making sure the IPO occurs on a relatively short timeline

[53] Crossover funds are operated by US firms such as Tiger Global Management, Goldman Sachs, Silicon Valley Bank, Wellington Management and Fidelity Investments. European financial institutions that also have crossover funds include Bpifrance, Octopus and the Scottish Investment Bank.

due diligence and decided to invest in the private company, is often viewed by other potential investors as a form of validation of the company and its offering, further increasing the chances for a successful IPO.[54] The EU Fund, through the IP, might only invest in funds and not directly in SME IPOs but the same considerations apply if this leads to crossover investments in SMEs.

Under two of the three main EU Fund options (Options A and C), the EU Fund would invest in Private Equity funds ('sub-funds') and similar investment vehicles in SMEs at the pre-IPO and IPO stages (under Option B, the Fund might co-invest in IPOs via the sub-funds with other investors, e.g. banks). Should the EU Fund invest in SME equity funds, many of those we consulted argue that it should seek-out SME crossover funds. However, they also acknowledged that there are few, if any, funds of this type operating in their countries. The extent to which Private Equity funds operate on a crossover basis is not clear but there are certainly several examples of some that do.

Box 3.5: Examples of Crossover Funds

The **Sofinnova Crossover Fund 1** in France is the largest healthcare crossover fund focused on Europe. Launched in 2018, the Fund has EUR 330 million of capital for late stage investment in the biopharmaceutical and medical device sectors. As a lead or cornerstone investor, the fund is seeking to invest in about 15 late stage private and public companies before their IPO and remains invested afterwards. In addition to Bpifrance, one of the most active crossover investors in the world, the Sofinnova Crossover 1 has attracted a range of international investors, predominantly sovereign funds, insurance companies, corporations and family offices. Commitments came from Europe, including France, Italy, Denmark, Ireland, and Switzerland but also from Asian investors in China and Singapore.[55]

Another example is the **Business Growth Fund (BGF)** was set up in the UK in 2011 following the financial crisis and provides equity financing to SMEs. The BGF operates as an investment company rather than a fund, acting as a long-term investor. The BGF is a major investor (via 'BGF Quoted') in the UK's Alternative Investment Market and one of the largest PE investors in Europe. It has a capacity of GBP 2.5bn and is designed to address the GBP 2m to GBP 10m equity financing gap where bank loans are no longer suitable for SMEs. Investment is made in three stages: (i) 'BGF Growth', which involves investments in the GBP 2m to GBP 10m range in return for a minority stake of 10-40% of the business; (ii) 'BGF Ventures' involving early-stage investments of up to GBP 5m; and (iii) 'BGF Quoted' under which BGF invests in SMEs listed on London's Alternative Investment Market (AIM) that seek funding for growth. In addition to these three packages, the BGF provides follow-on funding of up to GBP 30m for SMEs it has previously invested in.

According to an FESE assessment, there are several crossover funds active in the **Nordic markets**. In **Germany**, however, there are no crossover funds but measures currently being

[54] See for example 'Legal Considerations in Pre-IPO Crossover Financings', Lia DerMarderosian and Ryan Mitteness, Bloomberg Law, 2017.

[55] It is not clear whether there have been any exits from this particular fund yet but examples of others include Calliditas Therapeutics AB which was due to be floated on the Nasdaq Global Select Market in June 2020 with a number of shares being offered via an IPO to investors in the US (the 'global offering') and a smaller number being sold via a private placement to investors in Europe. Taken together, the IPO was expected to generate proceeds of USD 90m. It I envisaged that the proceeds will be used by Calliditas to fund ongoing clinical trial and related trials of Nefecon, pre-commercialisation and, if approved, commercialisation activities for Nefecon and development of additional product candidates. Another investment, in an AstraZeneca spin-off called Covidia, is being disposed of via a trade sale.

implemented there to fight the COVID-19 pandemic, including the 'Wirtschaftstabilisierungsfond', are expected to have some crossover fund characteristics as they will be allowed to invest in both private and public companies. In the **Netherlands**, to encourage investors to become active in the SME IPO market segment, there are ongoing discussions about the creation of an 'Alternative Investment Fund' to support the listing of local SMEs. This fund would allow domestic institutional investors to invest in small and mid-cap companies pre-IPO and then participate as cornerstone investors post-IPO. In **Spain**, although no crossover fund exists, the private-equity fund Capital MAB FCR had similar characteristics as it invested in pre-IPOs and/or IPOs of Catalan companies going public. There is an ongoing discussion between private equity managers and national or regional development financial institutions which could be a first step to the creation of crossover funds.

More generally, other research suggests that **Private Equity funds play a significant role in the IPO process**, at least in the UK.[56] Here, the IPO market has been dominated by private equity-led IPOs in recent years. According to the BVCA/PwC research, this trend peaked in 2014 when 32 PE IPO issuers raised a total of GBP 9.5bn on the London Stock Exchange. In 2019, more than half of all the IPOs in London involved private equity-backed companies with 53% of the proceeds raised from new flotations involving private equity-backed companies, compared with a global average of 29%. In addition, **private equity-backed IPOs** generally perform well in terms of the share price. The BVCA/PwC analysis of UK SME IPOs led by private equity fund in the 2009-17 period showed that they were trading on average 44% higher than their offer price for the period from IPO to 31 December 2017 compared to the non-private equity-backed IPOs of the same period which were trading at an average of 26% higher. A closer look at the statistics shows that while non-private equity IPOs outperformed private equity IPOs in the short term with their aftermarket performance compared to offer price, after 1-2 years, private equity IPOs outperformed the non-private equity IPOs.[57]

There is also evidence from the same study that **some Private Equity funds operate as crossover funds**, at least in relation to some of their investments, by remaining invested in firms after IPOs take place. Some examples of these crossover funds are operated by Sofinnova (see earlier box) and these have received financial backing from the French national promotional bank, BpiFrance. Sofinnova funds have a diversified portfolio of companies that they invest in. Some of the companies are private and others are listed. The investee companies that are not listed may still decide to conduct an IPO at some point, and some of the private investors can also decide to remain invested post-IPO. More generally, according to the PwC analysis, 99% of the Private Equity-supported IPOs in the UK during the period 2009-17 involved a **'lock-up' period** which in the vast majority of cases was for a period of at least 180 days (in 21% of cases the lock-up period exceeded one year). Reflecting this, the Further Offers for private equity-backed IPOs were more likely to happen between 180-360

[56] British Private Equity and Venture Capital Association and PwC, The UK private equity IPO report: Private equity-backed IPOs:1 January 2009 – 31 December 2017 (2020). https://www.pwc.co.uk/services/risk-assurance/insights/the-uk-private-equity-ipo-report.html

[57] Less positive conclusions are reached by a Bain & Co report (see Market Watch "Private-equity-backed IPOs aren't performing, driving more companies to remain private instead", 28 February 2020. https://www.marketwatch.com/story/private-equity-backed-ipos-arent-performing-that-is-driving-more-companies-to-stay-private-2020-02-25). This analyses global trends with regard to IPOs led by private equity funds. Bain examine a sample of 90 IPOs that were backed by buyouts between 2010 and 2014. More than 70% of these underperformed with the averaged an annualised total shareholder return five years after the IPO being 12 percentage points lower than the relevant public-market benchmark. Overall, two-thirds of a total 981 global IPOs underperformed, according to Bain which they argued helps explain why private equity firms prefer to sell their investments to strategic buyers, or to each other. The difference between the PwC and Bain analyses could arise from the differing time periods examined and the fact that private-equity funds are more active in supporting IPOs in the UK than globally.

days, compared to the non-Private Equity ones which were more likely to be later. Average holding periods for Private Equity funds were around 5 years for 2009-17.

In some cases, however, it is likely that Private Equity and Venture Capital firms will treat **IPOs purely as an exit mechanism with no crossover into the post-IPO stage.** However, if they help SMEs go through the pre-IPO and IPO stages, then Private Equity funds could still be suitable as investors alongside the EU Fund and similarly, its investment in such Private Equity funds would be justified. Moreover, as argued above, if 'lock-up' arrangements are agreed, this would help ensure that Private Equity fund exits take place over a period of time post-IPO rather than abruptly at the time of the IPO itself, thereby helping to ensure that there is time to attract alternative investors. It could be foreseen that some Private Equity investors might exit at the IPO stage but that the EU Fund would remain invested (assuming a continuing crossover investment is justified) alongside shareholders that have an interest in remaining invested in listed companies after the IPO, or investors that might enter the market to replace those who sell their shares or buy new shares later. Clearly, the fund manager would have an interest in maximising the fund's value both at the IPO stage and this will of course depend largely on the performance of the SMEs that receive support and the extent to which the fund manager is successful in selecting companies to invest in whose shares are likely to perform well over time.

The possibility of an IPO simply being regarded as an exit mechanism is a risk, as pointed out above, but it is clearly important that the EU IPO Fund is not used simply and solely as a way for Venture Capital and Private Equity, or the owners themselves, to 'cash in'. For this reason, we have suggested that the EU Fund co-investors should be asked to agree to a **12-18-month 'lock-up' period** before they consider selling shares. Our understanding, confirmed by one of the major international banks we interviewed, is that 'lock-up' arrangements are quite common in the equity investment business. Lock-up provisions are used to prevent large IPO investors from selling their shares immediately after an IPO, which could adversely affect market confidence and depress the share price. To prevent this, as the bank in question explained, most private equity funds remain invested beyond the IPO, selling typically 30-34% of their stake in a business in the IPO but exiting from the remainder in stages that can be spread over many years depending on the share price performance and other considerations (e.g. the longer-term prospects for the business). A further reason, from the investor perspective, for remaining invested in a company's shares for a period after an IPO is to take advantage of any upward movement in the share price before selling although this of course depends on making a correct judgment call with regard to market trends. This tendency to remain invested post-IPO is supported by our analysis in the previous section of this report.

Reflecting the above considerations, it is possible if not likely that the **EU SME Fund may need to be flexible enough to cater to different pre-existing SME equity funds that serve the different types of investors across the three stages of the IPO process**, with Venture Capital and Private Equity firms being more prominent at the pre-IPO stage and investment banks and other asset managers being more engaged in buying shares and remaining invested after the IPO.

Overall, feedback from key stakeholders who were consulted for this study suggests that **there is broad support for the idea of establishing an EU Fund for SME IPOs.** Positive feedback was received from private sector financial institutions and stock exchanges, almost without exception. To the extent that there was any scepticism, this was most evident in the more advanced IPO markets and/or in relation to specific aspects of the EU Fund's possible role (e.g. while there was agreement on the need for intervention at the pre-IPO and IPO stages to be prioritised, there was less of a consensus over the need for the EU Fund to have a role in the post-IPO stage).[58] On this question, the Phase 3 market testing exercise indicated that around half of those consulted considered that the EU Fund should have a crossover role. This further supported the argument that the SME IPO financing environment requires intervening in all three of the phases - pre-IPO, IPO and post-IPO. Examples of feedback supportive of the idea of a 'crossover fund' can be read in the following box:

Box 3.6: Market Testing Feedback – Crossover Investment

- 'A crossover approach is very much favoured and would help ensure that IPOs are not treated solely as an exit mechanism.' **– International Financial Institution's interview feedback**
- 'The EU IPO fund must work across the three phases. It needs to be hybrid instrument.' **– Investors Association's interview feedback**
- 'Ideally, EU intervention should support the establishment of a crossover fund that invests at the pre-IPO, IPO and post-IPO stages.' **– National Promotional Institution's interview feedback**
- 'The EU Fund should operate as a crossover fund. The issue with relying on existing SME equity funds is that few are currently active at both the pre- and post- IPO stages.' **– Investment Bank's interview feedback**
- 'There should not be a separation between listed and non-listed companies in terms of focus in the EU Fund. Crossover funds could help develop both types of equity.' **– Fintech Platform's Focus Group feedback.**
- 'The EU Fund should operate as much as possible on a crossover basis supporting investments in the pre-IPO, IPO and post-IPO phases.' **– Stock Exchange Representative's Focus Group feedback.**

3.1.4 SME target groups

Box 3.7: Key Points – SME Target Groups

- *The EU Fund's target group should be SMEs and smaller mid-caps with up to 500 employees and larger mid-caps with up to 3,000 employees if the firms concerned are innovative.*
- *The EU Fund should invest in IPOs involving SMEs that are seeking to raise growth capital, i.e. firms that have progressed beyond the early stages in their development and have a stable business model with products and services that are selling well, and which have the potential for sustainable growth.*
- *The Fund should have a 'generalist' focus rather than targeting SMEs in specific sectors. There could be several post-COVID-19 cross-sectoral priorities (e.g. digitalisation,*

[58] In addition to our own consultations, the Federation of European Stock Exchanges (FESE) ran survey of its members with a view of identifying the main challenges SMEs face when undergoing a listing in Europe. The exchanges were also asked to comment on the idea of establishing an EU SME IPO Fund. Not all the exchanges expressed am opinion on this question. Some called for the creation of an EU Fund that could support SME IPOs at a regional level (e.g. Baltic States). The notion of crossover fund was also supported. It was argued that an EU IPO Fund could help address a number of issues, for example the lack of investors and liquidity in SMEs' public equity and the reluctance of institutional investors to invest in IPOs that are under EUR 300 million. It was also argued that the added liquidity in small tickets could address another challenge, namely the limited involvement of retail investors and pension funds in SME IPOs. Some exchanges cautioned against seeking to attract retail investments, in view of the potential short-termism.

green economy).

A key issue is how SMEs should be selected by the EU Fund. As noted in Section 2, the Commission's **definition of an SME** is seen as being too restrictive for the purposes of an EU IPO Fund. Instead, our research proposes that in addition to SMEs, **smaller mid-caps should also be included as a target group**. If this approach is adopted then the EU Fund's target group would focus on SMEs and small mid-caps with up to 500 employees but also include larger mid-caps with up to 3,000 employees if the firms concerned are demonstrably innovative. An innovative firm can be considered to be any SME that engages in product (goods or services) innovation, process innovation, or both, according to the OECD and Eurostat.[59] If the innovation involves new or significantly improved products (e.g. components, software) for customers, it is a product innovation; if the innovation involves new or significantly improved methods for the production and delivery of products or the performance of a service (e.g. software), it is a process innovation.[60] The EU Fund will need to develop a more specific methodology for determining the extent to which SMEs meet the criteria of being innovative as part of its screening to determine which SME IPOs to support. Ultimately, however, it will be a question of the fund manager's professional judgement.

An important issue highlighted in the interview programme is what screening mechanism is needed to determine **what type of SMEs should be supported through the IPO process**. Our assessment indicates that the focus should be SMEs that have progressed beyond the early stages in their development and that have a **stable business model with products and services that are selling well, and which have the potential for further sustainable growth, but find it difficult to pursue an IPO due to market or administrative barriers**. Above all, they are likely to be SMEs whose owners and senior personnel are committed to the business's development beyond the IPO.

Another key question is **whether the proposed Fund should focus on particular sectors of the European economy**, for example technology and biotechnology (firms in both of these sectors would meet the criteria outlined above and are sectors where an IPO in the US is frequently pursued rather than in Europe). The consensus of opinion amongst stakeholders who we interviewed is, however, that the **EU Fund should have a 'generalist' orientation**.

There are several arguments for adopting a 'generalist' sector focus: firstly, it could be argued that SMEs in sectors such as tech and biotechnology generally do not need help in achieving a successful IPO. (However, if the IPO takes place in the US, which is often the case with these types of businesses, this could potentially mean a knowledge and innovation drain to the US.) One of the major investment banks we spoke to indicated that whilst around two-thirds of their planned IPOs in Europe either do not take place or fail, very few IPOs involving tech firms fall into this category with the overwhelming majority being successful. This view can be contested;[61] secondly, a target market that focuses on certain sectors could reduce the choice for investors; thirdly, if the EU Fund focuses on certain sectors, this could make it more difficult to operate on an EU-wide basis because the sectors concerned are likely to be more strongly present in some countries than others. Moreover, as several stakeholders pointed out, if innovative capacity is an important criterion, then firms fulfilling this requirement

[59] OECD/Eurostat. (2005). "The measurement of scientific and technological activities: proposed guidelines for collecting and interpreting innovation data. Oslo manual, Paris. http://ec.europa.eu/eurostat/ramon/statmanuals/files/9205111E.pdf

[60] Vertesy D., Del Sorbo M., Damioli G. (2017). High growth, innovative enterprises in Europe. JRC Technical Reports

[61] This is contradicted by the results of study that the Commission's DG RTD conducted specifically on the IPO challenge for tech companies. This found that very few tech companies actually go for an IPO, and that such firms face an additional difficulty of requiring specialised investors that can understand the business model. Therefore, those that do go for an IPO and are successfully floated are actually a very small minority of all tech firms.

are to be found in sectors across the full breadth of the European economy, in 'traditional' sectors as well as those such as tech where a lot of innovation most obviously takes place. Last but not least, a sector focus would not be consistent with the Commission's policy perspective that the EU Fund should not prioritise sectors.

Whilst it would not be appropriate for the EU Fund to prioritise sectors, it could still identify particular **cross-sectoral priorities**, especially those that are seen by the Commission and national authorities as important sources of new jobs and wealth in a post-COVID 19 environment (e.g. digitalisation and the green economy which both feature in the proposed EU Recovery Fund). Introducing cross-sectoral themes of this sort would reflect the InvestEU programme regulation which also highlights 'green and digital transitions' under the strategic European investment policy window.

Defining the EU Fund's objectives in the way outlined above in terms of sector and SME characteristics would mean that the potential target group for an EU Fund would be very large. Some of those we consulted suggested that the target group could be narrowed down if the focus is on **SMEs that have previously benefited from EU-supported venture capital, equity, and debt finance schemes**. This would have several advantages including the fact that a lot would already be known about investment propositions with the possibility of building on earlier due diligence. Also, there would be scope to develop synergies with other EU instruments, notably other venture capital and equity schemes. A disadvantage of this approach, however, is that the EU Fund might end up supporting SMEs that have already been supported by Private Equity and neglecting others that could include SMEs that are equally deserving of support. The fund manager's ability to strike a balance between identifying a broad range of potential investments whilst not extending this approach to the point where there is no focus at all will therefore be crucial.

The above considerations apply to all the EU SME Fund structures outlined earlier (Intermediated equity investment, FoF and SPV), and other potential investment sub-options.

3.1.5 Conclusions – Role of the EU Fund

The desk research and consultations performed during Phases 2 and 3 of this study confirmed two key aspects for the role of the EU Fund with regard to the stages in the SME IPO process it should intervene in, and the type of SMEs it should target. The stakeholders we interviewed confirmed that an EU Fund should support investment throughout the IPO process. In this regard, the most effective way to support all the phases of the IPO process would be through crossover fund investment. The EU Fund should also adopt a generalist approach when supporting SMEs under 500 employees, and larger firms with up to 3000 employees when they produce innovative products and/or incorporate innovative processes.

3.2 Fund Structure and Governance

Three basic EU SME IPO Fund options were identified by the study, each of which also has a number of possible variations and 'sub-options'. To summarise, the main options are:

Box 3.8: Main EU SME IPO Fund Options

- **Intermediated Equity Investment** – the Implementing Partner (IP) would invest directly in equity funds and similar investment vehicles that can be used to promote SME IPOs across EU Member States.
- **Fund-of-Funds (FoF)** - an EU-level FoF would be established which would, in turn, invest in a number of sub-funds. There could be private sector participation in the FoF itself and also, together with the national public sector, in the sub-funds.

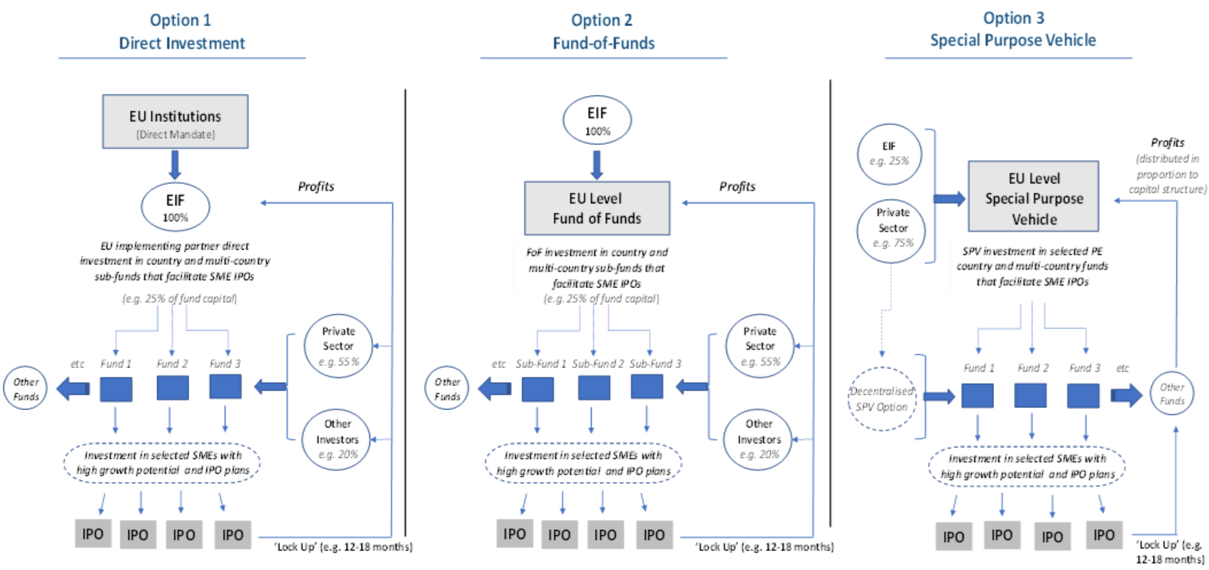
- **Special Purpose Vehicle (SPV)** – an SPV would be established at the EU level with a number of private sector financial institutions as co-investors. The SPV would be used to invest in SME equity funds and other similar investment vehicles across EU Member States. It could also invest directly in selected SME IPOs. A variation on this option would be a 'decentralised' model with a series of SPVs being established across EU Member States/country groupings.

Overall, the EU Fund options have a number of common features and differences: firstly, in relation to the common features:

- In all cases, an EU Fund would use resources mainly from InvestEU to invest in equity funds and other financial intermediaries across EU Member States that purchase the shares of SMEs that are going public.
- All the EU Fund options would involve the same type of intervention in relation to the IPO process, i.e. as a crossover fund mechanism that invests alongside other private and public sector investors in SMEs at the pre-IPO, IPO and post-IPO stages of a floatation.
- The various options would target the same types of SMEs, i.e. solid but capital-scarce firms that have reached a stage in their development where growth capital is needed to scale up.

In terms of the EU Fund itself, the estimates of the amount of investment and fund size required to achieve a significant impact on SME IPO trends would be the same for each of the options. Apart from the nature of the EU-level Fund options (Intermediated equity investment, FoF or SPV), the main differences lie in the extent of the interface between the IP and private sector partners and whether this takes place at the EU level as well as at the Member State or SME equity fund level. Related to this, the extent of private sector leverage and how this is likely to occur will vary. It follows from this that there are also differences in governance. The basic options for the EU Fund structure are outlined below.

Figure 3.1: Summary of EU Fund Options



3.2.1 Intermediated Equity Investment (Option A)

The first of the options would involve **investing EU funds directly in a portfolio of equity funds and similar vehicles across the EU that can be used, in turn, to invest in SME IPOs.** This would avoid the need to establish new fund structures, i.e. either a FoF or a SPV, at the EU level. This approach has been implemented at the EIB Group through its many existing direct mandates (see Section 2). Under Option A, the EIF (if it is the IP) would be given a specific mandate from the EU, i.e. under InvestEU, to make investments in equity funds and other investment vehicles that support SME IPOs.

According to its latest annual report**, the EIF currently has a portfolio of investments in some 750 funds across the EU-27 Member States.** The portfolio (as at July 2019) consists of around 190 investments in funds in individual countries (BE, BG, CZ, DK, FR, DE, GR, IRL, I and LT) with the remaining 560 being investments in multi-country funds. Their focus in terms of sectors varies with some being generalist and others investing in specific types of undertakings (life sciences, ICT, renewable energy, etc). The EIF investment supports both Venture Capital and Private Equity funds as well as some hybrids combining equity and debt. This diversity is also reflected in the SME target groups that range from early stage seed and start-ups to mid-market scale-ups.

Of these 750 funds, those with private equity strategies focusing on the mid-market, lower mid-market and growth expansion companies can be considered to be most likely to take SMEs to an IPO. This narrows the **number of equity funds that might be targeted by an EU Fund down to about 190 across the EU-27**.[62] Based on examining a sample of 50 websites of these funds, our research suggests that around one in four of the funds has led SMEs to an IPO in the past, providing either an exit for investors or remaining invested post-IPO (we estimated that one in 10 of these funds have remained invested in an SME after the IPO). This represents a potential pool of 40 to 50 EIF-backed equity funds in which the EU Fund could invest to support SME IPOs, with 15 to 20 of these effectively being crossover funds.

Based on examining the websites of the funds that provide information on their portfolios, on average, **one in five of the companies they have invested in have undergone an IPO**, albeit not all in the EU-27 area. These EIF-backed funds tend to have portfolios consisting of at least 10 investments, i.e. an average of two in each case at any one time being likely to undertake an IPO. On this basis, if each of the 40-50 EIF-backed equity funds that have a track-record of investing in SME IPOs invested in two additional IPOs with EU support, then the theoretical market absorption potential would be around 80 to 100 new SME IPOs over the lifetime of an average investment portfolio. This would probably be sufficient to absorb the resources of an EU Fund based SME IPO targets at the lower end of the scale for the size of the fund (see Section 3.5, in particular Table 3.13).

Under Option A an EU IP may also provide an incentive to managers of EIF-backed equity funds, or other equity funds that have an investment strategy reflecting EU priorities, to launch newly positioned funds in their portfolio but this would depend on their willingness to enter a different/not familiar investment strategy. Moreover, this would only be possible if the fund manager in question has not launched the fundraising with other investors and assuming any changes are agreed with a majority of the fund's Limited Partners. A change to investment strategies could, for example, involve placing more emphasis on certain types of IPOs and

[62] European Investment Fund. (2019). EIF Equity Portfolio. https://www.eif.org/what_we_do/equity/eif-equity-portfolio.pdf

perhaps introducing 'lock-up' periods as a more standard feature of the investment exit strategy. But although investment guidelines of this kind could be negotiated, there would still need to be flexibility with decisions regarding individual SME IPOs ultimately being taken on a case-by-case basis in light of commercial considerations.

Investing under Option A in the EIF's existing portfolio of equity funds, perhaps combined with investment in new funds, would have the advantage of being able to focus more on funds that already have a relationship with the EIB Group. In addition to the equity funds where there is existing EU investment, investment in new equity funds might be needed to fill gaps and to provide comprehensive EU27 coverage (as noted earlier, the existing coverage of EIF-supported equity funds is limited to 15 Member States and the multi-country funds are in most cases restricted to the coverage of a very small number of countries). In seeking to extend interventions beyond this, there will be a question of striking a balance between playing safe and focusing on investing in equity funds in markets that are already supported by the EIB group, or adopting the more challenging and riskier strategy of investing in the more under-developed equity markets in EU Members States where there has been relatively little or no EIB support and the equity gap is the most significant.

Table 3.2: Summary – Intermediated Equity Investment Approach

Advantages	Disadvantages
• Already used by for a high proportion of EIF equity investments. • Probably the simplest and quickest model to establish for the EU SME IPO Fund because there would be no need to establish a new investment structure with a separate legal entity. • Could be implemented via new investments in the existing portfolio of equity funds, including multi-country equity funds which would provide broader coverage of EU markets.	• Leverage of private sector investment would only take place at the level of individual equity funds. • There are probably 40-50 funds that could be used by the EU Fund as an intermediary structure and this might not be sufficient to achieve more ambitious SME IPO targets.

The second round of interviews performed for the Phase 3 market testing exercise indicated that Option A is seen as the quickest and most straightforward approach. It was also argued that Option A would be the easiest way for the EU IP to maintain control over its investments and focus on its policy objectives. However, there was no real consensus on the merits of Option A compared with other possibilities other than that it might be a first step in a process that subsequently involves developing a FoF or SPV fund structure. The results for the survey questions 'Assuming there is a case for EU intervention, what form should this take in your view?' can be seen in the table below:

Table 3.3: Survey Results on the preferred EU Fund Proposal Option

Proposal	1 (Most preferred)	2 (Neutral)	3 (Least preferred)	Total
Option A	16 (29%)	16 (29%)	24 (42%)	56 (100%)
Option B	9 (16%)	30 (54%)	17 (30%)	56 (100%)
Option C	20 (36%)	12 (22%)	23 (42%)	55 (100%)

Note: Survey results for 62 Respondents

Many stakeholders accepted that Option A should be regarded essentially as a steppingstone for either Option B or C rather than being the optimal EU Fund configuration in its own right. Others suggested that the various fund options should not be regarded as mutually exclusive, suggesting different options could suit different market situations/countries. Examples of stakeholders' feedback on Option A can be read in the following box:

Box 3.9: Market Testing Feedback – Option A

- 'Option A is the easiest and most direct way to implement an EU Fund.' **– Investors Association's interview feedback**
- 'An EU intervention should be based on Option A, but this could over time be developed into Option B with the IP investing in individual equity funds as well as FoFs.' **– International Financial Institution's interview feedback**
- 'Option A would be the easiest and quickest way of launching the intervention.' **– National Promotional Institution's interview feedback**
- 'The issue with Option A is that it may be indirectly supporting the strongest actors and not reaching those most in need in other geographies.' **– Investment Bank's interview Feedback**
- 'Start with Option A and once this has been demonstrated as working successfully, start with B and seek to obtain private sector investment alongside the EU contribution.' **– International Financial Institution's interview feedback**
- 'There is the possibility of using a phased approach implementing first Option A to ensure a quick mobilisation of liquidity into existing SME funds. This would enable the EU IP to establish a version of options B or C at a later stage' **– Stock Exchange Representative's feedback during focus group**

3.2.2 Fund of Funds (Option B)

Option B would involve establishing a Fund-of-Funds (FoF) at the EU level. It would be used to invest in sub-funds across EU Member States (in some cases perhaps in regional groupings) that would, in turn, invest in SME IPOs. Unlike the Option A intermediated equity model, Option B would involve establishing a new legal entity.

Compared with the Option A approach, there are fewer examples of FoFs as an investment model, at least at the EU level (as noted in Section 2, the VentureEU FoF is perhaps the most relevant). However, there are many examples of EIF-supported FoFs at the national level that have been operating successfully across the Member States. Under the FoF model, the EU Implementing Partner would invest capital in a number of existing and new sub-funds at the country/multi-country level. In addition to EU investment, there would be investment by private sector institutional investors in the FoF itself and in this respect Option B would differ fundamentally from Option A and might cater for the investment preferences and appetite of larger institutional investors.

Option B could be especially advantageous in Member States where the IPO market is relatively underdeveloped and the 'ecosystem' of locally-based equity funds and professional advisers that is required to support a thriving SME IPO culture does not exist or is very weak. This is because it would lead to the creation of new specialised SME equity funds focusing on SMEs and their IPOs in markets where there has hitherto been a limited presence of professional SME equity funds, especially those that are involved in the IPO processes. As noted in Section 2, these markets are generally 'below the radar' of the major international investors. The sub-funds could attract both international equity funds and local private sector financial institutions. By helping to set up sub-funds, Option B could potentially act as a catalyst, stimulating the wider development of the IPO ecosystem in the countries concerned. In the case of Options A and C, the EU intervention might be less structured and less rooted in the country's financial services institutional setting.

A key issue is whether there would be private sector investment in the EU-level FoF as well as in the sub-funds. Existing experience does not provide a reliable guide. Thus, it is difficult to determine how successful the VentureEU FoF (perhaps the closest model to an EU IPO FoF) has been in attracting investment from the private sector as no data has been made publicly available. However, we understand that some of the VentureEU's funds are still in their fundraising period. In the absence of private sector investment in the EU IPO FoF it could still, however, still be used as a mechanism for coordinating and channelling investment to the sub-funds although its utility would be much reduced.

The strategy for implementing Option B could involve a call to appoint a sub-fund manager (ideally from the private sector but possibly an NPI) in each major national/regional equity market that is identified at the EU level (e.g. regional markets encompassing the Baltic, Scandinavia and Benelux areas, or the national markets of larger Member States such as France) to promote more integrated cross-border capital markets.

A further possibility would be to have selected fund managers running sub-funds in more than one country. The sub-fund manager would be expected to define the strategy to be followed including the target group of SMEs in the country concerned, types of investment envisaged and how these might support the IPO process, amount of funding envisaged, etc. The sub-funds would seek **co-investment from a group of national and private financial institutions.** The fund management team would be responsible for preparing a **prospectus** and marketing it to institutional investors in their country/multi-country grouping. Institutional investors in each sub-fund could include banks that operate in the country concerned, equity funds, or pension funds, and insurance companies, any existing locally-based equity funds, etc) and other investment vehicles including existing EU-supported FoFs than are operating at the national level in several Member States (some examples are examined in Section 4). There could also be **national public sector participation** in the sub-funds, possibly via the NPIs, although this would depend on there being no state aids issues (see Section 2). In this respect, Option B would again differ from the other EU Fund options. In each case, the sub-fund board's composition would reflect the capital contributions of different co-investors. The financial institutions supporting each sub-fund would be used to help identify investment opportunities that fulfil the general criteria defined at the FoF level. The sub-fund co-investors would have the discretion to adapt these guidelines to reflect local priorities. Investment committees would be responsible for deciding which SMEs to support and at what stage (pre-IPO, IPO, post-IPO stages).

Option B would take longer to implement than Options A and C, because of the need to establish new sub-funds, and could be more complex and costly structure to operate because of the two layers. The complexity of this proposed structure might in turn make it more expensive for investors, and therefore potentially less attractive to them. However, it would be a way of strengthening the financial infrastructure in untapped markets across the EU.

Table 3.4: Summary – Fund-of-Funds

Advantages	Disadvantages
• Compared with Option A, possibility of two levels of private sector leverage. • More scope for bespoke design in terms of the sub-fund structure/strategy and potentially higher focus on particular stock markets. • An advantage of the FoF/SPV structures is that they can more easily finalise all investments in the first years. • Easier to exploit synergies between (sub-fund) co-investors than with Options A and C.	• Could take longer than Options A and C to implement because some sub-fund structures would be new to ensure EU-wide coverage. • A FoF could be a more complicated and costly investment vehicle with a double fee structure (FoF and sub-funds levels) adversely affecting investors' appetite. • Unclear whether experience suggests there would be enough private sector investment in FoF at the EU level to justify the structure.

There were mixed views about Option B in the Phase 3 market testing exercise. Some stakeholders argued that it might take a long time to design and establish a fund-of-funds with an EU-wide set of sub-funds. There were also some doubts about the merits of an EU-level FoF structure which was seen by some as inefficient and costly due to the double-fee structure, which could potentially adversely affect investors' appetite. Although being the option that received the lowest proportion of 'most preferred' responses in our surveys, it was also the one which received relatively few 'least preferred' responses (see Table 3.3). Examples of stakeholders' feedback on Option B can be read in the following box:

Box 3.10: Market Testing Feedback – Option B

- 'Option B contributes to creating a more favourable investment environment which can encourage more SMEs to consider an IPO. A challenge would be that Option B requires a longer time to establish.' **– Investors Association's interview feedback**
- 'Private investors tend to be sceptical if there is too much public investment intervention and control – there seems to be a lot public intervention in Option B.' **– National Promotional Institution's interview feedback**
- 'There are relatively few equity funds in Europe that operate in both public and private equity. Where these do not exist, new funds will need to be created to ensure European coverage, which may require implementing a form of Option B or C.' **– Investment Bank's interview feedback**
- 'The EU Fund should consider a more decentralised version of Option B or C, where special purpose vehicles and FoFs are created at the local regional/national level.' **– Strategic Fund-of-Funds' interview feedback**

3.2.3 Special Purpose Vehicle (Option C)

Option C would involve establishing a Special Purpose Vehicle (SPV) at the EU level (and/or also in individual countries). Unlike the Option A intermediated equity model, but like Option B, this EU Fund Option would involve establishing a new legal entity at the EU level and investing in SME equity funds at a Member State level, or multi-country level where such entities exist. The difference between Options B and C, is that Option C would be invest in existing SME equity funds (like Option A), while Option B would involve creating new sub-funds. Unlike Option A, this option would ideally include private sector investors in an EU-level entity and in this respect is again similar to Option B.

The purpose of the SPV would be to provide a mechanism at the EU level that could combine investment by the EU SME IPO Fund with capital that is contributed by private sector financial institutions**. As with Option B, there would be two levels of leverage – the EU (SPV) level and the level of the equity funds it invests in**. For example, a simple SPV might have five private sector institutional partners which, together with the EU Fund, each contribute 20% of the capital. After a selection process, the SPV would then invest, in much the same way as with Option A, in a number of existing equity funds and other investment vehicles that can be used to help support SME IPOs. These could, again, include some of the relevant 190 private equity country and multi-country funds that the EIF currently supports (albeit with the caveats mentioned in relation to Option A). Deal flow would be generated by the Private Equity funds and their existing governance structures would remain in place. The EU Fund's investment guidelines would be used to screen SMEs that are identified and where the SPV is asked to participate in the IPO.

The SPV structure has the advantage of being open at the EU level to private sector investment (unlike Option A). Compared with Option B, which also allows for private sector investment at the EU level, it could be that Option C is more appealing to the private sector because an **SPV is less complex and (potentially) less bureaucratic to operate**. This at least was the opinion of one of the major private sector international banking groups that we consulted as part of the market testing exercise. It could be that just as a FoF is in many ways especially well-suited for under-developed IPO markets, an SPV would be more appropriate for countries with more developed IPO markets, given that in these cases there are already private sector SME equity funds involved in SME IPOs. The SPV approach is also already used by the EIF although our research suggests that is mostly for investment projects involving national institutions rather than at the EU level.[63]

A suggestion made in the market testing exercise is that an Option C SPV could be **used by to invest directly in SME IPOs rather than having to operate through intermediary funds.** Some stakeholders we consulted suggested that rather than a single EU-level SPV, the emphasis should be on setting up a series of local SPVs serving national markets or regional markets (e.g. Baltic States). It was argued that decentralised SPVs would enable the EU Fund to tailor its interventions to specific domestic market conditions and to attract institutional investment from local private investors and asset managers. The possibility of creating decentralised investment vehicles serving different exchange networks (e.g. Nasdaq, Euronext) was also suggested as a possibility. In effect, the 'decentralised' version of Option C would combine features of both the other options.

It is clear, however, that the 'decentralised' version of Option C would also have drawbacks. First, we understand that the EIF would not be willing to become the IP if the SPV were used to invest directly in SME IPOs – although this role could also be played by the private sector. Moreover, the costs and complexity of additional layers, if combined with the low scale returns from ticket size, leverage and catalytic effects, would make such a structure unattractive.

[63] For example, the EIF established an SPV with Bpifrance to implement a joint infrastructure project.

Table 3.5: Summary – Special Purpose Vehicle

Advantages	Disadvantages
• Leverage of private sector investment could potentially be in-built at two levels (SPV and equity funds). • As with Option A, an SPV could invest in country / multi-country equity funds that the EIF already supports (subject to having acceptable investment strategies) which could provide broader coverage of EU markets. • An EU-level SPV could be used by to invest EU funds directly in SME IPOs. • Possibility to support the development of new (crossover) funds at the local/regional level under a decentralised SPV option.	• Unlike Option A, an SPV could take a relatively long time to establish depending on specific investment agreement. • The possibility of dual layer for the SPV (EU and 'centralised SPVs) could add complexity and costs. • Private sector investors in an SPV could feel they have less influence on investment decisions taken by financial intermediaries.

Option C was positively compared with Options A and B in the Phase 3 market testing interviews. In many ways this is seen as the preferred option (see Table 3.3) by the larger international financial institutions as it would allow an involvement at the EU level (unlike Option A) and would be relatively straightforward to operate (unlike Option B). These features could contribute to increasing investors' appetite in this fund option. However, if implemented only at the EU level, this option might be considered less attractive to smaller domestic financial players operating on a purely national basis. Examples of stakeholders' feedback on Option C can be read in the following box:

Box 3.11: Market Testing Feedback – Option C

- 'Option C should include the possibility of investing directly via an SPV in individual SME IPOs although this approach would be difficult to manage at the EU level and the SPV would need to be private sector led/managed.' **– International Financial Institution's interview feedback**
- 'Option C would be the preferable option – it might be possible to establish SPV funds investing in SMEs that are operated by professional managers.' **– National Promotional Institution's interview feedback**
- 'A variation of Option C would be preferable, ideally with localised SPVs established for every market, which would invest directly into SME IPOs. However, it is challenging and costly to set-up new structures of this type.' **– Investment Bank's interview feedback**
- 'Option C is the most innovative proposal of the three, there are already several forms of Option A and B operating in Europe which haven't had any real impact.' **– International Financial Institution's interview feedback**
- 'Options B or C would encourage more investment – but would imply higher costs. Separate funds could be created to serve stock exchange networks as these are moving towards the same growth-market structure. Establishing a fund to serve Nasdaq exchanges and another one for Euronext exchanges would cover most of the EU-27 equity market.' **– Think Tank's interview feedback**

3.2.4 Conclusions – Fund Structure and Governance

A key issue is **the extent to which private sector financial institutions are likely to be interested in participating in the EU Fund as investors**. Feedback from the private sector organisations we consulted is presented in Section 3.5. To summarise, overall, there is a positive view. For large global institutional investors, their interest in an EU Fund lies in using it as a mechanism to invest in stock markets that otherwise lack visibility and where most SMEs are 'below the radar' in terms of capitalisation. In these markets and others, it is also simply **not cost-effective for the large financial institutions to carry out the research to identify SME investment opportunities**. Nevertheless, there is an interest in gaining exposure to such markets and businesses given their long-term growth potential and returns.

For stakeholders of this type, investment at an EU level in a (FoF or SPV) fund could be a potentially attractive proposition. Indeed, it is likely that different types of private sector financial institutions would be interested in engaging at the two levels: whilst the very large financial institutions are likely to be more suitable as investors at the EU level in a FoF or an SPV, SME equity fund investors are more likely to be national and local institutions. For these reasons, the FoF options could be well suited to less developed IPO markets whereas the SPV could be more appropriate for developed markets. In theory it could be that two different types of EU Funds are established for different groupings of EU Member States, in practice this may not be feasible.

One of the key overall findings from the Phase 3 market testing exercise is that **the EU Fund options should not be regarded as mutually exclusive**. It was argued by several stakeholders that the possibility of the EU Fund structure being based on Option A should not preclude additional types of intervention (i.e. Options B and C) to run alongside an Option A fund in certain geographical/market settings. Equally, if Option A establishes 'proof of concept' and works well in different geographical/market settings it could be that the relatively short horizon of InvestEU implementation would mean that alternatives are not needed. Ideally, this would be the case given the relative short horizon of InvestEU implementation and potential complexities of implementing different models at the same time. Moreover, should Option A prove to be effective in the current period, there might be a case for only using this fund option in the foreseeable future.

3.3 Geographical Scope of the Fund

Box 3.12: Key Points – Geographical Scope of the Fund

- *The EU Fund should have an EU-wide mandate but with the flexibility to vary its objectives to reflect the specific situations in different Member States.*
- *In particular, the Fund's operations could focus more on pre-IPO investment activities in countries with relatively under-developed stock markets whereas in countries where IPO markets are well-developed, more emphasis could be placed on supporting the IPO itself and secondary issuances if the Fund's rules are flexible enough to allow this.*
- *Some stakeholders argue that the EU Fund should target regional groupings of Member States to help overcome the reluctance of major institutional investors to enter smaller markets, which lack critical mass and visibility, and help to develop an IPO eco-system that is conducive to capital market development.*

In the Commission's terms of reference, a key question is: 'should the fund operate on a pan-European basis, focusing on countries where IPO/SME growth markets are underdeveloped or non-existent, or leverage existing IPO markets (or both)?'. The research confirms the view that the EU Fund should have an **EU-wide mandate but with the flexibility to vary its objectives to reflect the specific situations in different Member States.**

Looking at this question from a different perspective, **an integrated investment mandate for the EU Fund would have the macro-economic benefit of greater risk-sharing between markets and would help to bridge the divisions between markets in terms of private sector capacity.** Such a structure would imply that the EU Fund is agnostic about which Member States' SMEs are supported, and on which stock exchange an IPO takes place. In contrast, a mandate specific to individual Member States or groups of countries could perpetuate segmentation between national capital markets, confront constraints in national market structures and investor bases but may support exchanges where liquidity is limited.

An argument favouring a decentralised approach is the diversity of the investment markets that are present in Europe. For example, the **Spanish stock market** has never focused on SMEs and there are only around 10 SME-dedicated institutional investors. However, according to an interview with a stock exchange, there is growing interest in Spain amongst private banks, family offices and retail investors in investing in SMEs. An EU IPO Fund could therefore play a catalytic role in Spain by stimulating investment in SME IPO and seek local co-investment partners. The Instituto de Credito Oficial (ICO), a state-owned bank, runs Axis which is the country's first Venture Capital fund. Axis could be used as a basis for an EU Fund's operations in Spain, where an EU fund could invest jointly with Axis or other similar funds in cross-over funds that also serve the IPO and post-IPO segments.

Italy also has an under-developed stock market for SME IPOs. By 2019, there were still only 35 SME listings on the Borsa Italiana, and the average value of the IPOs was modest at EUR 7 million. The big international financial institutions tend to focus on larger investment opportunities in Italy and the country lacks locally-based closed-end equity funds that exist elsewhere and which specialise in small and mid-cap equity investments and IPOs (according to the interview feedback, there is only one fund dedicated to the Italian AIM). Instead, IPO investors tend to be open-ended generalist equity funds, family offices and high net worth individuals. According to the interview feedback, this sector of Italy's financial services sector needs developing to the point where there are at least 20-30 equity funds that include small and mid-cap IPOs in their portfolios. It is argued that any initiative needs to focus on the local market rather than being solely a more 'remote' EU-level intervention.

To take a further example from a different part of the EU, in **Estonia** equity financing played a minor role until the 2008 financial crisis when bank lending was severely restricted. Today, the local stock exchanges across the **Baltic States** do not have a single company listed with more than EUR 1bn capitalisation and most firms that have a listing are micro-caps. This tends to make these markets 'invisible' to major international institutional investors that typically adopt a EUR 500m capitalisation threshold for investments in public markets, and consequently there is not significant appetite among large institutional investors to invest in these asset classes. However, large institutional investors could diversify their portfolios and indirectly finance SME IPOs in the Baltic States and other less visible markets by investing in them via an EU SME IPO Fund.

Poland has a large and dynamic stock exchange (the Giełda Papierów Wartościowych w Warszawie) where many SMEs have undergone a listing in recent years. Indeed, 95% of listed companies are SMEs according to the Polish definition. There are 400 SMEs listed on the Polish alternative market ('NewConnect') which sees an average of 15 IPOs per year, many with a focus on the green and tech sectors. To encourage more IPOs, the Warsaw Stock Exchange set up GPW Ventures (see Section 4) which is a Fund-of-Fund investing in SMEs that are planning to go public. The GPW FoF currently has investments in 15 Venture Capital and equity funds, participating in their governance through membership of their advisory boards or investment committees.

Markets such as these contrast with **Scandinavia** where there is a particularly strong track-record of SME IPOs. In markets such as these, there is likely to be more of a role for an EU-funding instrument to back funds that focus on the IPO phase and perhaps also the post-IPO phase. This was suggested by an investor association we interviewed which stated that many SMEs require several funding rounds in addition to the IPO to ensure continued growth because an IPO often only raises relatively small amounts of investment and it is the subsequent share issuances that are more important a company's development. In the case of Scandinavia, there are a number of investment companies that invest in SMEs' IPOs and listed companies, such as Investor AB in Sweden, as well as pension funds that might be considered as potential co-investors. This includes smaller funds that can invest modest amounts in IPOs (for EUR 1-2m IPOs). According to the interview feedback, 90% of Swedish IPOs involve companies with a capitalisation of below EUR 600m with 60% of the listings in 2019 being below EUR 10m. An example of a public fund in Sweden is the ALMI fund which has holdings in 17 listed companies and matches up to 50% of the investment made by other investors. Smaller firms listed on the stock market also attract retail investment with 80% of Swedish households estimated to own shares.

These examples illustrate the **diversity of market conditions across Europe.** There are some differences of opinion on whether an EU Fund should focus on certain countries where SME IPO growth markets are underdeveloped or non-existent or leverage existing IPO markets that are already developed. However, if the EU Fund's investment mandate is flexible this could mean that in relatively weak IPO markets, the Fund's operations could focus more on pre-IPO investment activities whereas in countries where IPO markets are relatively well-developed, more emphasis could be placed on supporting the IPO itself and secondary issuances (if the EU Fund's rules are flexible enough to allows this). Thus, in countries in the Baltic region, for example, the focus could be more on the pre-IPO phase given the small size of companies and capital markets, while in countries such as Sweden and elsewhere in the Scandinavian region, a stronger focus on the IPO and post-IPO stages would be more appropriate. The possibility of using different EU Fund options in different markets might be one way of helping to ensure that interventions are tailored to differing circumstances.

Some stakeholders we consulted argued that the EU Fund should target **regional groupings of Member States with similar investor bases, banking systems and stock markets.** This, it is argued, would help overcome the reluctance of major institutional investors to enter smaller and more fragmented markets which lack critical mass and help to develop an IPO eco-system that is conducive to capital market development. Moreover, it is argued that this approach could also help promote **cross-border investments** and reflects the fact that banks and fund managers might understand a regional market better than an EU-wide market. Potential regional groupings could include Scandinavian, Benelux, Baltic States and Western Balkan groups. However, groupings could also be based on other combinations of EU Member States where private sector investment companies operate an integrated marketing approach (e.g. Italy and Spain which several asset managers group together).

A Fund-of-Fund structure, as defined earlier (Option B) could be particularly well suited to helping to strengthen junior markets in countries where they are currently weak and lack a critical mass of equity funds that specialise in SME public and private equity financing. An advantage of a FoF structure would be that it could support the establishment of sub-funds that are specifically designed to focus on particular countries / multi-country groupings and bring together investors that operate in the stock markets concerned. The direct investment into equity funds (intermediated equity investment) and SPV models could also do this but almost certainly in a less focused and structured way as investors would be selected on an individual basis and collectively would not have the coherence of a FoF sub-fund with a group of co-investors that are selected from the region.

Looking at the broader picture of a **fragmented equity market landscape** of the EU, the EU Fund could play a role in reducing this fragmentation by focusing its investment strategy on the various stock exchange groups operating in the EU. A few of these groups dominate the growth market landscape including Euronext (e.g. Paris, Dublin, Lisbon), Nasdaq First North (Helsinki, Vilnius, Stockholm) and Deutsche Boerse AG (e.g. Frankfurt, Luxembourg), and the LSE Group (London, Milan). The EU Fund could promote equity market integration by selecting fund managers according to their experience of working across the exchanges in each group, by creating dedicated sub-funds or through a variation of Option C, i.e. establishing SPVs serving each of the main stock exchange groups. This approach of focusing the EU Fund's interventions on stock market groupings could be complemented by the type of country/regional coverage for parts of the EU where stock markets are not part of a grouping.

3.4 Private and Public Sector Engagement

Box 3.13: Key Points – Private and Public Sector Engagement

- *The Feedback obtained from the banks and asset managers that have been consulted for the study is positive with widespread support for the idea of establishing an EU SME IPO Fund.*
- *If an EU Fund could help to make investment in SME IPOs more cost-effective, then participation by major institutional investors in the initiative would become a potentially attractive proposition. Pension funds across Europe could be a further source of institutional co-investment in an EU SME IPO Fund.*
- *As a longer-term aspiration, another source of investment that could potentially be tapped into is the retail investor market. This could involve making use of equity crowdfunding platforms or attracting investment from publicly quoted funds that invest in the shares of smaller companies. Similarly, Member States could be encouraged to adopt tax incentives for retail investment in SME IPOs.*

A key issue is the extent of support from the EU's private sector financial institutions for the proposed EU SME IPO Fund. It is clearly desirable for the Fund to be able to leverage private sector support, thereby increasing the resources available for investment in SME IPOs. Ideally, there might also be national public sector investment, possibly via the NPIs (assuming state aid rules permit this).

3.4.1 Banks and asset managers

As noted earlier, the feedback obtained from the banks and asset managers that have been consulted for the study is positive with **widespread support for the idea of establishing an EU SME IPO Fund**. This is seen as making it potentially easier for major institutions to enter a market segment that is otherwise difficult to justify on commercial grounds.

Across Europe, banks generally concentrate on providing debt finance, but many have asset management operations that manage private equity investments and/or other equity funds and trusts. However, **in general, Europe's larger banks and asset managers are reluctant to invest in SME IPOs because of the small size of SME investments which make them unattractive given the costs of screening and subsequently monitoring.** If an EU Fund could help improve the risk-reward ratio of SME IPOs, then participation by banks and major institutional investors in the initiative would become a potentially attractive proposition.

Some interviewees nevertheless expressed **scepticism at the possibility of having private sector financial institutions involved in the initiative, at least at an EU level (i.e. Options B and C)** if the criteria for investing in SME IPOs via an EU IPO Fund are influenced by 'political' rather than purely financial considerations (e.g. EU strategic priorities that overrule commercial criteria or Member State support for national champions). Some of those we interviewed also raised the fear that what are seen as public sector bureaucratic practices could hamper efficient decision-making, which might create an impediment to the EU Fund's ability to make quick and effective investments. However, as we understand it, there is no intention for the Commission to be involved in decisions regarding the individual SME equity investments. But there will of course need to be a check that InvestEU governance rules are respected by the funds that are invested in.

An additional risk that was highlighted by a bank representative we spoke to is the danger of public institutions remaining invested in funds that in turn invest in companies with no possibility of an exit post-IPO. This, however, is a risk with any equity fund, whether supported by public or private investors and prior identification of the different exit routes available for investments (e.g. IPOs) will therefore be required to prevent this. There will need to be a careful selection by the EU Fund of the SME equity funds it targets and close subsequent monitoring of the individual SME investments it participates in to provide itself and its co-investors with clear exit routes.

3.4.2 Insurance and pension funds

Pension funds across Europe could be a further source of institutional investment in an EU SME IPO Fund. A representative of a major pension fund argued that the question of investing in SMEs is very much a 'live debate'. In the UK, for example, there has been a shift after the 2015 regulatory changes from employer supported 'defined benefit' (i.e. final salary-based) pensions to 'defined contribution' pensions with individuals using the capital that is transferred to them to generate a pension income from investments. Whereas the traditional 'defined benefit' pension funds generally adopted a very conservative attitude toward investment, the shift to self-invested pension funds has led to a greater focus on investing in stocks, including those of smaller firms. In the UK, the value of 'defined contribution' pension funds is now around GBP 350bn and although we do not have insights to pension funds across the EU, there is also a large sector in other countries (e.g. Sweden and The Netherlands).[64]

Those we have spoken to from the pension fund management sector in several countries in addition to the UK confirm that an EU SME IPO Fund could indeed be of interest to the funds as a way of investing in SMEs. There are regulatory considerations to be taken into account, specifically restrictions on pension funds under Solvency II investing in certain types of assets including relatively risky assets such as SMEs and their ability to invest in non-liquid assets, which might limit the possibility of an EU Fund to substantially leverage this source of investment. That said, a stock exchange manager we interviewed stated that an increased pension fund participation in the SME IPO market is realistic, as has been the case in the Nordic countries where it has been encouraged after national regulations restricting their participation were changed. The fact that pension funds in these countries are relatively small also makes investment in SME IPOs more attractive than in countries where pension funds have higher investment thresholds.

[64] While the UK's post-2020 situation is not clear at the time of writing, given that UK pension regulation still complies with the liberalisation of capital allocation under EU law, these UK funds could still invest in EU SME funds.

3.4.3 Retail investors

As a longer-term aspiration for the EU Fund, another source of investment that an EU SME Fund could potentially tap into is the retail investment market. As one asset manager we spoke to argued, with millennials entering the workforce, there is likely to be an increasingly large asset flow towards key areas such as climate change but at the moment appropriate investment products and vehicles are far and few between. Against this, in many European countries, there is a weak tradition of individuals investing their savings in stock markets. Sweden and the UK are perhaps the most notable exceptions. In both countries there are specific schemes that use fiscal incentives to encourage individuals to invest in listed and unlisted SMEs.[65]

The EU Fund could, in the longer term, promote the use equity **crowdfunding platforms** to help tap into the retail investment market. These platforms have developed rapidly in recent years and several now have a significant cross-border dimension to their operations. One example is Funderbeam, an Estonian company, which helps to raise funding for companies by creating small SPVs that crowd-in retail investors to purchase their shares. Each investor receives tokens representing his/her shares which can be traded and sold to other investors (1 token = 1 EUR). These transactions are recorded through blockchain technology. As we explain in Section 4, the Zagreb stock exchange has established an equity crowdfunding platform using Funderbeam technology to allow the trade of start-up shares.

There are a number of private sector crowdfunding platforms - one estimate is that there are now more than 2,000 in the US and Europe.[66] The larger platforms handle equity investments ranging from around EUR 150,000 to approximately EUR 500,000 at the higher end.[67]Crowdfunding equity platforms are usually more relevant to start-ups and companies at earlier growth stages. However, the EU Fund could potentially mobilise crowdfunding platforms to invest in SME IPOs. Existing SME equity funds that are supported by the EU Fund, or the sub-funds established under Option B, could be encouraged to cooperate with crowdfunding platforms to select promising SMEs and to link them to private investors to help secure equity financing, thus helping the SMEs reach a size that would make them more attractive to SME equity funds.[68,69] A Fintech platform we interviewed noted that, as an investor in SME equity funds, or through the establishment of its own sub-funds, the EU IPO Fund would be in a position to recommend investment brokers to the managers of the investee funds to find and select additional investors into the SME equity funds they run, and some of the recommended brokers could be crowdfunding platforms. The development of these equity crowdfunding platforms by stock exchanges could also be promoted by the EU as an additional measure to consolidate the funding landscape in Europe and help SMEs in their growth and trajectory to an IPO. However, given their early stage of development and the relative lack of successful use cases in raising crowd-finance for IPOs as opposed to early

---

[65] An example of this in Sweden are the investment accounts. In the UK, Venture Capital Trusts (VCTs) exempt individual investors from Capital Gains Tax on any gains made by their investments as long as this is maintained in the VCT for a minimum period of five years. The London AIM attracts retail investment because of exemptions from stamp duty.

[66] For instance, CrowdCube and Seedrs are Internet platforms which enable small companies to issue shares over the Internet and receive small investments from registered users in return. While CrowdCube is meant for users to invest small amounts and acquire shares directly in start-up companies, Seedrs pools the funds to invest in new businesses, as a nominated agent

[67] UK Business Angels Association, access: https://www.ukbaa.org.uk/member/crowdcube/

[68] C. Reffell. (2019). Crowdfunding and Venture Capital Working Together, from: https://crowdsourcingweek.com/blog/crowdfunding-and-venture-capital-working-together/

[69] (n.d). (2018). Chargemaster – An Electrifying Exit, from: https://www.ukcfa.org.uk/resources/case-studies/

stage finance, the EU SME IPO Fund should not rely too much on leveraging this type of finance at this stage.

Another possibility is that in some countries retail investment could be mobilised by encouraging existing **smaller company investment trusts and funds** to invest in the EU SME IPO Fund. For example, there are 24 investment trusts listed on the London Stock Exchange and many of these invest in SMEs across European markets at the IPO stage or later.

A constraint on the proposed EU Fund's capacity to tap into the retail investor market, at least if the Scandinavian and UK model is taken as a guide, is the fact that the sort of **tax incentives** used by national authorities to attract individual investors (e.g. exemption from capital gains tax if investments in SMEs are maintained for a minimum period of time) could not be offered at the EU level. Although beyond the scope of the present study, in the future it might be foreseeable that EU Member States could be encouraged, as part of developing additional support structures for EU SME IPO funds, to introduce tax and/or other incentives to encourage retail investment via an EU-level mechanism.

While those we consulted were mostly supportive of the idea of trying to attract retail investors, one counter-argument, put forward by a stock exchange manager that we interviewed, was that this could lead to additional volatility on the junior markets as retail investors often take a short-term view focusing on quick returns. Reflecting this, a Fintech platform in the Phase 3 market testing exercise argued that the focus of the EU Fund should be on promoting the investment into SME IPOs by professional institutional investors who are more likely to adopt a more long-term perspective.

However, in view of the success of retail investment in some IPO markets such as in Scandinavia, attracting retail investment could nevertheless be a feature of the EU Fund in some specific EU geographies. In addition, the survey we undertook via the European Investors' panel of retail investors showed that 85% of the consulted retail investors thought that an EU IPO Fund was needed. The overwhelming majority of respondents further indicated that the EU IPO fund would be very helpful providing new opportunities for retail investors in investment in SMEs and small mid-caps. These results indicate that there is some degree of investor appetite, at least from retail investors, as regards the new investment opportunities an EU SME Fund might provide. A breakdown of these results is provided below.

Table 3.6: European Investors Survey Responses 'To what extent would an EU fund be helpful to retail investors?'

Proposal	Very Helpful	Helpful	Not Helpful	Total
(a) Strengthening the exit mechanism for private equity investments	7 (16%)	22 (49%)	16 (35%)	45 (100%)
(b) Providing new opportunities for investment in SMEs and small mid-caps	33 (70%)	7 (15%)	7 (15%)	47 (100%)

Note: Survey results for 60 respondents.

The survey further highlighted the view that a plurality of retail investors thought that Option C would be the instrument that would most likely attract retail investment, while Option A the least likely, suggesting that the former might be more likely to increase investor appetite in SME IPOs.

Table 3.7: European Investors Survey Responses 'Which of the Fund Options is most likely to leverage retail investment?'

Proposal	Most likely	Likely	Least likely	Total
Option A	12 (26%)	9 (20%)	25 (54%)	46 (100%)
Option B	8 (18%)	19 (42%)	18 (40%)	45 (100%)
Option C	20 (44%)	14 (30%)	12 (26%)	46 (100%)

Note: Survey results for 53 respondents.

Additional examples of stakeholders' feedback on the participation of retail investment in the EU Fund can be read in the following box:

Box 3.14: Market Testing Feedback – Retail Investors

- 'There would be more potential in the retail market as seen in Scandinavia, but this might not be the case for institutional investors.' **– International Finance Institution's interview feedback**
- 'It is crucial that the focus of the EU Fund is to attract investment exclusively from professional investors, and its strategy should revolve around them.' **– Fintech Platform's feedback during focus group**
- 'It will be a safeguard for investors if European institutions are also investing in the SME.' **–European Investors survey respondent's feedback**
- 'An EU fund should always have an investor centric view.' **– European investors survey respondent's feedback**

3.4.4 Institutional Investor Appetite

In the consultations with private sector financial institutions, we investigated the extent to which there is interest in investing in an EU SME IPO Fund. While the research could not demonstrate conclusively the extent to which investors might themselves be likely to participate in the various EU Fund options, it was nevertheless possible to discern some more general aspects of investor appetite. Thus, the major institutional investors welcome the idea of setting up an EU Fund as a way of encouraging investors to support SME IPOs in markets that are otherwise 'below the radar'. The market testing exercise indicated that the preferred EU Fund models would be Option A (at least initially) or Option C, with the latter being seen as the most likely to appeal to private sector investors. However, as regards Option C, some stakeholders argued that there might be less interest from institutional investors in investing in an EU-wide vehicle and that their preference would be to invest in regional/national SPVs in line with a decentralised model.

The larger financial organisations that participated to our consultations suggested that a factor determining the willingness of institutional investors to participate in an EU Fund is scale, with larger investment funds being more likely to attract greater interest from institutional investors. An additional factor that could influence institutional investors' willingness to invest in the EU Fund is the choice of fund manager, as institutional investors would prefer experienced private sector fund managers if an intermediated approach is adopted. Finally, fund performance and the rate of return represent additional determinants of institutional investors' interest in participating to an EU Fund.

Box 3.15: Market Testing Feedback – Institutional Investors

- ‘Private investors tend to be sceptical if there is too much public investment intervention and control. However, the use of private fund managers could mitigate this risk and make the EU Fund more attractive to private investors.’ **– National Promotional Institution’s interview feedback**
- ‘The question of scale will influence private investors the most when choosing whether to invest or not in an SME equity fund. SME equity funds that are larger than EUR 200 million will be more attractive.’ **– Investment Bank’s interview feedback**
- ‘Should an intermediated approach be applied, institutional investors might be interested in participating, depending on who is managing the vehicle at the EU level.’ **– Investment Bank’s interview feedback**
- ‘Private investors might be willing to participate if a public intervention would provide a moderate IRR (7%).’ **– International Finance Institution’s interview feedback**
- ‘The Fund will need to create a strong track record to encourage investment – and provide a signal to the market and to potential investors in SME IPOs.’ **– National Promotional Institution’s interview feedback**

3.4.5 Other Public institutions

Other EU equity instruments have permitted the participation of national institutions. This includes **National Promotional Institutions (NPIs)** such as the National Promotional Banks. Their participation in an EU SME IPO Fund could be helpful in ensuring that the instrument achieves pan-European coverage. More particularly, the Member States’ NPIs could help increase the amount of funding available in their geographies for sub-funds if a decentralised national or country groupings segmentation is implemented. The NPBs of Lithuania, Estonia and Latvia, for example, provided investment capital for the Baltic Innovation Fund which raised EUR 130 million in total for high growth potential SMEs in the Baltic States.

However, the participation of Member States’ NPIs might raise **state aid issues.** To streamline the state aid approval process and to permit some forms of joint EU-Member State funding, the Commission proposed an amendment to one of the Council Regulations governing EU State aid, which was later adopted in November 2018. [70] This revised Regulation allows the Commission, subject to certain conditions, to exempt Member State funding channelled through InvestEU or supported by the InvestEU Fund, from the requirement to notify such interventions to the Commission prior to their implementation.

3.4.6 Relationship between public and private investors

As already explained, there is a strong interest among private sector financial institutions in participating in the operations of an EU SME IPO Fund. But, as noted earlier, a condition stressed by those we spoke to is that investment decisions should not be unduly influenced by what is described as ‘political’ considerations.

This should not be the case given that EU funding will not translate into direct influence as the **governance structures** are likely to directly involve the Implementing Partner but not the EU itself which will only be the trustee. Moreover, in the case of the FoF, SPV and Intermediated

[70] Council Regulation (EU) 2018/1911 of 26 November 2018 amending Regulation (EU) 2015/1588 on the application of Articles 107 and 108 of the Treaty on the Functioning of the European Union to certain categories of horizontal State aid (Text with EEA relevance.)

equity investment options, the ultimate investment decisions will lie with the fund managers which should help reassure private investors. Furthermore, as argued earlier, the EU will have to ensure that investments made by the EU SME IPO Fund still fulfil the EU's strategic priorities. General investment guidelines could be defined at the EU level with fund managers at the Member State/regional level having the discretion to adapt them to specific local priorities (see Section 3.6).

Whatever the approach, there is clearly **a need to develop a structure that does not crowd-out the private sector** and that also minimises the losses suffered by public sector when making riskier investments that the private sector is unwilling to make on its own. Given the low current levels of investment in SME IPOs there is a likelihood that the main challenge for the EU Fund will be to support additional investment in SME shares and preventing the crowding-out of private investors may not therefore be a significant issue. This is likely to be especially so in certain market segments (e.g. regions and sectors with undeveloped IPO markets). At the level of individual investment decisions, the EU Fund will have to adopt criteria that minimise the risk of crowding out by striking a balance between selecting investments that are worthwhile, on the one hand, but which nevertheless do not attract the necessary support from private sector sources alone, on the other.

A further concern of private sector financial institutions that we consulted is that the EU Fund should minimise what are seen as **potentially bureaucratic procedures**. The investment business is fast-moving and there is a concern that decision-making could be slowed down by multiple tiers of supervisory control associated with the EU interest in the fund. This concern is probably mis-placed but nonetheless real and private sector investors will need reassurance that governance structures would avoid excessively bureaucratic procedures.

A question raised in the Commission's terms of reference for this study is whether the public stake in the EU Fund should be **subordinated or 'pari passu'** to help mitigate private investors' perception of risk. The 'pari passu' option ensures that public and private investment are placed into a financial structure on an equal footing, i.e. the EU and private investors would be subject to the same level of losses if the EU Fund's investments were to fail, and would equally share in any profits. Should the EU equity interest be subordinated, then it would not have priority vis-à-vis other investors as regards repayments in the event of investment losses or liquidation of the Fund.[71]

Under EU regulation, for a financial transaction to be made on a 'pari passu' basis, the intervention of the private sector must be of real economic significance, which the Commission interprets as meaning a private investment making up at least 30% of the total investments in a company.[72] The issue of 'pari passu' versus subordinated interests is linked to the issue of state aid, i.e. the extent to which a subordinated public stake might distort competition. However, there are justified applications of subordinated mechanisms in case of, for example, strong market failures.[73] The following table highlights the implication of 'pari passu' shares according to investors and the EU state-aids law:

---

[71] D. Liberto. (2019). Junior Equity from: https://www.investopedia.com/terms/j/junior-equity.asp

[72] European Union Law of State Aid by Kelyn Bacon, from https://books.google.co.uk/books?id=p1njDQAAQBAJ&pg=PA184&lpg=PA184&dq=pari+passu+investment+equity+vehicle&source=bl&ots=MUrgeLNoXc&sig=ACfU3U0iB4xNn2Txic8IJ67ZXCvgcDMPlw&hl=en&sa=X&ved=2ahUKEwiUu7SZ_p_qAhWpVRUIHejIBzUQ6AEwEXoECGcQAQ#v=snippet&q=pari%20passu&f=false

[73] Technical Group 4: Further development of financial instruments and application in practice, From: https://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupDetailDoc&id=19082&no=2

Table 3.8: Summary - Pari Passu and subordinated equity relationship and state aid rules

Public Stake	Risk profile	Relationship	State-aid implications
Pari passu	Equal risk	Private investors likely to suffer as much from failed investments as the IP and gain as much from successful investments.	No state-aid implications
Subordinated	Lower risk	The EU investment would bear a greater share of losses compared with private investment. However, the assumption of less risk by private investors would not translate into lower remuneration should the investment be profitable.	State aid rules may apply (depending on EU IP)

In fact, EIB or EIF investments with a public guarantee are not considered to be public financing as they are considered by the EU to be private market-driven organisations.[74] Moreover, as an EU IP would be using EU budget instead of being a direct investor, EU state-aid rules might not apply to an EU IP's SPV or FoF. Under an Intermediated equity investment model (Option A), investment would take place directly in pre-existing SME equity funds, these investments therefore would need to be made on a 'pari passu' basis, unless they involved the EIB Group.[75] In the EU Fund Options B and C defined earlier, the EU capital contribution could be either subordinated or 'pari passu'. In Option C this decision could apply to both the EU-level structure level and SME equity fund level, and the same could be said about the FoF structure should it attract private investment.

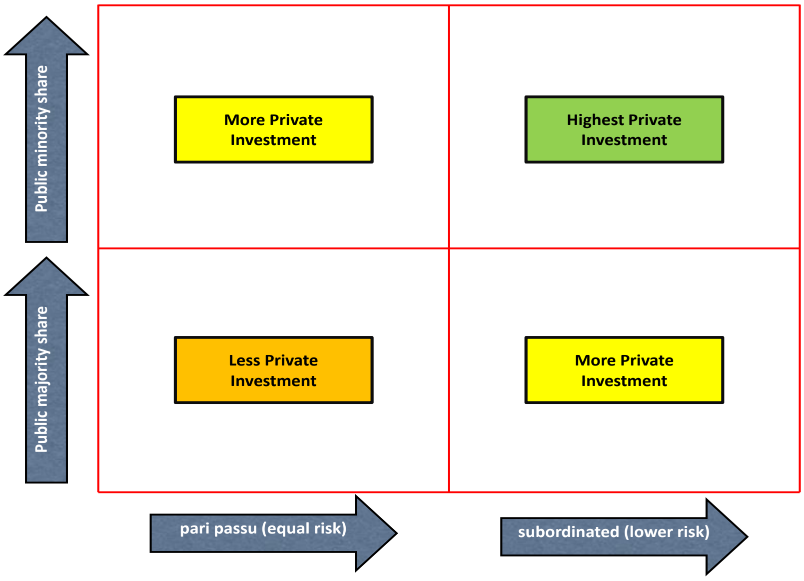
Another issue that has been raised in the interviews for this assignment is that, in order to reassure SME owners about the control of their companies, the EU Fund should only be used to purchase a **minority shareholding in SME IPOs**. There are some examples of this approach (e.g. KfW Capital in Germany and the UK's Business Growth Fund). Such an approach corresponds with the notion of a **longer-term, 'patient' capital interest in SMEs**. Greater if not majority private participation and control seems to be a feature that provides enhanced market validation to private investors in public-private strategic funds, according to research from the World Bank.[76] A greater private sector stake leverage however comes with less control over policy implementation by the public stake.[77] A combination of both a subordinated and a minority public sector stake would in theory, according to our desk research, be the most attractive to private investors. The relationship between subordinated and 'pari passu' shares, as well as the effects of the degree of public sector participation versus the private sector role is summarised in the chart below in a way that highlights the preferences of potential private sector investors according to existing research.

[74] European Union Law of State Aid by Kelyn Bacon, from https://books.google.co.uk/books?id=p1njDQAAQBAJ&pg=PA184&lpg=PA184&dq=pari+passu+investment+equity+vehicle&source=bl&ots=MUrgeLNoXc&sig=ACfU3U0iB4xNn2Txic8IJ67ZXCvgcDMPlw&hl=en&sa=X&ved=2ahUKEwiUu7SZ_p_gAhWpVRUIHejIBzUQ6AEwEXoECGcQAQ#v=snippet&q=pari%20passu&f=false

[75] Guidance on State aid in European Structural and Investment (ESI) Funds Financial instruments in the 2014-2020 programming period

[76] Halland, H., Noël, M., Tordo, S., & Kloper-Owens, J. J. (2016). Strategic Investment Funds: Opportunities and Challenges. Policy Research Working Papers. doi:10.1596/1813-9450-7851

Figure 3.2: Private sector preference



Despite the existing research's findings illustrated in Figure 3.2, the interviews in the Phase 3 market testing exercise did not suggest a strong preference as to whether the EU IP's investment participation should be subordinated or not. Rather, the case for **investments being either exclusively on a 'pari passu' basis or with 'pari passu' being the standard option** was made during some of the Phase 3 consultations, with the use of subordinated participation being considered only an option. However, interviewees also made the point that EU IP investments would need to be economically meaningful to raise additional private capital. It was further argued that the EU Fund size as well as the choice of fund managers would be critical factors in in determining the attractiveness of an EU Fund for private investors.

According to some of the Phase 3 market testing exercise, **the EU Fund's share of investment in SME equity funds should be agreed on a case-by-case basis, but should not exceed 50% for EU capital exposure in any individual SME equity fund**, and its contribution could be capped to avoid over-exposure to one single large fund while still giving the EU Fund the flexibility to engage in large investments. It was suggested that **the size of the EU Fund's individual investments in individual equity funds should be in the range EUR 20-50 million with an overall target of EUR 100 million.** Interviewees further recommended **limiting EU exposure to individual SMEs' shares to a minority holding, i.e. under 25% to be aligned with the InvestEU guarantee limits.** Examples of stakeholders' feedback on the relationship between public and private investors can be read in the following box:

Box 3.16: Market Testing Feedback – Relationship between public and private investors

- 'This type of interventions would find it hard to capture significant amounts of private investment. Only the First North market has been successful in attracting private investment into SME IPOs.' **– International Financial Institution's interview feedback**
- 'The best form of investment for an EU Fund would be on pari passu basis, with a minority participation in SME funds (less than 50%).' **– Stock Exchange Representative's feedback during focus group**
- 'The use of subordinated shares in the EU Fund might be useful but it might also send the wrong signal - if shares are on a pari passu basis, private investors might be more easily convinced about the quality of the investment.' **– Strategic Fund-of-Funds' interview feedback**
- 'It is unlikely that large institutional investors would invest in a Pan-EU vehicle, due to a lack of clients in some of the markets it operates. Local SPVs would be able instead to seek participation from national banks with a local focus.' **– Investment Bank's interview feedback**
- 'The proposed cap of 25% of EU co-investment and EUR 30m per fund/SME should probably be higher to attract private sector support. EU investment could be either pari passu or subordinated - the starting point, however, should be pari passu with asymmetric asset sharing.' **– International Financial Institution's interview feedback**

3.4.7 Conclusions – Private and Public Sector Engagement

This section has explored factors influencing the likelihood of different types of private investors participating in an EU Fund at the EU level and/or through supported interventions in Member States. A key conclusion is that **the ability to attract private sector investment will differ depending on the form the EU Fund takes** (Option A, Option B and Option C) and the stages in the IPO process which the EU Fund supports (pre-IPO, IPO and post-IPO).

As discussed in Sub-Sections 3.2.3 and 3.4.2, **the market testing exercise suggests that private sector investment would probably be easiest to raise under Option C.** This would be especially the case if Option C is implemented in a decentralised manner given that local investment vehicles would increase the scope to attract institutional and possibly retail investors. Against this, the costs of setting-up several SPVs serving different markets could act as a deterrent to some investors.

Under all the Fund options, the Phase 3 market testing suggests that **EU investment should ideally be on a 'pari passu' basis with a minority share.** Exposure to SME equity, whether direct or indirect, should be less than 50% in all cases. It could have been assumed, and earlier desk research suggested this, that EU investment would have to be on a subordinated basis to attract private sector investors. However, the market testing exercise suggested that this need not necessarily be the case.

3.5 Size of the Fund and Cost Benefit Assessment

Box 3.17: Key Points – Size of the Fund and Cost Benefit Assessment

- *The approach that we have adopted to determining the size of the EU Fund is to examine past trends in SME IPOs across Europe and to assume that the EU Fund should be used to move the trajectory upwards over a period of time compared with the past trends.*
- *To estimate the EU Fund costs, we have examined four scenarios with regard to the percentage increase in additional IPOs that could be adopted as a target for coming years. Based on the data for the 2014-19 period for SME IPOs, we have then estimated the amount of investment that would be needed to achieve the target.*
- *The scenarios that have been developed are the status quo (for reference purposes) and three 'change' scenarios reflecting differing levels of ambition with regard to increasing the number of SME IPO compared with past trends. The status quo (Scenario A) is defined by the average number of SME IPOs on EU-27 stock exchanges during the period 2014-19, i.e. an average of 107 SME IPOs per year on average. The three main scenarios are B, C and D which involve increasing the number of IPOs by 10%, 20% and 50% respectively.*
- *In addition to the IPO-related scenarios, we have varied the private sector co-investment rate (i.e. examined the effect on the EU contribution to the Fund based on co-investment rates of 10% and 25%) at the intermediated level of equity. Last but not least, we have presented the analysis separately for the three definitions of the SME target group (market capitalisation of up to EUR 200 million, staff of up to 500 and staff up to 3,000).*
- *Given the likely effect of COVID-19 on the EU economy, a reasonable goal for the EU Fund would be to fulfil Scenario B and increase the number of SME IPOs by 10%, or approximately an additional 64 SME IPOs in the 2022-27 period. This would involve an EU contribution of EUR 738 million to the EU Fund, i.e.25% of the overall investment excluding provisions for losses and abandoned IPOs.*
- *The EU Fund should be open for at least 5-7 years to allow the investment rate to build up from what will probably be a slow beginning in the post-COVID-19 period and to allow share prices to reach a level where disinvestment can take place on a profitable basis. Private sector investors should be asked to ideally agree to a post-IPO lock-up period of 6-12 months.*
- *In addition to the EU Fund costs, this section examines the financial and economic returns that could arise from the EU Fund's interventions and which can be estimated in quantitative terms, as well as other benefits that can only be assessed qualitatively.*

There are **different ways in which the costs of an EU Fund can be estimated**, notably in relation to the financial resources needed to fulfil an ambition with regard to increasing the number and value of SME IPOs in coming years or, conversely, on the basis of the amount of EU budgetary resources that the EU is willing to commit to the Fund and what can be achieved with this in terms of IPO volumes and values. The same basic methodology can be used in both approaches – the difference lies in the starting point. Comparisons with other EU funds and other equity funds are also helpful as a guide to the appropriate scale of EU intervention.

The estimates in this section regarding the EU Fund size that will be needed to have a significant impact are unlikely to vary significantly across the different Fund options that were presented in Sections 3.1 and 3.2. However, the EU's specific contribution to the Fund could be influenced by a number of factors, in particular the extent of private sector leverage and, secondly, the co-financing rates that are used for investments. The estimates presented below allow for variations in these and other factors. In addition, we have assumed that **in a post-COVID-19 environment, EU-27 IPO activity is likely to remain subdued well into 2021** (see Section 3.8). As such, we have adopted a conservative approach to estimating the EU Fund investment costs.

After presenting the various EU Fund ‘cost’ scenarios in Section 3.6.2, we then examine the potential benefits in Section 3.6.3. First, however, we summarise the key parameters that have been used as a basis for the cost estimates. For the sake of completeness and ease of reference, some data that are presented in Section 2 of the report on IPO trends and values are reproduced here.

3.5.1 Key parameters in determining the EU Fund costs

As a basis for the estimates, the approach that we have adopted is to examine past trends in SME IPOs across Europe and to assume that the EU Fund should be used to help **move the SME IPO trajectory upwards over a period of time compared with past trends**. As noted in Section 2, IPO trends in the past few years have been subdued with no significant trends up or down across most European stock exchanges until 2019 when the number of SME IPOs declined. To estimate the EU Fund costs, we have examined **several scenarios with regard to the percentage increase in additional IPOs compared with the annual average for 2014-19 that could be adopted as a target for coming years**. Based on the data for the 2014-19 period for SME IPOs, we have then estimated the amount of investment that would be needed to achieve the target.

As noted in Section 2 (see Tables 2.3 and 2.4), **during the years 2014 to 2020 Q1 a total of 600 IPOs involving SMEs with a market capitalisation of up to EUR 200 million were conducted on EU-27 exchanges (FESE members only)**. During the same period, 476 IPOs involving SMEs with a market capitalisation of up to EUR 200 million were completed on stock exchanges of the LSE Group (London Stock Exchange and the Borsa Italiana). To allow for a broader definition of the target market for the EU Fund we have also examined FESE data for SMEs with up to 500 employees and, separately, for SMEs with up to 3,000 employees (for the purpose of the scenarios we have not attempted to define ‘innovative’ firms and, indeed, the data would not permit an analysis based on this criterion whatever definition is adopted).

Using FESE data, we have calculated that **during the period 2014-19, there was a yearly average of 97 small cap IPOs involving SMEs with a market capitalisation of up to EUR 200 million, 86 IPOs for companies with up to 500 employees, and 105 IPOs for companies with up to 3000 employees** (see Table 2.2). The calculations are based on the IPO data from the FESE which contain IPOs on the EU-27 exchanges. The London Stock Exchange and the Borsa Italiana are not part of this dataset. The FESE data contain more information than the WFE dataset and therefore some calculations cannot be undertaken with the WFE data but only with the FESE data (and visa-versa). Our calculations in Sections 2.1 have shown that on average two IPOs from the EU-27 were conducted on the LSE each year and 8 IPOs per year on the Borsa Italiana. We have therefore used these 10 IPOs per year to adjust the calculations of the baseline scenario based on FESE data.

Table 3.9 shows the **number of IPOs by year on the EU-27 Stock Exchanges during the 2014-20 period** while Table 3.10 shows that average market capitalisation of the IPO, broken down by the various definitions making up the SME/smaller mid-cap definitions being used for the study.

Table 3.9: Number of IPOs on the EU-27 Stock Exchanges, 2014-2020

EU27 exchanges	Market Capitalisation up to EUR 200 million		Staff up to 500		Staff up to 3000	
	Up to EUR 200m	More than EUR 200m	Up to 500	More than 500	Up to 3000	More than 3000
	SMEs	Other Companies	SMEs	Other Companies	SMEs	Other Companies
2014	102	55	93	64	117	40
2015	112	75	112	75	143	44
2016	97	37	69	65	86	48
2017	107	56	113	50	131	32
2018	101	33	71	63	90	44
2019	62	24	58	28	65	21
2020 (Q1)	19	4	18	5	20	3
Average 2014-19	**97**	**47**	**86**	**58**	**105**	**38**

Source: analysis of FESE data

Table 3.10: Average Market capitalisation of SME at the time of their IPOs on the EU-27 Stock Exchanges, 2014-2020

	Market Capitalisation below EUR 200 million		Staff up to 500		Staff up to 3,000	
	Total market capitalisation in EUR million	Market capitalisation per IPO, in EUR million	Total market capitalisation in EUR million	Market capitalisation per IPO, in EUR million	Total market capitalisation in EUR million	Market capitalisation per IPO, in EUR million
2014	6,110.3	59.9	1,4417.5	155.0	28,535.0	243.9
2015	6,351.9	56.7	8,109.2	72.4	58,587.1	409.7
2016	5,704.0	58.8	8,157.1	118.2	20,634.6	239.9
2017	6,117.9	57.2	21,162.3	187.3	38,403.3	293.2
2018	6,201.7	61.4	14,471.9	203.8	24,649.1	273.9
2019	2,717.7	43.8	12,227.5	210.8	26,639.0	409.8
2020 (Q1)	573.7	30.2	1,593.0	88.5	2,054.8	102.7
Average p.a. 2014-19	**5,533.9**	**57.1**	**13,090.9**	**152.2**	**32,908.0**	**312.4**

Source: analysis of FESE data. Note: The table shows the market capitalisation of SMEs at the time of the IPO and not the money raised during the IPO (which is typically lower than the market capitalisation).

As can be seen, the market capitalisation per IPO is EUR 57.1 million on average for companies with a market capitalisation of up to EUR 200 million. For companies with up to 500 employees the average market capitalisation is EUR 152.2 million, while the average market capitalisation of companies with up to 3,000 employees is EUR 312.4 million on the first trading day (Table 3.10).

The capital raised by an IPO is estimated in two ways. On the one hand, there are the newly issued shares, and on the other hand there is the sum of newly and already issued shares (i.e. those privately placed before an IPO). There is only a small number of companies that have already issued shares before the IPO. **While the average IPO in the period 2014-19 raised EUR 14.5 million in newly issued shares on EU-27 exchanges, the average IPO raised EUR 21.6 million in newly and already issued shares** (Table 3.11).[78] The difference arises from the fact that some companies have issued shares in a private placement before their IPO. Since we are focussing on IPOs, we only use the information on newly issued shares in our derivations. For the calculation of the EU Fund size, these numbers are important parameters. The companies, which issued shares on private markets before their IPOs are often larger. As such, there would be a risk of overstating the size of an IPO by using the sum of newly and already issued shares. Therefore, we have decided to use the average number of only the newly issued shares as a parameter since the inclusion of the number of existing shares would lead to an overestimation of the fund size.

Table 3.11: Capital Raised through an SME IPO on EU-27 exchanges (EUR million)

Year	Market Capitalisation below EUR 200m		Staff up to 500		Staff up to 3000	
	Newly Issued Shares	Newly and Already Issued Shares	Newly Issued Shares	Newly and Already Issued Shares	Newly Issued Shares	Newly and Already Issued Shares
2014	8.8	19.4	59.1	71.3	92.3	104.6
2015	18.0	22.9	44.9	60.1	58.9	113.5
2016	13.2	18.4	15.9	30.1	32.6	117.7
2017	17.4	22.2	33.9	56.2	44.5	83.1
2018	17.7	28.0	28.7	53.8	36.4	78.2
2019	11.8	18.4	25.2	76.3	46.7	126.0
2020 (Q1)	15.1	16.1	7.3	22.1	29.0	33.7
Average per year 2014-19	**14.5**	**21.6**	**34.6**	**58.0**	**51.9**	**103.9**
Average per year 2015-19	**15.6**	**22.0**	**29.7**	**55.3**	**43.8**	**103.7**

Source: analysis of FESE data. Note: missing datapoints for newly issued shares for 2014 and 2020 (Q1) were imputed by means of data from newly and already issued shares to avoid inconsistencies because of small sample bias.

SMEs and small mid-caps with a market capitalisation of up to EUR 200 million raised on average EUR 21.6 million through an IPO in the period 2014-19, while companies with up to 500 employees and companies with up to 3,000 employees raised EUR 58 million and EUR 103.7 million on average, respectively. If we only regard the newly issued shares, the companies with a market capitalisation of up to EUR 200 million raised on average EUR 14.5 million through an IPO, while companies with up to 500 employees raised EUR 34.6 million on average. If we define small cap companies as firms with up to 3,000 employees, the corresponding number is an average of EUR 51.9 million raised by an IPO. Since the year 2014 seems to be an outlier, we also calculated the averages for the period 2015 to 2019 to check the robustness of the results. In that period SMEs defined in terms of market capitalisation raised slightly more (EUR 15.6 million) and SMEs based on headcount less (EUR 29.7 million and EUR 43.8 million). Consequently, the 2014-2019 results proved to be robust for the capital raised by SMEs with a market capitalisation below EUR 200m, as for

[78] The numbers for the London Stock Exchange are a bit higher. The average IPO here raised during the period 2014-19 raised EUR 20.0 million as newly issued shares and EUR 27.9 million as newly and already issued shares.

SMEs with staff numbers of up to 500 or 3000, the 2015-2019 period should be used as a baseline instead.

3.5.2 EU Fund cost scenarios

We have developed **four scenarios – the status quo (for reference purposes) and three 'change' scenarios** reflecting differing levels of ambition with regard to increasing the number of SME IPOs compared with the past trends analysed earlier (Section 2). **The status quo is defined by the average number of SME IPOs on EU-27 stock exchanges during the period 2014-19, i.e. 96.8 SME IPOs per year on average**.

Box 3.18: Summary - Illustrative EU SME IPO Scenarios and Targets

- **Scenario A - Status quo:** the status quo (i.e. baseline scenario) is defined as the average number of IPOs each year during the period 2014-19 (i.e. **107 IPOs** per year on average for SMEs with a market capitalisation below EUR 200 million). Our analysis of the FESE data indicates a figure of **97 SME IPOs p.a**. which were adjusted for 8 IPOs per year on Borsa Italiana and 2 IPOs of EU-27 companies on LSE. This would lead to an average of **EUR 10.1 bn** of capital being raised from **642 IPOs during the period from 2022-27**.
- **Scenario B (1.10 factor):** the first 'change' scenarios would involve setting a target to increase the number of IPOs by a factor of 1.10 compared with the status quo, i.e. to a total of 706 IPOs which means **64 additional IPOs during the 2022-27 period**.
- **Scenarios C (1.25 factor):** Alternatively, if the more ambitious objective is set to increase the number of IPOs by a factor of 1.25 compared with the status quo, this would lead to 803 IPOs or **161 additional IPOs during 2022 -27**.
- **Scenario D (1.50 factor):** In this scenario the Fund's interventions would lead to the number of IPOs being increased to 963, which corresponds to **additional 321 IPOs during the 2022-27 period.**

We have estimated the size of the EU Fund with the help of the parameters summarised in Table 3.11. The average number of SME IPOs in the EU-27 together with the average of 8 IPOs from Borsa Italiana and 2 IPOs per year involving EU-27 companies that were conducted on the LSE defines the benchmark scenario or status quo. Based on these parameters and the definition of an SME we arrive at 642 IPOs for companies with a market capitalisation of up to EUR 200 million, 576 IPOs for companies with up to 500 employees and 690 IPOs for companies with up to 3,000 employees in the status quo. Having established that the average yearly new capital raised at IPOs by an SME with a capitalisation up to EUR 200 million is EUR 15.8 million, we estimate the average yearly amount for all IPOs at EUR 1,690.6 million, and the total amount for the 2022-2027 period at around EUR 10.1 billion.

For the purposes of the scenarios, we have **increased the baseline by 10% (Scenario B) or 25% (Scenario C)** or **50% (Scenario D)** reflecting different levels of ambition. These scenarios serve as a guide for the EU SME IPO Fund's target which would probably lie somewhere within the range calculated here. Thus, under Scenario B the aim would be to increase the number of IPOs by 64 IPOs above the baseline during the 2022-27 period. This increase would mean an additional EUR 1,014 million in share proceeds from the IPOs (Table 3.12).

In addition to the three scenarios, we have varied the **co-investment rate, which is the share of the investment accounted for by the EU money and the share of investment involving money from other investors** at the intermediated equity level (i.e. examined the effect on the EU contribution to the EU Fund based on co-investment rates of 10% and 25%), and not the final beneficiary stage (SMEs and their IPOs). Again, the assumptions for the co-investment rates serve as a guide for the EU Fund. While the actual co-investment rates could be higher judging by the experience of other equity funds that the EU has invested in (see Section 3.5.3), in light of COVID-19 and the likelihood that European stock markets will remain subdued in 2021 if not beyond, we have adopted a conservative approach for the purposes of the estimates.

Last but not least, we have presented the analysis separately for the three **SME target groups**: (1) SMEs with up to EUR 200m capitalisation; (2) SMEs with up to 500 employees; and (3) all SME types with up to 500 employees (including non-innovative types) in addition to innovative SMEs with up to 3,000 employees. The results are set out below.

Table 3.12: Inputs to the fund modelling

	Data Sources	SMEs defined as capitalisation up to EUR 200 million	SMEs defined by staff up to 500	SMEs defined by staff up to 500 + innovative SMEs with ≤ 3000 staff
Average IPOs per year	FESE members	97	86	105
	Borsa Italiana*	8	8	8
	EU-27 companies on LSE*	2	2	2
	Benchmark (Status quo) p.a.	**107**	**96**	**115**
Benchmark (Status quo) number of IPOs for 2022-27		**642**	**576**	**690**
Newly issued shares per IPO in EUR million for 2022-27		15.8	29.2	42.8
Capital raised in benchmark scenario for 2022-27 in EUR million		10,144	16,819	29,532

*Note: * calculated adjustment factor from table 2.3. Source: based on data from FESE and WFE taken from tables 2.3, 3.2 and 3.4. The year 2014 was excluded from the calculation of the average volume of newly issued shared per IPO since the average value of this year seems to be an outlier because of missing values for smaller companies in the dataset.*

The estimates shown above are based on a **six-year operational period for the EU Fund**. As noted earlier, we have defined the baseline or status quo in terms of the average annual number of IPOs on EU-27 exchanges plus two additional IPOs of companies from the EU-27 which were conducted on the LSE. The 97 IPOs on average plus 8 from Borsa Italiana and two on the LSE gives **us a benchmark of 107 IPOs per year or 642 IPOs over the six-year operational period of the EU Fund**.

- Under Scenario B, i.e. **increasing the number of IPOs by 10% during the 2022-27 period,** we arrive at +64 additional IPOs (see Table 3.12).
- We earlier calculated that in an average IPO for an SME with up to EUR 200 million market capitalisation, EUR 15.6 million will be raised, which will result in a prediction of an additional **EUR 998.4 million** overall that will be raised in these additional IPOs (64 x EUR 15.8m).
- In the scenario, in which the EU Fund invests 10% and the private sector 90%, then the

EU Fund's investment of EUR 101 million in these IPOs **would be aimed at mobilising EUR 931 million of private sector investment** (see Table 3.13).

Table 3.13 below provides estimates of the amount of EU and private sector investment required in the SME IPO Fund for the period 2022-27 depending on which definition of an SME is used for the target group, the co-investment rates and scenarios with regard to increasing the number of SME IPOs. The costs of failed SME IPOs under different scenarios are included in this table (third column). Table 3.13 (fourth column) factors in for the Fund size estimation for each of the different SME definitions the fact that some companies that might be supported by the EU IPO Fund at the pre-IPO stage do not make it to a successful IPO. For the purposes of our estimations we have assumed that an average of 50 SMEs that are supported and had planned to undertake an IPO would not actually do so.[79] Whilst this is unlikely to make any significant difference for the *cumulative* (6-year) Fund size, because most of the money invested in companies failing to IPO will be eventually recovered after a few years, when most of these companies exit through another route, it would make a difference to the *initial* Fund size.

Table 3.13: EU Contribution to the SME IPO Fund needed to fulfil SME IPO Scenarios

(a) SME definition - capitalisation up to EUR 200 million

SMEs defined as capitalisation up to EUR 200 million	Estimated EU contribution to Fund Investments from 2022 to 2027 in EUR million		Estimated loss provisions under Scenarios B, C and D		Provision for IPOs that do not proceed	Estimated EU fund contribution from 2022 to 2027 in EUR million + provisions	
Scenarios	Co-investment rate: 10%	Co-investment rate: 25%	Co-investment rate: 10%	Co-investment rate: 25%		Co-investment rate: 10%	Co-investment rate: 25%
Factor 1.10	101	254	7	18	7	115	279
Factor 1.25	254	634	18	46	18	290	698
Factor 1.50	507	1,268	37	91	36	580	1395

(b) SME definition - up to 500 employees

SMEs defined by up to 500 employees	Estimated EU contribution to Fund Investments from 2022 to 2027 in EUR million		Estimated loss provisions under Scenarios B, C and D		Provision for IPOs that do not proceed	Estimated EU fund contribution from 2022 to 2027 in EUR million + provisions	
	Co-investment rate: 10%	Co-investment rate: 25%	Co-investment rate: 10%	Co-investment rate: 25%		Co-investment rate: 10%	Co-investment rate: 25%
Factor 1.10	168	420	12	30	6	186	456
Factor 1.25	420	1051	30	76	16	466	1143
Factor 1.50	841	2102	61	151	32	934	2285

(c) SME definition - up to 3,000 employees

[79] This number is based on data for 2018 when 50 companies withdrew or postponed an already announced IPO. This number could be an underestimate: because of the heavy reputational costs linked to the postponement or withdrawal of an announced IPO, the majority of companies can be expected to try and cancel an IPO well before announcing its intention of going public. See 'Equity Primary Markets and Trading Report', European market data update, 4Q 2018, AFME (2018).

SMEs defined by up to 3,000 employees	Estimated EU contribution to Fund Investments from 2022 to 2027 in EUR million		Estimated loss provisions under Scenarios B, C and D		Provision for IPOs that do not proceed	Estimated EU fund contribution from 2022 to 2027 in EUR million + provisions	
	Co-investment rate: 10%	Co-investment rate: 25%	Co-investment rate: 10%	Co-investment rate: 25%		Co-investment rate: 10%	o-ivestment ite: 25%
Factor 1.10	295	738	21	53	8	324	799
Factor 1.25	738	1846	53	133	19	810	1,998
Factor 1.50	1477	3692	166	266	39	1,682	3,997

Source: FESE, own calculations. Note: Parameters taken from Table 3.11.

As noted earlier, the EU fund size estimates depend on a set of parameters, which are: (i) the definition of an SME; (ii) the degree of ambition to increase the number of IPOs; and (iii) the co-investment rate. Some illustrations of the effects of varying these parameters are detailed below (these are based on Table 3.13(a) for SMEs defined as having capitalisation up to EUR 200 million).

- By varying the **definition of an SME,** the EU Fund's contribution with a co-investment rate of 10% would vary from EUR 101 million for companies with up to EUR 200 million market capitalisation to EUR 295 million, if innovative companies with up to 3,000 employees were to be included.
- By varying the **co-investment rate** from 10% percent to 25% the EU Fund size would increase from EUR 101 million to EUR 254 million. Under the lower co-investment rate EUR 913 million would have to be raised from the private sector, while under the higher co-investment rate only EUR 761 million have to be raised from the private sector. If the EU Fund's participation is attracting private investors, then more private money can be raised to reach the target and the Fund could operate with a lower co-investment rate.
- By varying the **level of ambition** from a 10% increase in SME IPOs to a 50% increase, the EU involvement could increase from EUR 101 million to EUR 507 million for the same SME category with up to EUR 200 million market capitalisation.

Conclusions – EU Fund size

Because of the number of variables (different SME definitions, different targets for SME IPOs, different co-investment rates) the scenarios provide a very **wide range of possible EU Fund investment values from an EU contribution of EUR 101 million at one end of the scale (Table 3.13(a)) to EUR 1,477 million at the other end (Table 3.13(c)).**

From the earlier assessment in this section it can be concluded that the **definition of SMEs** based on market capitalisation might be too restrictive since it excludes larger companies with up to 3,000 employees, many of which could have better growth prospects than the smaller companies. Moreover, an EU **co-investment rate** of 10% to the Fund might be too low to attract private sector investment in the IPOs and a 25% co-investment rate could be more appropriate.

At the same time, given the likelihood of the COVID-19 pandemic lasting well into 2021, if not longer, and the European economy and stock markets therefore remaining depressed for some time to come, any target **for increasing the number of SME IPOs should**, we suggest, be relatively conservative. As such Scenario B (a factor 1.10 increase in IPOs) is probably the most realistic. **Taking all these considerations together suggests that the EU investment should ideally lie in the range set out in the first row of Table 3.13(c), i.e. the lower end**

of the scale, with a 25% EU contribution to the fund. Under this scenarios, this would require a **contribution by the EU of approximately EUR 738 million** to the total invested by the EU Fund, excluding the provisions for loss-making IPOs and for planned IPOs that are abandoned (shown in Table 3.13(c)). This is the most conservative estimate for the EU Fund size for the definition of the target market of innovative SMEs with up to 3,000 employees. We have argued that is the most realistic estimate given COVID-19 and uncertainties regarding the economic and market prospects for 2021. This should not, however, preclude the EU Fund from raising further capital after an initial period of operations.

3.5.3 Alternative approaches to estimating the fund size

There are several alternative approaches that could be used to estimate an appropriate EU Fund size. The first of these is to take other existing schemes as a benchmark. The advantage of such an approach is that it is strongly evidence-based but a drawback is that other schemes are situation-specific, and their features reflect market failures that do not necessarily apply more widely.

In the UK for example, the **Business Growth Fund** (see Section 4) has supported 300 companies since 2011, which is an average of 33 per year. The 33 companies per year supported by the BGF would translate into a factor increase between 1.25 and 1.50 if applied to the EU Fund, resulting in the following number of new company IPOs per year:

Table 3.14: Factor Increase in SME IPO based on existing benchmark

	SMEs defined as capitalisation up to EUR 200 million	SMEs defined by staff up to 500	SMEs defined by staff up to 3000
Factor 1.10	11	10	12
Factor 1.25	27	24	29
Factor 1.50	54	48	58

The UK Business Growth Fund currently has a portfolio of GBP 1.6 billion investments in 260 companies, many of which either have or are expected to exit via an IPO. In 2018, roughly half of new investments were funded from operating profits and disposals. The BGF currently expects a steady state at GBP 2.1bn assets under management in about 340 companies. **For the EU-27 this would be equivalent to a fund size of EUR 15bn with investments in about 2,100 companies. This would represent an average investment of EUR 7.1 million**. Such a figure should be seen as being at the very high end of the possible EU Fund size scenarios, representing the most ambitious target for an EU intervention aimed at increasing the number of potential SME IPOs to 1,800 over a six year period (300 Fund-supported SME IPOs p.a. and 50 Fund-supported SMEs with IPOs that do not proceed).

The EIF-supported funds-of-funds can also be used as a guide. One of these, the **VentureEU** venture capital fund-of-funds is perhaps the closest example at the EU level of a FoF (we describe VentureEU in more detail in Section 4). VentureEU consists of six sub-funds each of which is led by a private sector fund manager and aims to raise EUR 500 million (i.e. a total of EUR 3 billion in total for the FoF). It is envisaged that the EU contribution to each sub-fund will be 25% of the planned total. The fund raising was still underway at the time when this report was prepared.

The EIF has also supported several **FoFs at the Member State level.** The EIF website lists a total of 41 schemes that have either been launched in recent years of which are in the process of fund-raising. The table below summarises the data that is available on the EIF website on the funding arrangements (this is only available for six of the FoFs on the website).

Table 3.15: Examples of EIF Funds-of-Funds (EUR million)

EIF-Supported Fund of funds	EIF	NPB	Private	Total	Leverage
Baltic Innovation Fund 2	78	78	350	506	6.5
Central Europe Fund of Funds	39	58	97	194	5.0
Portuguese Growth	50	50	100	200	4.0
Polish Growth Fund of Funds	30	60	90	180	6.0
Croatian Growth Investment Programme	35	35	0	70	2.0
Dutch Growth Co-Investment Programme	50	50	100	200	4.0
Total (EURm) /average	**282**	**331**	**737**	**1,350**	**4.8**

Source: https://www.eif.org/what_we_do/resources/pgff/index.htm

As can be seen, on average, **EIF funding has had a 4.8 leverage effect in terms of mobilising additional national public and private sector funding (put another way, EU funding represents 21% of the total funding**). This is the leverage at the FoF level and further leverage is achieved at the level of underlying investments. We do not have the data required to estimate the leverage in relation to the investments in SME IPOs.

The leverage rates shown above are higher than those we have assumed for the purposes of the EU IPO Fund. In our view a degree of caution is warranted given the post-COVID-19 environment and the likelihood that IPO activity is likely to remain subdued well into 2021 if not beyond that.

3.5.4 EU Fund costs and benefits

The EU Fund costs will consist of the **cost of the capital invested in SME IPOs** (this should ideally produce a positive return when the shares in SMEs are sold). Section 3.5.2 set out the cost estimates for three main scenarios. **In addition there will be operating costs,** i.e. management fees, the cost of the Fund's staff, facilities and equipment, and the research needed to screen SMEs and monitor investments**,** as well as to market the fund's activities to help generate a business pipeline. There will also be **economic costs** if the EU Fund, through the funds it invests in, remains invested in SMEs that either fail or are less successful in generating returns than expected which could lead to investment exiting at a loss. The economic costs of failed SME IPOs under different scenarios are presented in table 3.13.

If Private Equity funds are taken as a guide, then **management fees** of the EU Fund would be around 2% of the committed capital p.a. We assume, however, that if the EIF is the IP then management fees would not arise in the case of intermediated equity investment (Option A). In relation to the FoF (Option B), there could be management fees at both the FoF and sub-fund levels if private sector fund managers are appointed. In the case of the SPV, there could be management fees if the SPV itself is private sector managed but in the case of the equity funds it invests in, there would be no additional fees over and above those charged in any case by the managers in the normal course of business. In a purely commercial environment, **performance fees** would also be charged by a fund manager and these can often be around 20% of the profit made on the sale of shares in a company when the investor exits. In the case of the EU Fund, we have assumed that the EIF (if it is the IP) would not charge a performance fee and that any returns would be reinvested in the fund without deductions.

3.5.5 EU SME IPO Fund's financial returns

The returns generated on the IPOs from interventions by the EU Fund will be a critical consideration in attracting private sector investment.

For the EU Fund to generate profits, the stock price after the holding period (e.g. one year or five years) must be higher compared with the stock price on the day of the IPO. If the stock price is lower after the holding period compared with the stock price on the day of the IPO, the EU Fund would exit the investment with a loss if the depreciation of the stock price exceeds the revenues of the Fund, i.e. the management fees and the dividends. Besides this, the EU Fund would earn some management fees and probably dividends, although it is uncertain whether the companies would be able to pay dividends for some years after the IPO. But the evolution of the stock price after the IPO is important to analyse to provide an indication of the financial return risks that are involved for the EU Fund.

For the analysis of the performance of the IPO companies three considerations need to be borne in mind: first, when analysing historical data on the performance of companies after an IPO, we can calculate the ex-post returns from the stock prices. Thus, we are using information on the success of the companies, which the Fund's managers do not have at the time they are deciding about the investment. Secondly, the historical data on the performance of the companies after the IPOs are based on companies in which the Fund will not invest, since these companies are already listed. Thus, it is only possible to calculate scenarios or expectations for the fund's performance based on historical data. Thirdly, at this stage we do not know in which companies the EU Fund will invest in, so it is only possible to make assumptions about the composition of the Fund's portfolio. Concentrating only on successful IPOs would bias the EU Fund's performance upwards since the data represents information not available to the Fund at the time of investment.

Bearing in mind these considerations, we have developed three scenarios for an orientation to give some guidance on the risks involved:

Box 3.19: Scenarios for Stock Selection

- **Scenario 1 ('Perfect SME selection'):** under this scenario the EU Fund would invest only in successful IPOs, i.e. companies whose stock price increases after the IPO. We call this scenario 'perfect SME selection' because it assumes that the EU Fund managers know ex-ante which of the companies will be successful after the IPO. Depending on the year of the IPO, the one-year-after stock-price-increase would vary from 24.9% in 2014 to 41.4 percent in 2013 with an average stock-price-increase of 35.1% for IPOs during 2013-17 (see Table 3.16).
- **Scenario 2 ('Mixed portfolio'):** the EU Fund would invest in companies which are representative of all IPOs during the period 2014-17, i.e. the Fund would invest in the successful as well as the unsuccessful IPOs. With this portfolio the one-year-after stock-price-increase ranged from -5.1% for IPOs in 2016 to -30.5% for IPOs in 2014 (the average stock-price-increase for IPOs from 2014 to 2016 is -19.1%). Thus, diversification into a broad market portfolio would not work in the case of SME IPOs, because 58.7% of the companies which completed an IPO during the 2014 and 2017 period experienced a declining stock price during the year after the IPO (Table 3.16).
- **Scenario 3 ('Poor SME selection'):** for the sake of completeness we also have calculated the performance of the EU Fund on the assumption that it invests in companies whose stock price decreases during the year after the IPO. Although the fund managers are unlikely to undertake such poor SME selection, this scenario serves as a benchmark for the downside risks of the EU Fund. The one-year-after stock-price-

increase for this category ranges from -44.1% for companies which undertook an IPO in 2016 to -71.3% for IPOs in 2014. During the time span 2014 to 2017 the stock prices of the unsuccessful firms declined on average by -57.4% during the year after their IPO.

It should be added that the mean values are very sensitive to outliers in the data set, while outliers are very frequent in the dataset.

The above data demonstrate that the selection of SMEs will be critical to ensure that positive returns are likely to be generated by the EU Fund's investments. A more detailed analysis of the share price data is shown in the Table 3.16. These data are illustrations of the **risk exposure of the EU Fund** on the assumption that that Fund has invested in all companies. The result is that, judging by stock performance in the 2014-17 period, this investment approach would expose the EU Fund to a considerable downside risk given the high number of companies experiencing decreasing stock prices after an IPO.

Table 3.16: Estimated Returns 1 and 2 Years after the IPOs (2014-17)

	1 year after					2 years after					4 years after the IPO (2014)
	2014	2015	2016	2017	2014-17	2014	2015	2016	2017	2014-17	
Number of companies with an increase or decrease in their stock price after the IPO (%)											
Increase	35.5	45.6	46.1	38.3	41.3	42.3	45.5	42.1	41.2	42.7	34.3
Decrease	64.5	54.4	53.9	61.7	58.7	57.7	54.5	57.9	58.8	57.3	65.7
Overall	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**
Average stock price at the day of the IPO											
Increase	38.9	31.9	11.3	13.7	23.9	56.1	33.9	9.8	19.6	31.4	27.0
Decrease	49.9	24.5	14.9	18.0	27.1	27.7	22.9	16.5	12.1	19.3	26.0
Average increase or decrease in the stock price after the IPO (%)											
Increase	41	25	40	35	35	34	32	72	40	44	62
Decrease	-71	-53	-44	-58	-57	-95	-75	-91	-98	-90	-119
Overall	**-31**	**-17**	**-5**	**-22**	**-19**	**-40**	**-25**	**-22**	**-41**	**-33**	**-56**

Note: SMEs defined as companies with a market capitalisation of up to EUR 200 million
Source: FESE, Bloomberg, own calculations. Annotation: based on SME IPOs from the years 2014 to 2017

The data from the above table have then been used for the estimation of the **EU Fund's profits**. Under Scenario B (+10% IPOs), the EU Fund would invest in 161 companies during the period 2022-27. Table 3.17 summarizes the fund's expected profits and losses for the three scenarios:

Table 3.17: The EU Fund's expected profits and losses

Scenario 1 (perfect SME selection)	Positive-return- IPOS	Negative-return-IPOs	All IPOs
Additional IPOs under +25% IPO target	161	0	**161**
Investment EUR million (co-investment rate: 10%)	253.6	0.0	**253.6**
Gross Return after one year holding period, EUR million	342.6	-	**342.6**

Net Return after one year holding period, EUR million	89.0	-	**89.0**
Net Return after one year holding period, in percent	35.1	-	**35.1**
Management fee (2 percent of assets per year)	-	-	**30.4**
Profit or loss	-	-	**119.4**
Scenario 2 (mixed portfolio)			
Additional IPOs under +25% IPO target	67	94	**161**
Investment EUR million (co-investment rate: 10%)	104.7	148.9	**253.6**
Gross Return after one year holding period, EUR million	141.5	63.4	**204.9**
Net Return after one year holding period, EUR million	36.8	-85.4	**-48.7**
Net Return after one year holding period, in percent	35.1	-57.4	**-19.1**
Management fee (2 percent of assets per year)	-	-	**30.4**
Profit or loss	-	-	**-18.3**
Scenario 3 (Poor SME selection)			
Additional IPOs under +25% IPO target	0	161	**161**
Investment EUR million (co-investment rate: 10%)	0.0	253.6	**253.6**
Gross Return after one year holding period, EUR million	-	108.0	**108.0**
Net Return after one year holding period, EUR million	-	-145.6	**-145.6**
Net Return after one year holding period, in percent	-	-57.4	**-57.4**
Management fee (2 percent of assets per year)	-	-	**30.4**
Profit or loss	-	-	**-115.2**

Note: based on SME IPOs from the years 2014-17 as used in Table 3.12. (SMEs defined as companies with a market capitalisation of up to EUR 200 million).

Source: FESE, Bloomberg, own calculations

In Table 3.17 we have included the 4-year holding period. For longer holding periods, however, we do not have the data (2014 + 6 year holding period = 2020) and we can only calculate results for the not necessarily representative year 2014. For this reason, we based the calculations on the one year holding period and the input data based on the years 2014-17. To summarise the outcomes under each of the three scenarios:

Box 3.20: Scenarios for the EU Fund Returns

- **Scenario 1 ('Perfect SME selection'):** in this hypothetical scenario the EU Fund would invest in 161 companies, all of which experience a positive increase in their stock price one year after the IPO. Given a co-investment rate of 10% the EU Fund would invest EUR 253.3 million. Based on a management fee of 2% the EU Fund would earn EUR 5.1 million in fees and make EUR 89.0 million profits from selling the companies' shares after a one-year-holding period. Taking the 2022-27 period overall, together with the management fee of EUR 30.4 million (2% of assets per year) the EU Fund would earn EUR 119.4 million.
- **Scenario 2 ('Mixed portfolio'):** in this scenario the EU Fund would invest in 161 companies which are representative of the IPOs during the period 2014 to 2017 in terms of share price performance. Thus 67 companies would experience an increase in their stock price during the year after their IPO while 94 companies would experience a decline in their stock price. The EU Fund would therefore earn EUR 36.8 million from stock price increases but lose EUR 85.8 million from stock price decreases leading to an overall loss for the Fund of EUR 18.3 million over the 2022-27 period.

- **Scenario 3 ('Poor SME selection'):** In this hypothetical scenario the EU Fund would invest in 161 companies which would all experience a decline in their stock price. While the EU Fund would earn EUR 30.4 million in management fees, the Fund would lose EUR 145.6 million from declining stock prices leading to an overall loss of EUR 115.2 million over the 2022-27 period.

In reality, if the EU Fund adopts the role of an 'anchor' investor, it is likely to remain invested in selected SMEs beyond the two years following the IPOs. During this time, the returns are likely to improve as share prices tend to rise over time. In the case of Venture Capital, funds are structured on the assumption that fund managers will invest in new companies over a period of 2-3 years, deploy all (or nearly all) of the capital in a fund within 5 years, and return all capital to investors within 10 years. Similarly, a typical Private Equity fund has a total lifespan of approximately 10 years. The PE firm is required to invest each respective fund's capital within a period of about 5-7 years and then usually has another 5-7 years to sell (exit) the investment.

3.5.6 Economic benefits

The benefits arising from the EU Fund's investments to the European economy are difficult to estimate, let alone to quantify. Some of the EU Fund's expected benefits can, however, be estimated in quantitative terms, namely the **additional jobs and turnover** generated by SMEs that benefit from the purchase of their shares by external investors.

The FESE datasets provide an estimate of the number of employees and the revenues of companies undertaking an IPO for the years after an IPO. For the year 2014 we have data on up to four years after the IPO, while we only have data for one year after the IPOs for 2017 (hence the gaps in the table below). In the year 2014, SMEs in general increased on average their staff size by +19 employees one year after an IPO and by +38 employees (i.e. by 19% on average) two years after an IPO. Thus, small mid-caps increased their staff by +31.5 employees per year on average. When it comes to revenues, the small mid-caps increased their revenues after the IPO by +EUR 2.452 million on average.

Table 3.18: Change in Employees and Revenues after IPO

Average change from baseline year = year of IPO

	Change in number of employees				Change in revenues (in EURm)			
	1 year after IPO	2 years after IPO	3 years after IPO	4 years after IPO	1 year after IPO	2 years after IPO	3 years after IPO	4 years after IPO
2014	19	38	44	57	0.727	3.710	9.225	21.705
2015	25	29	39	-	3.267	11.013	15.822	-
2016	40	321	-	-	8.828	23.917	-	-
2017	-5	-	-	-	-21.395	-	-	-
2014-17	**31.5 per year on average per IPO**				**24.522 per year on average per IPO**			

Source: FESE, own calculations. (SMEs defined as companies with a market capitalisation of up to EUR 200 million).

Under Scenario B defined earlier, the aim would be to increase the number of IPOs by +10 percent above the baseline. Based on the estimates in the above table, we would expect jobs to grow by an overall 2,022 employees in the newly listed 64 SMEs (i.e. +31.5 employees per company). Moreover, we would expect an increase in revenues by the newly listed small caps of +EUR 157.4 million (+EUR 2.4 million per company). Under Scenarios B and C the number of additional IPOs would be 161 and 321 respectively, which would lead to +5,056 and +10,112 additional jobs created by these companies and to an increase in revenues of +EUR 393.6 million and +EUR 787.2 million respectively from 2022 to 2027. The following tables provide a more detailed analysis.

Table 3.19: Change in Employees and Revenues under different Fund Scenarios

Average change one year after the IPO

a) SME definition – capitalisation up to EUR 200 million

SMEs with capitalisation up to 200 million Euro	SME IPOs from 2022 to 2027	Additional IPOs	Additional jobs created by the IPOs	Additional revenue created by the IPOs (in EUR million)
Status quo	642	-	-	-
Factor 1.10	**706**	**64**	**2,022**	**157.4**
Factor 1.25	803	161	5,056	393.6
Factor 1.50	963	321	10,112	787.2

b) SME definition – up to 500 employees

SMEs defined by staff up to 500	SME IPOs from 2022 to 2027	Additional IPOs	Additional jobs created by the IPOs	Additional revenue created by the IPOs
Status quo	576	-	-	-
Factor 1.10	**634**	**58**	**1,814**	**141.2**
Factor 1.25	720	86	2,722	211.9
Factor 1.50	864	144	4,536	353.1

c) SME definition – up to 500 employees

SMEs defined by staff up to 3000	SME IPOs from 2022 to 2027	Additional IPOs	Additional jobs created by the IPOs	Additional revenue created by the IPOs
Status quo	690	-	-	-
Factor 1.10	**759**	**69**	**2,174**	**169.2**
Factor 1.25	863	104	3,260	253.8
Factor 1.50	1,035	173	5,434	423.0

Source: FESE, own calculations. Note: Based on the parameters calculated in Table 3.11

One question that can be asked is **whether the economic benefits of an EU SME IPO Fund would vary depending on which fund option (as defined in Section 3.2) is chosen**. It is very difficult to model an answer to this question because many factors could influence the way in which the different EU Fund options are implemented in practice. However, if just one factor – the leverage of private sector investment – is used as the key variable, then it could be argued that Options B and C are likely to generate more economic benefits than Option A because they (potentially) involve leveraging private sector investment at two levels. Some indicative estimates are provided below. It should be stressed that these estimates are highly speculative.

Table 3.20: Change in Employees and Revenues under different Fund Options

Average change one year after IPO

Fund Option	Public Funds (bn EUR)	Private Funds (bn EUR)	Sum of Private and Public Funds (bn EUR)	Additional IPOs	Additional Jobs per year	Additional Revenues per year (bn EUR)
Option A	3.7	0	3.7	86	2,723	2.1
Option B	3.7	3.1	6.8	159	5,005	3.9
Option C	**3.7**	**> 3.1**	**> 6.8**	**> 159**	**> 5,005**	**> 3.9**

Source: FESE, own calculations

There are **other EU SME IPO Fund potential benefits** that whilst more difficult or impossible to quantify could nevertheless be very significant. These can only be assessed in qualitative terms.

First, EU Fund activity on the scale outlined earlier under the 'change' scenarios would **increase liquidity in the IPO markets** because beyond the amounts directly invested in promoting the IPOs, the involvement of the EU Fund is likely to create confidence and encourage other investors to increase their IPO-related investment activities. More specifically, because the EU Fund would help encourage investment in selected SMEs based on an assessment of their prospects, it could help give visibility to companies that are relatively unknown. Secondly, assuming the EU IPO Fund stimulates additional IPOs and investor interest, SMEs will be able to **raise more growth finance** for investment in their expansion. Whilst benefits such as these to SMEs are not possible to quantify, anecdotal evidence from our research suggests that companies that go through a successful IPOs perform better in terms of jobs and turnover than beforehand and compared with their peers.

Thirdly, apart from scaling up, there could be more specific benefits if the EU Fund's investment guidelines include thematic priorities (see Section 3.3). Thus, if for example the EU Fund includes a focus on **promoting digitalisation in SMEs**, this could help them to expand their markets and to become more resilient. The COVID-19 crisis has demonstrated that businesses whose operations included a strong online presence and the ability to sell products and services via the internet are likely to have been less damaged by the economic downturn than more 'traditional' types of firms without a high degree of digitalisation. There is very little evidence available, however, that can be used to help estimate the precise effects of an EU Fund's interventions in this respect. Fourth, the EU Fund's interventions should also help to promote **innovation** assuming its investment rules include criteria that lead to firms being targeted where the proceeds from IPOs are used to for this purpose (e.g. clinical trials or perhaps commercialisation of new medicines, development of new electric vehicle technology). Again, the effects on innovation cannot be quantified.

Overall, a more active IPO market should help to **strengthen several key sectors** in EU Member States by promoting dynamic businesses with high growth potential.

Turning to the broader effects, another significant benefit of the EU Fund's interventions should be **helping to develop EU stock markets and the supporting 'ecosystem'** that is needed to promote SME IPOs. Most obviously, an increase in the number of IPOs taking place on different stock markets as a result of the EU Fund's intervention should raise their profile and could stimulate other IPOs that are not connected to the same interventions. Ideally, some of the European 'tech' firms that have tended in the past to choose the US as a place to go public might instead opt for an IPO on an EU-27 stock exchange although this effect is probably not a short-term prospect and would depend on many other factors in addition to the EU Fund. More generally, the EU Fund could contribute to reducing the fragmentation of equity markets in Europe through its interventions, especially if a regional approach is adopted to operating the intermediated fund options.

However, more immediately, financial institutions that previously considered SME IPOs to be unattractive as an investment proposition might change their position as a result of the more positive returns that should be generated by investing alongside the EU fund in SME IPOs. Linked to this, a number of stakeholders we spoke to stressed that in addition to the role played by the financial services sector, successful IPOs depend on the existence of a **well-developed ecosystem or cluster** of accountants, lawyers, marketing and the other finance-related professionals that are needed to help a company to prepare for a public flotation. Although the EU Fund will not have a role in directly supporting the development of the ecosystem, if its interventions lead to an increase in IPOs, then this should indirectly help to strengthen the IPO-related services offered by professional services firms that support SMEs with their flotations. Some of these wider factors, and their importance in the SME IPO 'ecosystem', are elaborated on in Section 3.7.

3.6 Investment Guidelines and Scoreboard

Section 3.3 set out various criteria with regard to the target group of SMEs for an EU IPO Fund, indicating that the Fund would only invest in equity funds and FoF sub-funds orientated towards these targets as it would not seek to influence the policies of existing funds (although this could be done in relation to new funds). In this section we therefore focus more on the EU level investment guidelines.

The investment policy document for the EU Fund (whether FoF or SPV), or any other EU investment approach, will ultimately be key in guiding investment managers and formulating their mandate. As a public-private fund this would need to conform with best-practice in the industry.[80]

3.6.1 EU Fund level guidelines

The future SME IPO Fund will need to strike a balance between implementing guidelines fulfilling EU objectives while not deterring private sector investors.

An SPV instrument would be less concerned about being made attractive as it will be investing in SME equity funds that have a proven track record. Similarly, under an intermediated equity investment model, the EU implementing partner would not need to rely heavily on being able to attract external investors as this funding structure does not see their participation until the secondary stage. Rather, an EU IP intermediated equity investment would need to make sure that it invests in SME equity funds that are attractive to investors but are also ensure their commitment to EU IP's investment guidelines.

A FoF approach differs as its sub-funds will need to be made attractive to private investors. To this end, the focus should be in ensuring a high enough IRR to prove its value to private investors. From an IP perspective, beyond the IRR, investment in funds should also take into account the Economic Rate of Return (ERR) and value added.

[80] See for instance, Principles for Responsible Investment (2019): Investment policy: process and practice – a guide for practitioners.

Box 3.21: Investment Guidelines

- Investment **objectives**, and guidelines for the investment process including:
  - Return on investment objectives/IRR: this will need to balance low EU cost of funds with return expectation of private sector co-investors, and their fees.
  - The investment horizon in individual investee companies, and criteria for divestment: a process leading up to an IPO may well extend over more than two years, and an additional post-IPO phase may follow.
  - Overall lifetime of the EU Fund (wind-down phase), which may well need to exceed the seven years foreseen in the InvestEU regulation or require a subsequent extension.
  - Risk tolerance and risk metrics, including with regard to liquidity risks in unlisted exposures, which could be managed through lock-up periods.
  - Other aspects that define the risk/return trade-off, such as leverage.
- **Governance arrangements**, including interaction between trustees, the Implementing Partner and the SME equity funds' investment committees as well as engagement with external managers and selection criteria.
- The **Fund's ownership role**, if a single SPV type structure were to be designed. The active development of the investee company towards a potential IPO would require a significant ownership share; at the same time the direct participation by a public body in the invested funds as an investor, including an EU Implementing Partner, itself could create conflicts of interest with private investors in the funds. Indirect EU funding through backed intermediaries should be seen as a sign of approval and that the investee company has met the highest standards in terms of governance and integrity, alongside the growth prospects. This will further boost the company's chances of accessing credit and capital market funding. Conversely, poor conduct by the investee would likely result in reputational damage for the Fund, its managers, and other investee firms.
- **Environmental, social, and governance (ESG) principles**. It is clear that the Fund would need to comply with basic ESG principles, not just by excluding certain sectors such as those with high carbon emissions, and activities that are clearly unacceptable for EU support, and should be in line with the EU's 2018 Sustainable Finance Action Plan, and the 2020 EU SME Strategy. A clear ESG profile will attract other private, long-term investors. The new Taxonomy Regulation, requiring disclosure by investee companies will in any case need to be complied with. Recent empirical research demonstrates that ESG thresholds may well bolster the risk-return characteristics of funds and will likely attract additional institutional investors.
- On this basis formulation of a due diligence process, either in the form of guidelines where external managers are engaged, or through detailed instruction to own managers; this would need to include standards for non-financial disclosure by investee companies that will allow the implementation of the agreed ESG principles.

3.6.2 Secondary level

As noted above, at the secondary level, i.e. the investments made by the SME equity funds backed by the EU Fund, investment guidelines will already exist and it is more a question of the IP selecting funds that are most likely to support EU policy objectives given their existing guidelines.

Based on past EIB experience, the Implementing Partner could develop **a scoreboard to help guide investments by the EU Fund at the secondary level**. Depending on the different EU fund structures, this scoreboard could be used to influence decisions through investment committees or other supervisory structures. In the case of the EIB, a total of 38 Scoreboards define standard criteria for policy consistency, and quality and soundness of each project, though also non-financial indicators of project quality (in the so-called Pillar 4), and a similar or simplified methodology could be proposed to develop an investment scoreboard for the EU SME Fund.

It is important that the EU Fund's scorecard measures established standards for transparency, such as they are currently applied by the EIB Group. That said, some criteria may need to be decided to suit the policy objectives of the EU IP's investment guidelines. This would need to cover at a minimum the following criteria:

Box 3.22: Scoreboard Criteria

- **Mobilisation of cross-border finance.** The score for an individual investment should be raised, where the investee company is outside of the individual fund's jurisdiction.
- **Taxonomy-alignment.** If the Fund does not set targets for the taxonomy alignment of the entire portfolio, individual transactions should disclose such alignment and be given a 'bonus' where a large share is aligned.
- **Additionality and value added**. It would need to be documented that the Fund is additional to the existing financing in the sense that such financing would have not happened in the absence of a public intervention – and that it provides value added, in the sense that such a scheme could not be offered by national promotional banks or other national interventions.

3.7 Strengthening the Wider SME IPO Ecosystem

Many of those we consulted argued that in addition to the EU Fund, steps should be taken to strengthen the wider IPO 'ecosystem'. This is likely to be only a side-effect of the Fund as its interventions will focus on investing in SMEs' share capital but the wider ecosystem issues could be addressed by a combination of EU technical assistance, Member States and other key stakeholders (e.g. the EBRD, private sector). Through its engagement with national investor communities and the issuer base the EU Fund is likely to have a significant influence, though clearly this should not be an explicit objective.

Various measures could be taken to strengthen the IPO ecosystem. According to the stakeholders we have consulted these measures could include the **promotion of greater awareness amongst SMEs of IPO requirements, benefits and potential drawbacks** (e.g. initiatives similar to those of the Elite Italia programme); improving the **networking between SMEs and potential investors** at the pre-IPO stage; the development of **SME equity indices**; improving the quality of **research on SMEs**; and ensuring that SMEs have access to high quality **advisory support** (e.g. the UK 'nomad' programme advising SMEs on the IPO process); the development of digital methods to facilitate retail investment in SME IPOs could also be an important element in strengthening the IPO 'ecosystem'.

Some smaller stock exchanges, and therefore the SMEs that might be listed in them, lack **visibility**. The EU could support efforts to promote the visibility of both the stock exchanges and listed SME landscape by helping the creation of new indices for SMEs that are listed as a way of attracting international investors (here a possible model is the US Wilshire 5000). This would in turn facilitate research activity focusing on SMEs. Indexes are also important in attracting retail investors.

The **EBRD is playing an important role in several initiatives to strengthen SME IPO support structures**, specifically in Member States in Central and South Eastern Europe. Thus, in the Baltic States the EBRD is promoting the 'Financial Support Instrument for IPOs' scheme under which 50% of the listing costs and advisor fees incurred by SMEs on the stock exchanges in the region are refunded up to an agreed limit. We understand that this scheme, which was launched in 2019, is currently being piloted in Latvia. In another initiative in six countries, the 'Research Coverage Scheme', the EBRD is helping to ensure that investors information on SMEs is improved. The EBRD is also supporting new SME exchanges and trading platforms such as 'Funderbeam SEE'. These collaboration projects allow SMEs to tap into new investment markets, such as retail investors, but also to gain access to capital at different stages in their development (pre-IPO, IPO, post-IPO), thus creating an enabling SME funding landscape. In Section 4.3 we review some of the initiatives that are especially relevant to the proposed EU IPO Fund.

3.8 Macroeconomic Context and the Fund's Operations

The proposed EU Fund is part of a longer-term strategy to promote SME IPOs, though it will be launched in the aftermath of the **COVID-19 crisis**. Many of those we have interviewed have argued that the higher leverage and debt distress in European SMEs arising from COVID-19 means that the proposed Fund will have an important role to play in promoting more sustainable SME financing, i.e. equity finance, as part of a wider recovery programme for the European economy.

Following the 'lockdowns' of the first half of 2020, periodic restrictions on economic activity, travel and mobility of labour, and on household spending in retail outlets are likely to continue into 2021. A full normalisation of economic activity is not expected until a vaccine has been found or immunity in the broader population has been achieved, at the earliest in mid-2021. This means that **the EU Fund will become operational in a context of profound economic uncertainty, depressed demand, and disrupted supply chains**. Some business models may be permanently impaired, in particular in the travel, tourism and hospitality industries; others may find new opportunities. This uncertainty will be reflected in equity capital markets, while public schemes of support to equity financing and corporate solvency may well proliferate, including through the national promotional banks.

In its latest forecast[81] the European Commission projected a **GDP contraction in 2020 of 7.7% in the euro area, and 7.4% in the EU overall**. Even though a sharp rebound is expected for 2021, the recovery would be incomplete, with output in aggregate remaining 3% below that previously expected, and investment 7% lower. Differing capacity of policies in Member States to respond will result in an uneven recovery.

The expected recession will have an impact on the EU's corporate sector which ahead of this crisis already showed stretched leverage, even though the debt service remains very low. In several EU Member States a large share of enterprises showed signs of **debt distress** even before the crisis.[82] Empirical studies suggest that where highly indebted firms are faced with

---

[81] European Commission, *European Economic Forecast, Spring 2020*, European Economy Institutional Paper 125, May 2020.

[82] For instance, the OECD in 2017 estimated the share in the total capital stock of firms with chronically weak interest coverage ratios at 14 per cent in Belgium, 16 per cent in Spain, and 19 per cent in Italy.

an adverse shock to demand, they reduce external debt, which suggests that the credit guarantee programmes may ultimately be of limited use. As the recession continues firms will further erode their reserves, raising vulnerabilities and risk premia. **Commission estimates suggest that in aggregate, enterprises could incur losses of EUR 720 billion by end-2020 in the baseline scenario**. These losses would result in substantial recapitalisation requirements ('equity repair needs').[83]

So far in 2020, the **financing environment for companies** has been remarkably resilient, in part due to government support measures. Following the early shock, IPOs on the European market came to a standstill, as the sharp drop in valuations made IPOs unattractive. **In March and April 2020 both the number of actual IPOs and of announced IPOs were sharply down** compared to issuing activity at this time of year in 2019. However, it is interesting to note that secondary listings by companies that are already listed on the market were at a level that was nearly as high as in the last year, as companies that are already listed used the equity market as an additional source of funding. European enterprises reacted to the sudden change in the funding environment by issuing a substantial amount of investment grade bonds. This contrasted with the sharp downturn in the issuance of bonds and leveraged loans of high yield companies.[84] At the same time, banks' credit standards for lending to firms have tightened in the first quarter, though banks expected a loosening as policies took effect.[85]

The extraordinary EU and national COVID-19 support are expected to prevent many insolvencies. Substantial liquidity support and credit guarantees, and some grants have been offered by national governments in support of SMEs.[86] As the recession and 'lockdown' measures become more protracted, **equity instruments and solvency support** are also offered within the context of a more flexible EU state aid regime. The Commission has proposed a significantly **expanded InvestEU programme**, including with an equity support facility, within which the new Fund would be operationalised.[87] However, a Think Tank we interviewed during the Phase 3 market testing consultations brought to our attention the fact that large institutional investors might be put under pressure by Member States' politicians to invest in national assets post-COVID and that therefore a future EU Fund would need to factor the political implications that encouraging investment in a Pan-EU IPO Fund might have in Member States' national politics. Box 3.6 sets out several possible implications of the changed macroeconomic and financing environment for the new Fund.

Box 3.23: Implications of the Macroeconomic Situation for the EU SME IPO Fund

- Uncertainty over the policy measures and the growing signs of corporate debt distress and insolvencies will result in a higher equity risk premium. The prospect of continued public support may also reduce SMEs' appetite for external equity. Inadequate equity funding through capital markets, and more leveraged balance sheets will result, underlining the need of the new Fund to bridge the funding shortfall.
- The recovery will be asymmetric across EU Member States, resulting in higher risk premia in some countries, and potentially a further withdrawal of cross-country equity positions. The 'risk sharing' role of the Fund will be elevated.

[83] Commission Staff Working Document SWD (2020) 98 final, Section 3. Even where firms use up existing working capital buffers, a financial shortfall of EUR 400 billion would remain, affecting about 25 per cent of EU firms, the bulk of this shortfall would be among financially vulnerable firms.
[84] AFME: AFME data finds Europe's capital markets have performed well despite market stress from COVID-19.
[85] ECB: April euro area bank lending survey.
[86] OECD (2020): Coronavirus (COVID-19): SME policy responses.
[87] https://ec.europa.eu/info/publications/mff-2021-2027-sectoral-acts_en

- Depressed valuations will reduce entrepreneurs' demand for external equity and incentives for IPOs. Public listings for SMEs will be particularly difficult, as the traditional problem of information asymmetry will be more daunting as the viability of many business models is uncertain. The 'seal of approval' through the backing of the EU Fund will be more significant.
- It should also be borne in mind that the private equity industry enters this recession with record liquidity, underlining the need for the fund to be highly additional to private investors.
- Also, national promotional banks structure equity support instruments, which may well overlap in scope, or target similar enterprises, thereby potentially crowding out investment in the designated beneficiaries by the new Fund.

Table 3.21: Summary – Main EU SME IPO Fund Options

	Option A	Option B	Option C
Investment Instruments			
	Intermediated Equity Investment	**Fund of Funds (FoF)**	**Special Purpose Vehicle (SPV)**
Strategic Objective	*To help increase the use of IPOs in Europe as a way for SMEs and smaller mid-caps with high growth potential to raise capital, thereby bridging the gap between private and public equity, and promoting scale-ups.*		
Implementing partner	An EU Implementing Partner (IP) would be responsible for implementing the EU SME IPO Fund using funding from InvestEU. The EIB Group could be considered a potential IP since the EIF already has a role in implementing InvestEU and other SME equity initiatives and it would allow synergies with other EU equity instruments to be maximised.		
EU level fund model	Intermediated equity investment by IP in equity funds that support SME IPOs. No private investment at this level.	A FoF would be established at the EU level with capital provided by the IP and possibly by a number of private sector financial institutions.	A closed-end SPV established at the EU level would be supported by the EU IP and a group of private sector financial institutions. A variation on this would be separate local SPVs in different countries.
Country level structure	Intermediated equity Investment by the EU IP in FoFs and/or individual SME private equity funds in EU Member States including some of the country and multi-country funds that the EU already invests in.	The FoF would invest in a number of country or multi-country sub-funds across the EU, most if not all of which it would help to create. In addition to the FoF investment, each sub-fund would also have investment from the private sector (banks, PE funds, etc.) and public institutions (in line with state EU aid rules).	The EU-level SPV or national/regional SPVs would invest in existing SME equity funds. As with Option A, these could include country and multi-country funds that already have EU investment. Alternatively, the SPVs could invest directly in SME IPOs.
Investment guidelines and SME target groups	Sector: SMEs from any sector with high growth potential and fulfilling the EU IPO fund investment criteria. SMEs: SMEs with up to 500 employees and large mid-caps with up to 3,000 employees, if they are innovative.		

	Option A	Option B	Option C
	Investment: focusing on the equity gap, i.e. investments that are too large for venture capital but below the thresholds for other private sector institutional investors. The investment range would vary and reflect the nature of the equity gap in different countries/markets. Themes: the investment criteria would be underpinned by ESG principles and other agreed themes (e.g. digitalisation and green economy).		
Investment approach	Intermediated equity investment in SME equity funds on a 'pari passu' or subordinated basis (if the EIF is the IP). Level of investment in SME equity funds would be agreed flexibly on a case-by-case basis (e.g. EUR 20-50m per fund or up to 50%, whichever is the lowest). EU exposure to individual SMEs' equity limited to 25%. The Direct EU Investment approach could last at least for 5-7 years.	EU investment in an EU Fund of Funds on a 'pari passu' basis. The FoF would have at least 25% EU investment and at least 30% private sector investment. EU/private sector investment in sub-funds would be decided on a case-by-case basis (EUR 20-50m) and the EU exposure to individual SMEs' equity would be limited to 25%. The EU Fund would operate for at least 5-7 years.	EU investment in an SPV on a 'pari passu' basis. The SPV would have at least 25% EU investment and at least 30% private sector investment. The EU share of investment in SME equity funds could be agreed flexibly on a case-by-case basis (EUR 20-50m). The EU exposure to SMEs' equity limited to 25%. The EU Fund would operate for at least 5-7 years.
Fund management	The IP would be represented in the EU-supported SME funds' structures (e.g. supervisory bodies) allowing it to have a say in investment strategies alongside other investors.	The FoF would be managed by the IP. Fund managers with private sector experience would be selected to prepare a prospectus for each of the sub-funds. They would also help identify co-investors and to manage the new sub-funds. The IP would be represented on sub-fund supervisory body or equivalent structures.	SPV investment decisions would be made by the fund manager which could come from the private sector. The IP would also be represented in the SPV and SPV-supported SME funds' structures (e.g. supervisory bodies) allowing it to have a say in investment strategies alongside other investors.
Co-investors and private sector leverage	Private sector investment would occur at the level of the SME equity funds that the IP directly invests in. Some funds could also	Private sector investment would be at the EU FoF level (like the SPV) but also in the newly established sub-funds. Each sub-fund could also have a number of public	There would be private sector investment in the SPV. The SPV would invest in SME equity funds that already have private sector investors. As with Options A and B, some funds could also

	Option A	Option B	Option C
	have public sector investors (e.g. NPBs, subject to state aid rules).	sector investors (e.g. NPBs, subject to state aid rules)	have public sector investors (e.g. NPBs, subject to state aid rules)
Geographical coverage	All three Fund options would seek to achieve EU-27 coverage. In the case of Options A and C, this could mean having to invest in existing SME equity funds to achieve EU27 coverage because of different fund specialisms. With Option B, new sub-funds would be established by the FoF that include a broad range of investors. A decentralised version of Option C would see the establishment of individual SPVs serving different EU Member States' markets. Option B or C could promote the targeted development of local capital markets as well as pan-European cross-border integration through country groupings. The type of intervention (pre-IPO/IPO/post-IPO) and amount of investment could vary from one country or multi- country group (e.g. Baltics) to another depending on market conditions and gaps.		
Role in IPO Process			
	Intermediated Equity Investment	**Fund of Funds (FoF)**	**Special Purpose Vehicle (SPV)**
Overall modus operandi	It is envisaged that the EU IPO Fund would be a cross-over fund that includes both public and private equity capital that is used to invest in shares in SMEs at several stages, i.e. before, during, and after an IPO. Through SME equity funds/FoF sub-funds, the EU Fund would act as an anchor investor in companies seeking to become public in the near future by helping to expand their shareholder base prior to the IPO to include institutional shareholders who participate in the IPO and potentially take part in secondary issuances.		
Types of intervention in the IPO process	Pre-IPO: the EU SME IPO Fund would support the investment in target SMEs for around 6-12 months before a planned IPO, to give SMEs confidence in going public and to help them prepare the IPO and to restructure the company for post-IPO operations. The private placement of shares would also be aimed at giving other private investors the confidence to support the planned IPO. The EU IPO Fund would influence the selection of SMEs through its investment guidelines by supporting funds that are mainly if not only late-stage VC and PE funds and/or through its representation on investment committees/supervisory bodies of the supported funds.		
	IPO: the EU fund would support cross-over investments (via SME equity funds/FoF sub-funds) in the shares of targeted SMEs during their IPO, taking part in the book-building process determining the number and price of shares being sold. These investments could involve SMEs that were supported during the pre-IPO stage, but the EU fund could also invest in the shares of SMEs that had not been supported pre-IPO.		
	Post-IPO: via the SME equity funds/FoF sub-funds, the EU IPO fund would remain invested in selected SMEs as an 'anchor investor' for 3-5 years with co-investors being asked to agree to a 12-18-month 'lock-up' period before selling		

	Option A	Option B	Option C
	shares. Follow-on investments would be made by the EU fund in the shares of some SMEs (particularly where the IPO is for limited capital raising and secondary issuances are more important).		
Deal flow	Potential investment targets would be identified and screened by the equity funds the EU Fund invests in.	Potential investment targets would be identified and screened by the FoF sub-fund partners in each country/country grouping.	Potential investment targets would be identified and screened by the equity funds the SPV invests in.
Key performance indicators	Outputs: amount of new capital committed by EU and other partners, leverage of private sector investment and returns. Impacts: post-IPO performance of SMEs and (if applicable) after secondary share issuance; development of stock exchanges, increased IPO use by SMEs compared with the EU-27 baseline and improved trend vis-a-vis comparator markets.		
Pros and Cons			
	Intermediated Equity Investment	**Fund of Funds (FoF)**	**Special Purpose Vehicle (SPV)**
Advantages	• Already used by EU for equity investment. • Would be a simple and quick way to establish the EU SME IPO Fund, because there is no need to establish a structure with a separate legal entity. • Could involve investing in multi-country equity funds that an EU IP already support.	• Previous experience - FoF model has been used before (e.g. EU Venture capital FoFs) • More scope for a bespoke design of the new sub-fund structures with potentially more focus on particular stock markets. • It would be easier to select investments that meet EU guidelines, given the lower reliance on existing IPO SME equity funds. • Easier to exploit synergies between sub-fund co-investors than with Options A. • High diversification, larger ticket size at FoF level, potentially attracting institutional investors.	• As with FoF, leverage of private sector investment at two levels (SPV and individual SME equity funds). • As with Option A, an SPV could make use of multi-country equity funds that EU IPs already support as financial intermediaries, providing broad market coverage. • An SPV would be able to invest directly in SMEs' IPOs, should appropriate SME equity funds not exist in certain markets. • Could support the development of new (crossover) funds at the regional level under a decentralised SPV option, leading to more dynamic SME

Pros and Cons			
	Intermediated Equity Investment	**Fund of Funds (FoF)**	**Special Purpose Vehicle (SPV)**
			IPO markets in less developed EU equity markets.
Disadvantages	• Private sector investment only leveraged at the SME equity fund level. Hence more investment needed for the same amount of SME financing • EU IP involvement in investment decisions only possible at the level of SME equity funds' supervisory structures. • Relatively few SME equity funds operate in Europe on a crossover basis, and it might therefore be challenging to ensure EU-27 coverage.	• Could take longer than Options A to implement because sub-fund structures would probably be mostly new. • There could be a double fee structure (FoF and sub-funds). • Experience is unclear on whether there would be sufficient private sector investment in the FoF.	• SPV could take a long time to establish depending on specific investment agreements. • Under a decentralised option, the SPV option might make the operation of the EU Fund more expensive. • Private sector investors in SPV could feel they have less influence on investment decisions taken by financial intermediaries.

4 Good Practice Assessment

An important aim of the study was to review experience with existing public-private IPO funds. Existing experience is important for several reasons: firstly, to help identify there any gaps in existing schemes helping to promote SME IPOs that could be filled by an EU Fund; and, secondly, to identify experiences that could be useful in defining how an EU Fund should function.

4.1 Overview

In the inception report, a total of 10 schemes were identified that an early assessment suggested could demonstrate good practices. Several additional schemes were subsequently added. These schemes are listed below.

Table 4.1: Good Practice Cases

Stage	Initiatives	Description
Pre IPO	*Deutsche Börse (DE) 'Scale for Shares'*	Deutsche Börse complements its platform for SMEs ('Scale for shares') with services to enhance trading on its stock exchange. The Deutsche Börse Capital Market Partners is a service that provides advice on the IPO process as well as investor/public relations, legal affairs and auditing.
	KfW Capital (DE)	KfW Capital is German government-backed bank subsidiary that invests in VC in tech growth SME companies. It operates as a fund of funds, investing in other funds on a long term 'pari passu' basis with private investors.
	Borsa Italiana (IT)	The Borsa Italiana has a scheme that advises SMEs during the admission period and during their listing on the exchange, like the London Elite programme.
	Almi Fund (SE)	The Almi has been established in Sweden to provide financing to early-growth companies in Sweden. The fund is financed by the Swedish government, but also receives a 50% co-financing from the ERDF. The fund is divided between different regional funds and private capital participation is invested on a 'pari passu' basis.
Pre IPO and IPO	*Xtend Market (HU)*	The Hungarian stock exchange operates an MTF for SMEs called Xtend Market with lower listing requirements and the government covers one-off listing costs and co-invests in the IPOs. The scheme supports secondary market liquidity via market making and research coverage. The Stock Exchange Development Fund is a co-investor pre-IPO and during the IPO of SMEs. A Grant Fund partially covers the costs of the IPO for SMEs.
IPO and post-IPO	*Venture capital trusts (UK)*	A Venture Capital Trust (VCT) is a publicly listed company run by a fund manager. It aims to make money by investing in SMEs on secondary markets and helping them to grow. Individual investors who invest in the trust obtain tax benefits (e.g. tax-free dividends, no capital gains tax) as long as they stay invested for more than five years. Examples of VCTs in the UK include Albion, Northern VCT and Octopus VCT.

Stage	Initiatives	Description
	High-Tech Gründerfonds (DE)	The HTGF supports German companies from seed to exit/ IPO. It is a public–private partnership. Investors include the Federal Ministry of Economics and Technology, the KfW Banking Group owned by the federal government, and 39 industrial groups.
	Baltic Innovation Fund (LT, VA, EE)	The European Investment Fund (EIF) supports the Baltic Innovation Fund. The main goal of the fund is to further develop equity investments in SMEs. The EIF has been doing so with the help of three national promotional institutions – KredEx (EE), Altum (LV) and Invega (LT).
	Nasdaq FirstNorth (SE, DK, FI)	Nasdaq FirstNorth is a Stockholm based growth-market designed to make the listing conditions easier for SMEs based in the Nordic countries. The stock exchange affords SMEs with the greater visibility they need with regional investors and prevents the fragmentation of the SME capital market in the Nordic region across small national markets.
	Funderbeam SEE (HR)	The EBRD has funded a new SME stock exchange called Funderbeam SEE. This is a collaboration between the Zagreb Stock Exchange and the Estonian investment platform Funderbeam. It allows SMEs to access the two junior markets, thereby increasing liquidity. The platform is also distinct because it allows for early stage exits before an IPO. The EBRD owns a 5.2% of ZSE.
	Caisse des Dépôts – Euronext (FR)	This is a joint initiative between the Caisse des Dépôts and Euronext to accelerate the growth of SME tech companies listed in Paris (Euronext Paris). The initiative involves a EUR 100 million investment in small caps. It also created a 'Euronext Tech Croissance index' which tracks the performance of the tech-oriented stocks admitted to listing on Euronext.
Pre-IPO, IPO and post-IPO	*Business Growth Fund (UK)*	The Business growth fund in the UK was established after the 2008 financial crisis to fund small companies at different stage of their development stage, from early-stage ventures, to more established SME and quoted companies[88]. It is led by HSBC and leverages equity financing from a number of commercial banks.
	Growth Ladder Fund (KR)	South Korea launched the Growth Ladder Fund (GLF), a FoF investing in SMEs with a focus is on innovative companies and growth-stage companies. The GLF is made of several sub-funds to meet different SME funding needs during the growth stages: pre-IPO, IPO and post-IPO. The fund receives substantial government funding but is managed by a private investment organisation (K-Growth) and is expected to last until 2023.

[88] What we do. (n.d.). Retrieved April 20, 2020, from https://www.bgf.co.uk/what-we-do/

4.2 Good Practice Cases

in this section we provide a descriptive analysis of the ‘good practice’ funds, focusing on aspects that are relevant to the proposed EU SME IPO Fund.

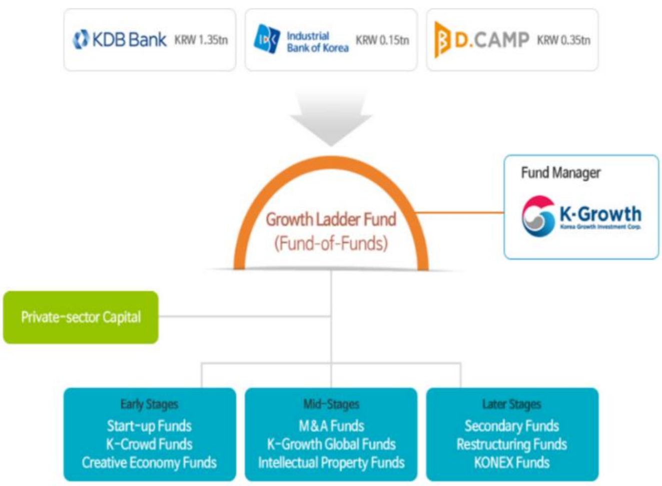
4.2.1 Growth Ladder Fund (KR)

In 2013, South Korea launched an initiative to support start-ups and industry through a variety of public funds and regulatory reforms[89]. This led to the Growth Ladder Fund (GLF)[90], a FoF investing in SMEs. The GLF has collected USD 1.5bn from state banks such as Korea Development Bank (KDB). The fund-of-funds’ focus is on innovative companies and growth-stage companies. The fund is expected to be active until 2023. The GLF is made of several sub-funds to meet different SME funding needs during the growth stages. The fund is operated by an independent fund manager, Korea Growth Investment Corp (K-Growth) and is comprised of nine funds operating at different growth stages (see Figure 4.1).

The GLF channels its investment through the three funds - the Start-up Fund, the K-Crowd Fund, and the Creative Economy Fund. With regard to the growth phase (mid-stage), the GLF is concerned with addressing the lack of capital and know-how in SMEs, preventing them from participating in M&A activities. This stage is supported by the M&A Fund, K-Growth Global Fund and the Intellectual Property Fund. In the mature stage, the Fund is concerned with developing secondary markets as well as giving visibility to KONEX, an exchange for SMEs. Regulatory reforms have streamlined the listing process on KONEX, speeding up the listing process for SMEs compared to the main Korea Exchange (KRX).

In addition, the GLF supports SMEs in securing further equity financing. This stage is covered by the KONEX Fund, which invests in SMEs listed or planning their listing, and by the Secondary and Restructuring Funds.

Figure 4.1: Growth Ladder Fund's Structure



---

89 Pacheco Pardo, R. and Klingler-Vidra, R. (2019). The Entrepreneurial Developmental State: What is the Perceived Impact of South Korea’s Creative Economy Action Plan on Entrepreneurial Activity? *Asian Studies Review*, 43:2, pp.313-331.

90 Lee, J. and Jung, T. (2017). Policy-driven expansion of venture capital Industry: an empirical examination of contexts, factors, and effects behind the recent surge of Korean venture capital industry. *Academy of Entrepreneurship Journal*.

Source: K-Growth[91]

As of 2018, the GLF has supported over 1453 SMEs through USD 3bn equity financing across 80 private equity and venture capital funds. The GLF has predisposed 3 funds managing 16 portfolios having invested USD 92 million in companies listed or planning to list on the Konex. In total, GLF funds have invested in 133 late-stage development companies using secondary, restructuring and Konex funds, which includes IPOs.[92]

Box 4.1: Growth Ladder Fund – Lessons

- The GLF's approach to SME financing is comprehensive and intervenes at all stages in an SME's growth. The FoF is therefore concerned with all stages, namely, pre-IPO (including seed and early stage capital for start-ups), IPO and post-IPO.
- The creation of the KONEX secondary exchange for SMEs. This market is geared for long-term 'buy and hold' investment on growth prospects of SMEs. The exchange has been successful, demonstrated by the growth of listed companies, from 21 to 153 in 2018, and total market capitalisation amounts of KRW EUR 4.6 million and the transaction volume in 2018 amounts to EUR 880,000.[93]
- Following a slowdown in its activity in 2019, the KONEX exchange introduced a series of regulatory reforms for its listed companies: lowering the deposit amounts from 100m won to 30m won, a fast track transition to KOSDAQ and the easing of regulations on discount rates for issuing new shares.[94]
- The co-investment of the private sector is also an important element to consider as its support is paramount to the creation of dynamic equity ecosystems.

4.2.2 Business Growth Fund (UK)

The Business Growth Fund (BGF) was set up in the UK in 2011 following the financial crisis and provides equity financing to SMEs. The BGF operates as an investment company rather than a fund, acting as a long-term investor. The BGF is a major investor (via 'BGF Quoted') in the UK's Alternative Investment Market and one of the largest PE investors in Europe. It has a capacity of GBP 2.5bn and is designed to address the GBP 2m to GBP 10m equity financing gap where bank loans are no longer suitable for SMEs.

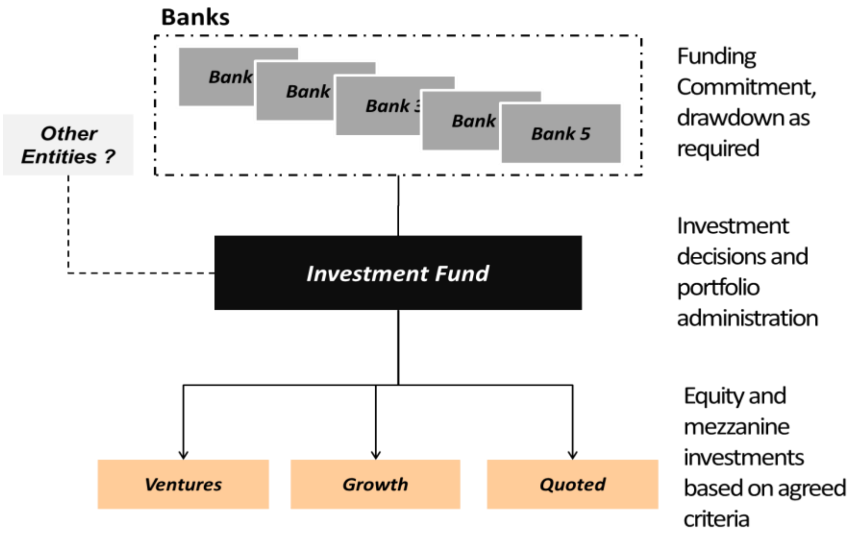
Investment is made in three stages: (i) 'BGF Growth', which involves investments in the GBP 2m to GBP 10m range in return for a minority stake of 10-40% of the business; (ii) 'BGF Ventures' involving early-stage investments of up to GBP 5m; and (iii) 'BGF Quoted' under which BGF invests in SMEs listed on London's Alternative Investment Market (AIM) that seek funding for growth. In addition to these three packages, the BGF provides follow-on funding of up to GBP 30m for SMEs it has previously invested in.

The BGF is supported by the UK's five largest commercial banks (Barclays, Lloyds, HSBC, RBS and Standard Chartered). HSBC manages the scheme through 17 offices across the UK and Ireland to ensure regional coverage. So far, over GBP 500m of this type of funding has

[91] Available at: https://eng.kgrowth.or.kr/page/fund_about.asp
[92] K-Growth. (2019). Korea Growth Investment Corporation and Growth Ladder Fund.
[93] PWC. (2019). Listing in Korea – A Guide to Listing on the European Exchange.
[94] http://news.hankyung.com/article/2019013085851

been provided. The Fund can invest in SMEs of all types excluding financial services, property and some other sectors (e.g. armaments).

Figure 4.2: How does the Business Growth Fund works



Source: HSBC

An average investment of GBP 6m has been made in the 300 SMEs that the BGF has so far supported. The BGF undertakes some 50 transactions every year. The BGF portfolio has an income of around GBP 74m (2018) with an operating profit of GBP 27m. The 300 SMEs that the BGF has invested in have a combined turnover exceeding GBP 4.4bn. It is estimated that there has been an overall increase of 34% in employment levels in the assisted SMEs. A key to the profitability of the BGF model is the treatment of risk-weighted assets which encourages a longer timeframe for exits from investments and increases diversification and the rate of return.

Box 4.2: Business Growth Fund – Lessons

- The BGF provides SMEs with equity at the IPO stage but also the pre-IPO and post-IPO stages. Indeed, the comprehensive, long-term nature of its investment offer is regarded as one of its strengths as it ensures that SMEs on track for an IPO receive patient capital and quoted companies receive more liquidity.
- The BGF is a good example of a private-sector driven fund that is capable of investing relatively small amounts of equity in a variety of SMEs that would be considered too risky by PE companies, but which in turn ensures diversified return to the BGF. This is achieved through mixed asset portfolios, which can optimally reduce market risk by having a diversified portfolio of small shareholdings in different sectors, Limits on leverage with Investment Company, multiple shareholders to reduce risk for individual shareholders.
- The tax treatment of BGF investments, in particular the treatment of risk-weighted assets held by banks under UK regulations, helps to make investments cost-effective.
- The decision to only take a minority stake of up to 40% in SMEs helps to reduce one of the barriers to equity financing, namely the reluctance of SMEs to give up control of their undertakings.
- The scale of the BGF's investment activities helps to promote diversification which, in turn, reduces risks and increases returns. The fact that five banks support the fund also reduces their exposure.

- Local offices help ensure that investments are geographically spread. It facilitates deal identification and allows the screening of investments by BGF personnel located in close proximity to SMEs.

4.2.3 Xtend Market and NSEDF (HU)

The Hungarian government has implemented steps to increase SMEs' access to secondary markets. The Xtend market was launched in Hungary by the Budapest Stock Exchange (BSE) in 2017. A National Stock Exchange Development Fund (NSEDF) has also been established to provide an initial investment to the listing SMEs.[95] The schemes enable SMEs to access a wider pool of investors, while also providing them with the necessary know-how to undertake successful listings.

To facilitate IPOs, companies listing in the Xtend market face lower fees and less complicated terms. The easier listing conditions enable the SMEs to get used to the transparency requirements. Through the Xtend market, SME entrants are guided by a nominated advisor (as in some other markets such as AIM and Nasdaq North) which connects them to investors. This in turn helps address issues for SMEs such as a lack of visibility to large investors. Prior to entering the market, the nominated advisor screens the issuer and helps it prepare for the stock issue.

Listing on the BSE Xtend does not need to involve an initial public offering and can typically take place after raising private capital. The nominated advisor supports the issuer throughout its market presence, helping the issuer in making its annual declarations and act as a guarantee to investors. The market surveillance over the Xtend market is shared between the BSE and the National Bank of Hungary. To encourage the participation of investors, stocks purchased on Xtend can be placed in long-term investment accounts from which the owners can withdraw funds tax-free after five years (as with the UK's Venture Capital Trusts).

A National Stock Exchange Development Fund (NSEDF) has been established to provide capital to SMEs wishing to enter the BSE Xtend market. This instrument aims to address the lack of liquidity by stimulating demand for a stock and 'de-risking' it. As a screening mechanism, the NSEDF invests in SMEs that are quite mature. The typical investment size for the fund is HUF 1 billion per enterprise in exchange of only a minority stake in the ownership. The NSEDF allocates HUF 13 billion for SMEs in total. SMEs supported by the fund have witnessed increased revenues, fixed and total assets, as well as increased shareholder equity.

Box 4.3: Xtend Market and NSEDF - Lessons

- The Xtend Market and NSEDF are a good example of an initiative to develop a relatively weak IPO market.
- SMEs were helped by the creation of a market exchange specifically serving SMEs within the main stock exchange. This exchange presents listing conditions that are easier for SMEs to navigate.
- The IPO process is further assisted through the presence of nominated advisors

[95] Klis, K. and Vidovics-Dancs, A. (2019) Multilateral Trading Platform in Europe and Hungary. *Economy and Finance*

assisting with the listing and reporting requirements, while linking SMEs to investors.

- To finance the IPO process, the state has instituted a specific national fund investing in SMEs, which screens for SMEs mature enough to IPO to inject liquidity and attract private investors.
- A listing can take place through a private placement of capital before the IPO, with the fund only taking a minority of shares.
- A final component underpinning this initiative is the availability of tax incentives through the creation of the long-term investment account instrument.

4.2.4 Caisse des Dépôts (FR)

Caisse des Dépôts (CDC) is France's biggest public sector investor in listed French SMEs. Along with the Euronext stock exchange, the public sector institution launched a joint two-tier initiative to foster the growth of small and medium-sized tech companies listed on the Euronext exchanges. As a long-term asset manager, CDC has a total of EUR 2.5bn invested in this market segment.[96] Indeed, CDC has been interested in supporting the growth of the tech sector in light of the fact that companies involved in that sector require longer-term financing than those in other sectors.

The first part of the initiative is led by a CDC investment programme aimed at small caps, stepping up its presence in equity markets, previously consisting in 22% of its EUR 1,732bn investment portfolio. From July 2019, CDC invested EUR 100m in smaller tech SMEs listed on Euronext Paris and whose market capitalisation was under EUR 1bn. Concurrently, Bpifrance - another French investment bank owned at 50% by CDC – also supported emerging French tech champions by investing EUR 1bn. This investment will be fully rolled out by 2022 and will be focused on SMEs in the later growth and late stages. Second, in coordination with the experts at CDC Croissance, Euronext has created a market index for tech SMEs listed in Paris called Euronext Tech Croissance.[97] This index was created with the primary purpose to give the performance of these Tech names a higher profile. The index is comprised of high-potential companies with trading liquidity over EUR 10,000 per day and market capitalisation of between EUR 25m and EUR 1bn. Before the COVID-19 crisis, the Euronext Tech Croissance index revealed a positive trend line in the number of securities exchanged four months after the index was introduced.

Box 4.4: Caisse des Dépôts – Lessons

- The creation of an index for high-growth SMEs. This is an important element to consider as SMEs often lack the visibility required to attract investors.
- CDC's long-term approach to assets management is essential for SMEs growth.
- CDC, along with other investors such as BNP Paribas, Caceis (Crédit Agricole), Société Générale and Euronext Brussels introduced LiquidShare, a blockchain that allows a peer-to-peer settlement between custodian nodes for listed and non-listed shares, removing friction costs.

[96] https://www.caissedesdepots.fr/en/news/investing-growth-technology-smes
[97] Available at: https://live.euronext.com/en/product/indices/FR0013425352-XPAR/market-information

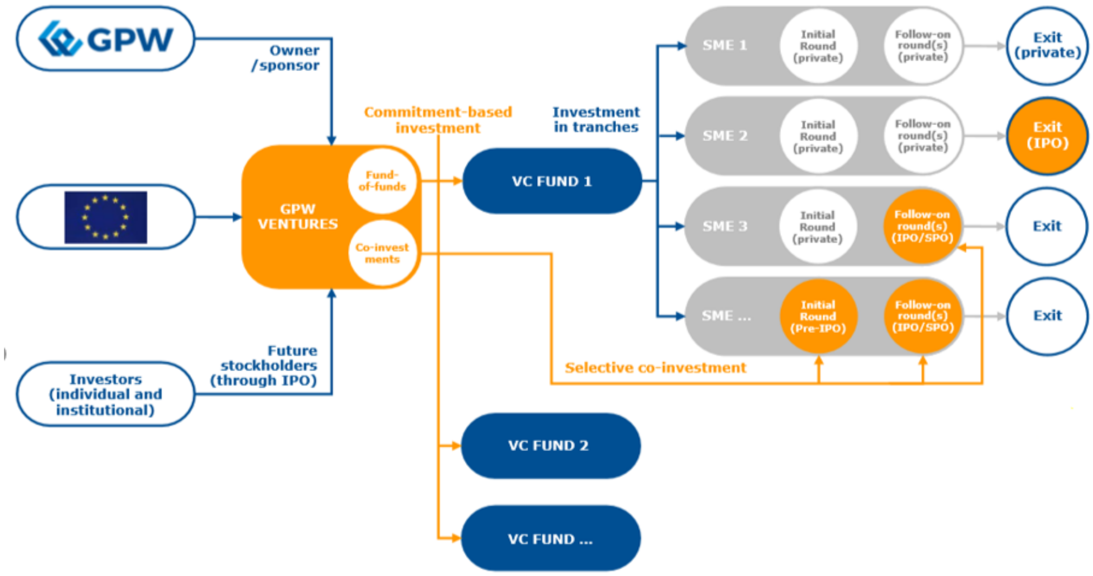
4.2.5 GPW Ventures (PL)

GPW, the Warsaw stock Exchange has in recent years developed into one of the most developed stock exchanges in the world. Polish companies, including SMEs, now have access to professional market intermediaries that can steer companies into this dynamic market, while ensuring high standards of corporate governance and efficient trading and post-trading services. Moreover, GPW has created an open environment that is encouraging international investors. Foreign investors account for more than half of the main market's trading equities' turnover and 40% of market capitalisation. It has also been successful in channelling pension funds savings into stocks. By providing the NewConnect exchange, it eases the listing of growing companies, especially in the high-tech sector.

GPW has also led the way in understanding how a fund can promote greater IPO listings. In 2019 it launched the GPW Ventures ASI S.A. which is a fund set-up as a joint stock company. Its stated objective is to enhance the IPO market in Poland for SMEs by encouraging VC funds to invest in SMEs and their exits through IPO transactions.

GPW Ventures acts as a fund-of-funds investing in VC funds that subsequently invest in SMEs. The fund co-invests in the selected investee companies through its portfolio of VC funds – at the throughout the Pre-IPO, IPO phases. The fund has been established to follow the most advanced PE/VC industry investment standards set up by Invest Europe, as well as the EIF and EBRD. A graphical representation of its business model can be seen in figure 4.3:

Figure 4.3: How does the Business Growth Fund works



Source: GPW

The FoF aims to secure 50% of the total commitments in the funds it invests in. typical investments are usually in VC that are EUR 10-100 million in size and with a EUR 15 million ticket. The VC funds typically buy 50% shares of the investee company. GPW ventures actively selects investments in funds and companies that have their seat in the EU, in particular SMEs that are IPO oriented with an innovation profile being preferred. The fund's ability to implement its selection criteria in investments is facilitated by its participation in the investee VC funds' investment committees and advisory boards, and therefore being able to actively select investments.

Box 4.5: GPW Ventures – Lessons

- Ensure the creation of an effective SME IPO market supporting firms before, during and after their IPOs through the presence of professional services and institutional investors such as pension funds.
- Create stock market that are tailored to ease listings for growing firms, in particular for those in innovative sectors.
- Exchange group establishing a fund leveraging VC capital to encourage listings, with a FoF structure where 100% of capital is provided by the exchange group, but co-investing with the private sector in its investee VC funds.
- Focus on investing in SMEs with an IPO perspective at the pre-IPO, IPO and post-IPO stages.
- Recognising the importance of the European dimension by investing in VC funds and SMEs with their legal base in the EU.
- GPW fund embedding itself in the governance structure of its investee VC funds, through their investment committees and advisory boards, enabling it to have control over investment decisions.

4.3 Other Initiatives

The desk research for this project identified a number of other schemes that have contributed to the development of the wider ecosystem for SME IPOs and which are referred to in Section 3. Further details are provided below.

4.3.1 Funderbeam SEE (HR)

The EBRD has focused on developing capital markets in Croatia through the provision of technical assistance to the Zagreb Stock Exchange (ZSE) to assess the feasibility of establishing an exchange-for SMEs in Croatia. The aim of the EBRD and ZSE is to increase SMEs' access to local capital markets through IPOs and create a regional financing platform for the sector. The SME growth market platform was supported by the EBRD Technical Cooperation Fund.

In addition, the initiative was also supported by the EBRD's Shareholder Special Fund for the provision of advisory services to Funderbeam South-East Europe (SEE) which is a funding platform for start-up companies based on blockchain technology which was introduced to help inject liquidity into ZSE, whereby a syndication allows small investments as low as EUR 200, besides an anchor investors' initial investment.[98] Funderbeam SEE is a joint venture between Funderbeam, an Estonian company developing global equity funding and trading platforms, and the Zagreb Stock Exchange, which own the platform 80% and 20%, respectively. The EBRD also supported the development of capital markets through policy dialogue. In cooperation with the Croatian Ministry of Finance and National Bank the EBRD is supporting an initiative introducing the trade in covered bonds in the ZSE. Funderbeam SEE and the ZSE SME exchange are an example of how the EBRD can come together with an exchange and a private company to create a versatile growth market for SMEs.

[98] Parker, L. (2019). EBRD backs funding platform Funderbeam to plug SEE's equity gap. https://www.euromoney.com/article/b1h5spv07h2z24/ebrd-backs-funding-platform-funderbeam-to-plug-sees-equity-gap

4.3.2 AIM Italia (IT)

The Italian arm of the London Stock Exchange's Alternative Investment Market (LSE AIM) was created in 2012 by the Italian Stock Exchange, Borsa Italiana. The exchange was designed to promote the listing of SMEs and the development of this capital market segment.

AIM Italia's main instrument to promote the listing of SMEs is simplified entry conditions which are less rigorous and faster than those for the main exchange. As is the case with the London AIM, SMEs benefit from the presence of a 'NOMAD' (Nominated Adviser) programme within AIM Italia that helps SMEs navigate the process of getting listed. In the pre-IPO phase, for example, a NOMAD performs research on the SMEs to promote investor awareness and provide a fair assessment of their growth potential and valuation. The NOMAD also acts as a market-maker by enabling listed SMEs to get in touch with potential investors to encourage liquidity and sustain share price. The NOMAD further acts as a screening agent for the prospective SMEs to determine whether they are suited for a listing. All institutional investors may trade AIM Italia shares through their usual broker, which facilitates trading and liquidity. Furthermore, the LSE AIM Italia instituted an ELITE programme which is similar to the London's LSE programme helping SMEs to understand at earlier stages on how to prepare for an eventual listing on the AIM Italian exchange. This builds on past programmes such as Più Borsa which facilitated the listing of SMEs through the provision of funding. For example, within the Più Borsa project, there was a FoF structure encouraging the LSE's associates to invest in special purpose investment vehicles for Italian small caps (less than EUR 300m turnover). The FoF sought the participation of other institutional investors such as the Italian Strategic Fund with a view to also attracting private investors. The aim of this initiative was to help create a dynamic SME asset management industry.

The LSE AIM Italia and linked initiatives have been successful in promoting SMEs' access to capital markets with the number of listed SMEs growing from 5 in 2009 to 132 in 2019. In the year 2019 alone there were 35 IPOs, the highest number for any SME growth market in Europe. Some 65% of new IPOs involve technology firms. From December 2015 to June 2019, the LSE Italia saw its market capitalisation grow from EUR 2.9 to EUR 7.6 billion.

4.3.3 ALMI Fund (SE)

ALMI Invest was formed in 2008 to coordinate the ALMI group's venture capital investments. The ALMI Group is owned by the Swedish Ministry of Enterprise and Innovation and provides government-financed loans, VC and advisory services to companies in the early stages of growth. Operations are divided across different regional funds and a national fund with seed capital. ALMI Invest act as a national coordinator for the regional VC funds. The regional funds that ALMI coordinates are co-financed 50% by the European Regional Development Fund (ERDF), and are run as projects under its programmes.

ALMI Invest's goal is to create company growth, its activities are intended to complement and not crowd out the private sector. For the regional funds, investments are made on commercial grounds, and investments are co-financed with private investors on a 'pari passu' basis. ALMI Invest has a portfolio of around 400 companies and invests on average in three to four companies per week.

Some of the key take-aways from this scheme, which determined its success have been: the focus on attracting private capital; the regional focus to disperse investment into different regions; active investment, whereby ALMI also provides advice and influence decisions through its ownership stake; and successful leverage of the financial resources from International institutions, including the ERDF.

4.3.4 KfW Capital (DE)

The KfW Group, the German state-owned development bank, has a subsidiary called KfW Capital which invests in German and European VC funds. The bank's primary goal is to increase funding available for venture capital directed towards innovative tech growth companies. KfW Capital began operations in 2018 and functions as an independent bank with a dedicated mandate. It operates a fund-of-funds, pooling funds together and investing in other funds which must invest at least the same amount in tech companies. The investments are intended to be long-term. KfW Capital often makes these investments 'pari passu' with private sector institutional investors. Investments by KfW Capital are subject to ESG and sustainability guidelines.

KfW Capital is involved in schemes with the European Recovery Programme (ERP) Special Fund. In these schemes KfW Capital invests a maximum of EUR 25m and under 20% of the funds' capital. Subsequently, with investments from private sector investors, these funds then invest in small growth companies. The scheme invests in funds that have at least EUR 50m. Another KfW Capital fund is the High-Tech Start-up Fund (HTGF) which invests alongside the Federal Ministry for Economic Affairs and Energy (BMWi) and private investors to provide seed investment for tech companies. Investment is provided through various stages of the business' growth including start-up and IPO. A maximum of EUR 3m can be invested in a single company. KfW Capital also invests alongside the BMWi and the EIB in the Coparion fund and act as the fund's shareholders. This fund subsequently invests with private investors in SMEs at a later growth stage of development.

4.3.5 VentureEU

At the EU level, the Commission and EIF launched the VentureEU fund-of-funds in 2018 which consists of six sub-funds. Over time, the initial investment of EUR 410bn by the EU is expected to rise to EUR 2.1bn with a further EUR 6.5bn being leveraged from institutional investors such as pension funds. The FoF is designed to deployed over 4-5 years with annual investments averaging around EUR 500m. Via the Programme, the EIF will commit equity financing to Pan-European VC Fund-of-Funds on a pari passu basis with other investors into the selected sub-funds (between 7.5% and 25% of the FoF's total commitments within a limit of EUR 300 million. Fund-raising is still in progress with the aim of raising EUR 500 million for each fund (i.e. EUR 3 billion overall) with the EU contributing up to 25% of this sum). Each of the VentureEU funds is being managed by professional fund managers from the private sector.

At the Fund of Funds level, it is difficult to determine how successful VentureEU has been in attracting investment from the private sector, as no data has been made publicly available. Regarding attracting investment from the private sector at the sub-fund level, a condition for private sector VC FoF managers in applying to take part in the VentureEU programme was that they would attract additional private sector funding as part of the process of fund closure. Regarding the investments in SMEs made by the six selected private VC fund managers, typically, these will be made over the duration of the fund (i.e. a period of 7 or 8 years). As investments are made gradually post fund closure, only a small number of investments have thus far been made. The Aurora fund managed by Axon, which is backed by VentureEU, has built a Portfolio of around 25 of the leading VC funds and has exposure to around 300 tech companies.

4.3.6 EIF funds-of-funds

As noted earlier (Section 3), the EIF has invested in 41 fund-of-funds, all of which have a national focus. Some examples are highlighted below.

The **Baltic Innovation Fund (BIF)** was launched in 2013 by the EIF and the national authorities of Lithuania, Latvia and Estonia. One of its objectives is to stimulate employment and growth across the Baltic region through promoting the development of high-growth firms. It is a good example of a cross-border public FoF. It invests in venture capital funds and directly in SME equity. It facilitates the co-investments of family offices and institutional investors into the early and growth phase SMEs. The EIF has so far invested 40% (EUR 40m) alongside investments of EUR 20m from three national agencies, one for each of the Baltic States, making it a public sector-led financial initiative. The size of the BIF is EUR 100m, which is considered large enough to attract private capital and have an impact in the financing landscape in the region. BIF has invested in five underlying funds managed by experienced fund managers following a call for proposals and following a selection process organised by the EIF. The selection criteria utilised by the BIF when selecting the funds to invest in included: an investment strategy focused on the Baltics; an experienced team and a strong track record; clear legal and tax structures; and fund stakeholders whose interests are aligned. By 2018, the five funds had raised a further EUR 335 million in funds (40% from pension funds) and invested EUR 138 million in 29 companies.

One of the contributing factors to the success of BIF has been the close co-operation between the national financing institutions in each of the three Member States of the Baltic region and the EIF. Moreover, it has showed how an EU public institution such as the EIF can ensure that qualified fund managers are screened and selected to fulfil their investment policy objectives and help develop underdeveloped equity markets in European regions such as the Baltics. The BIF has been followed-up by a successor, the Baltic Innovation Fund II, whose signature and launch was in 2019.

An example of FoF that the EIF has successfully managed is the **GEEREF (Global Energy Efficiency and Renewable Energy Fund)** which has a focus on fostering energy efficiency and renewables around the world. Public investors committed EUR 112m to GEEREF, which was able to mobilise a further EUR 110m from the private sector. Of these, the fund has committed EUR 166 to its portfolio of 13 underlying funds. The underlying funds supported by GEEREF has raised a total of approximately EUR 1 billion, EUR 600 million of which having been invested to fund 105 renewable/efficiency energy projects, representing EUR 3 billion in project costs of which 3% were mobilised through public equity. In addition to the EIB Group, the GEEREF Fund has investment from Germany and Norway.

The EIF also launched a successful **Social Impact Accelerator (SIA)** FoF at the pan-European level along with private and public investors, which mobilised EUR 243 million at its closing. These investments were directed to specialist VC funds focusing on investment in social impact SMEs according to the definition developed by the SIA fund.

Another example is the **Central Europe Fund of Funds (CEFoF),** which was launched in 2017, which is a EUR 97m fund-of-funds initiative created by the EIF with the support of the national authorities of Austria, Czech Republic, Slovakia, Hungary and Slovenia to boost equity investments in SMEs. A total of EUR 58m was contributed to the FoF by the five Member States with EUR 39m (40%) coming from the EIF. The FoF is being used to invest in a portfolio of venture capital and private equity funds that focus on later stage and growth equity investments (including acquisition, buy-and-build and replacement capital strategies that include capital increase in the portfolio companies). The FoF has a 4-year investment period that will run to the end of 2021. In addition to investments in funds, the CEFoF coinvests through the sub-funds in later stage and growth stage SMEs alongside VC and PE funds, family offices and institutional investors.

The **Polish Growth Fund of Funds** (PGFF) is a EUR 90 million Fund-of-Fund initiative launched in 2013 by the EIF in close co-operation with Bank Gospodarstwa Krajowego (BGK) to stimulate equity investments into growth-focussed enterprises in Poland. At the initial stage, PGFF combines a EUR 30 million commitment from EIF with EUR 60 million from BGK.

Last but not least, another FoF example is **Portuguese Growth** which is supported by the EIF and the Portuguese national promotional institution, Instituição Financeira de Desenvolvimento (IFD). This is a EUR 100m fund that is designed to promote the growth and internationalisation of mature Portuguese companies through access to private equity. The EIF and IFD each contribute EUR 50 million to this joint programme, which aims to leverage over EUR 300m into funds and companies, by crowding in further resources also from private investors. Portuguese Growth operates as a FoF which invest in private equity, growth capital and mezzanine funds. Portuguese funds that apply for investment must demonstrate the ability to raise at least 50% of commitments from third party investors.

4.3.7 EIF Direct investment mandate

The EIF also invests directly in equity funds and related co-investment vehicles. There are a number of examples of EIF-supported schemes combining several different types of investment vehicles.

The **Croatian Growth Investment Programme (CROGIP)** is a EUR 70 million equity investment programme launched in January 2019. The funding is being invested alongside private investors and will support Croatian SMEs, small midcaps and midcaps' access to growth and expansion equity capital. EIF and HBOR contribute EUR 35 million each to this jointly developed programme, which is expected to catalyse additional private-sector investments into funds and companies. The objective of CROGIP is to support Croatian SMEs, small midcap and midcaps, to attract private equity investment to Croatia and to build local capacity by supporting fund managers which focus a significant part of their investments into Croatian companies.

In Germany, the **ERP-EIF Facility**, which was launched in 2004, includes three sub-facilities, namely: a fund-of-funds investing in venture capital funds with aggregate volume of EUR 2.7bn with around 100 fund investments in mid-2020; the European Angels Fund Germany (EAF Germany), investing in joint portfolios with experienced business angels with an aggregate volume of EUR 270m, through approximately 50 business angels and family offices; and the ERP-EIF Growth Facility with an aggregate volume of EUR 500m, investing in co-investment funds managed by venture capital fund managers already supported by the Facility, in order to provide expansion financing for growth companies within their portfolios with around 10 fund investments in mid-2020.

The **Dutch Growth Co-Investment Programme**, launched in 2017, is a EUR 100 million equity co-investment scheme developed by EIF and the Netherlands Investment Agency (NIA) and managed by EIF, to be invested alongside existing equity funds and other private investors with the objective to catalyse at least another EUR 100 million of growth capital to target companies. The Programme provides co-investment funding to fund managers with an established relationship with the EIF. This is done via a SPV co-investment vehicle which is set up by the fund managers and used to channel investments from the fund manager and EIF to firms.

Another example is the **Luxembourg Future Fund** is a EUR 150 million fund which aims to stimulate the diversification and sustainable development of the Luxembourgish economy by attracting venture capital fund managers and early to later stage innovative businesses into Luxembourg. It was set up by the EIF and the Société Nationale de Crédit et d'Investissement (SNCI) and combines a EUR 120 million contribution from SNCI with EUR 30 million from the EIF. The Luxembourg Future Fund comprises two sub-funds: the first sub-fund invests in venture capital funds that are not yet established in Luxembourg, targeting early to growth stage innovative technology companies; the second sub-fund is used for co-investments alongside existing venture capital funds and business angels in in innovative technology SMEs that are not based in Luxembourg but which demonstrate the capacity to bring significant international 'spill over' effects to Luxembourg.

In total, the EIF has directly invested in around 750 equity/debt/VC Funds across EU Member States. The portfolio (as of July 2019) consists of around 190 investments in funds in individual countries (BE, BG, CZ, DK, FR, DE, GR, IRL, I and LT) with the remainder being investments in multi-country funds. Their focus in terms of sectors varies with some being generalist and others investing in specific activities (life sciences, ICT, renewable energy, etc). the EIF investment supports both venture capital and private equity funds as well as some hybrids combining equity and debt. This is also reflected in the SME target groups than range from early stage seed and start-ups to mod-market scale-ups.

5 Summary and Recommendations

Overall, this study indicates that there is wide support for the establishment of an EU fund to help promote SME IPOs. There are, however, differing - but not mutually exclusive - views on the most appropriate model.

In addition to addressing IPO market failures, the proposed EU Fund is seen as making a potentially significant contribution to promoting a shift from a long-term tendency in Europe for SMEs to rely on debt financing to a situation where there is a greater use of equity instruments and a more developed 'equity culture'. The COVID-19 crisis, and its economic consequences, are seen as reinforcing the need for such a shift because many firms are likely to increase their debt to very high levels as a result of the crisis in 2020-21, and converting this debt into equity will therefore help ensure longer-term financial sustainability.

5.1 Key conclusions and Recommendations

The research suggests that there is a need for EU intervention at different stages of the listing process (pre-IPO, IPO and post-IPO). This would, in effect, mean that the EU Fund would operate as a 'crossover' fund, supporting investment across all three phases of the IPO process.

The pre-IPO stage is seen as especially important because an EU Fund's investment before SMEs go public would help to other investors the confidence to enter the market. The consensus amongst those consulted for this study is that an EU SME IPO Fund could help address an 'equity gap' affecting SMEs, i.e. above the amounts typically provided by venture capital companies but below the thresholds for private equity and/or investment bank support (this equity gap varies to some extent depending on the market). Ideally, the EU Fund should also support secondary issuances, thereby performing the role of an 'anchor' investor.

Recommendation 1: the EU Fund should be established as a crossover fund with a flexible mandate to invest in SME shares at different stages of the IPO process (re-IPO, IPO and post-IPO). 'Lock-up' arrangements should be negotiated with private investors, for periods of at least 6-12 months, to discourage them from exiting at an early stage in or after an IPO, thus ensuring greater price stability for newly listed SMEs.

The EU Fund's target group should be SMEs and small mid-caps with up to 500 employees but also other mid-caps with up to 3,000 employees if the firms concerned are innovative as defined in Section 3 and as determined in the EU Fund's screening process. This will mean adopting a broader definition of an SME than is the case with the Commission's official definition. Innovation in this context should be broadly defined to include not just SMEs that are innovative in a technological sense but innovative across different sectors of the European economy.

However, in all cases, the EU Fund should invest in IPOs involving SMEs that are seeking to raise growth capital and have solid long-term prospects. These are likely to be SMEs that have progressed beyond the early stages in their development and that have a stable business model with products and services that are selling well, and which have the potential for further sustainable growth. The consensus of opinion amongst the stakeholders that were consulted for the study is that the EU Fund should be open to all sectors rather than investing in specific sectors. However, the EU Fund's investment guidelines could include several sectors as priority sectors (e.g. digitalisation, green economy) that are likely to be especially relevant in a post-COVID-19 environment.

Recommendation 2: the EU Fund should target SMEs with growth potential and with fewer than 3,000 employees. The Fund's investment guidelines should be flexible and not have any particular sectoral restrictions. There could, however, be several sectors as priority sectors, for example concerning the promotion of digital technology, the green economy and COVID-19 related priorities.

With regard to the EU Fund structure and modus operandi the study identified three basic options:

- **Option A** where the Implementing Partner would invest across EU Member States directly in existing SME equity funds and similar investment vehicles that can be used to promote IPOs.
- **Option B**, namely a Fund-of-Funds (FoF) at the EU-level which would, in turn, invest in a number of newly created sub-funds, unlike Options A and C which would invest in existing SME equity funds. Ideally, there would be private sector participation in the FoF at the EU level and also, together with the national public sector, in the sub-funds.
- **Option C**, i.e. a SPV would be established at the EU level with a number of private sector financial institutions as co-investors. The SPV would be used to invest in SME equity funds and other similar investment vehicles across EU Member States. Via the SPV it could also invest directly in selected SME IPOs.

The different EU Fund options each have advantages and disadvantages. One of the key findings from the Phase 3 market testing exercise is the fact that the initially selected Fund structure may not be the permanent one but could potentially evolve over time. Given the complexities and risks of setting up an EU SME IPO Fund, especially in the current COVID-19-influenced market conditions, one possibility would be to implement Option A as a first step in a process that could involve the EU Fund structure subsequently evolving into Option B or Option C. Option A has the advantage of being based on the EIF's existing modus operandi (if the EIF is selected as the Implementing Partner) and should therefore be relatively straightforward to implement. Options B and C have the advantage of potentially leveraging more private sector investment than Option A but involve setting up new investment structures (a FoFs and SPV respectively).

Different EU Fund options could suit different market conditions across the EU and a flexible approach to implementation involving several models should not therefore be ruled out. As argued in Section 3 of the report, an Option B FoF could be especially well-suited to less-developed markets because it would involve setting up sub-funds in different countries that could mobilise a more diverse range of private sector institutions, thereby strengthening the local SME IPO financial infrastructure in a way that is less likely to occur under Options A or C. Option C could potentially also mobilise private sector investment at the EU and national levels (like Option B) but would need to reply on the existence of equity funds as an intermediary structure although some investment directly in SME IPOs via the SPV could also be possible. As such, Option C is probably better suited to the more developed markets. A decentralised Option C could also be foreseen with SPVs being established in different countries/country groupings, and this would replicate many of the benefits of Option B.

Table 5.1: Conclusions – Advantages & Disadvantages of the Main EU SME IPO Fund Options

Option	Advantages	Disadvantages
Option A	Based on an existing model and therefore quickest to implement	Leverage of private investment only at one level
Option B	Leverages greater private investment in less-developed markets	Relatively complex and requires new legal structures at EU and national levels
Option C	Potentially leverages greater private investment in developed markets	Requires new EU legal structure (SPV) and several layers of costs

Recommendation 3: The EU Fund should be launched in the form of Option A (assuming the EIF is selected as the IP). The possibility of the EU Fund structure subsequently developed to allow for additional types of intervention (i.e. Options B and C) to run alongside an Option A fund in certain geographical/market settings should not, however, be ruled out. Equally, if Option A establishes 'proof of concept' and works well in different geographical/market settings it could be that the relatively short horizon of InvestEU implementation would mean that alternatives are not needed. Ideally, this would be the case given the relative short horizon of InvestEU implementation and potential complexities of implementing different models.

In terms of geographical scope, our research indicates that the EU Fund should have an EU-wide mandate but with the flexibility to vary its investment objectives to reflect the particular situation with regard to SME IPOs in different EU Member States. This flexibility should enable the EU supported interventions to suit the different investor profiles and increase investment appetite in the various national/regional EU markets.

Thus, whilst a focus on pre-IPOs and IPOs is likely to be a priority in many if not most countries, in others with relatively well-developed stock markets, the EU Fund could place more emphasis on participating in secondary issuances. Some stakeholders argue that the EU Fund should target regional groupings of Members States to help overcome the reluctance of major institutional investors to enter smaller markets, which lack critical mass and visibility, and help to develop an IPO eco-system that is conducive to capital market development. In this respect, Option B and/or a decentralised version of Option C could contribute to addressing the challenges posed by the differing needs of the EU-27's different market geographies.

An alternative to this approach would be to segment the equity markets by stock exchange group and to focus the EU Fund's interventions on these exchanges (whilst encoring covering of other countries outside the groupings. On this basis, the EU Fund could encourage existing investors to invest in other exchanges in their groupings and their SME equities.

Recommendation 4: the European Commission should discuss the EU Fund's specific investment objective with national authorities to determine an appropriate role and model tailored to different market conditions and priorities. This approach could be extended to the various stock exchange groupings operating in Europe.

There is strong private sector interest in the idea of an EU Fund for SME IPOs. If an EU Fund can help to make investments in SME IPOs more cost-effective (although it will not be able to address risk weighting concerns), then participation by major institutional investors in the initiative would become a potentially attractive proposition. Pension funds across Europe could also be source of institutional investment in an EU SME IPO Fund. As a longer-term aspiration for the EU Fund, another source of investment that could potentially be tapped into is the retail investor market and here, crowdfunding platforms could have an especially important role alongside more traditional investment vehicles (e.g. smaller company investment trusts). Some stakeholders who were consulted were sceptical about the prospect of attracting this form of investment but the Phase 3 market testing suggested that it should not be discarded as a longer-term possibility, albeit perhaps only in relation to a 'decentralised' version of the Option C SPV structure.

The extent to which the private sector leveraged contribution will be forthcoming depends on a variety of factors including the EU Fund structure (in particular whether it allows for leverage at one or two levels); the amount of funding contributed by the EU and its leverage effect; and the relationship between EU and private sector capital. Our assessment suggests that if the EU should invest in SME equity funds on a 'pari passu' basis, as this would not disincentivise greater private investment. A minority EU participation in equity funds and individuals SME shares is seen as an appropriate approach.

Recommendation 5: To ensure optimal private-public sector engagement, the EU Fund should invest alongside the private sector on a 'pari passu' basis. The EU Fund should also only invest on a minority basis in SME shares that are floated via an IPO.

Section 3 of the report we provide various estimates of the EU Fund investment costs based on a total of four scenarios.). There are different ways in which the costs of an EU Fund can be estimated, notably in relation to the financial resources needed to fulfil an ambition with regard to increasing the number and value of SME IPOs in coming years or, conversely on the basis of the amount of EU budgetary resources that the EU is willing to commit to the Fund and what can be achieved with this in terms of IPO volumes and values. Again, it could be that the EU Fund's initial operations are based on a relatively modest level of investment, enough to demonstrate 'proof of concept' (e.g. under EU Fund option A), and that a phased approach is adopted to building up the Fund size as it evolves over time into a FoF and/or SPV. For this reason, 'Scenario B' is recommended which aims to increase the number of SME IPOs by 10% or about 64 new SME IPOs over the period of operation of the EU Fund, with EU resources contributing 25% of the total value of its investments.

Recommendation 6: InvestEU resources should be used to contribute to the EU Fund. We estimate that to achieve a 10% increase in SME IPOs during the 2022-27 period compared with earlier trends (Scenario B in our report) would require an EU investment of EUR 738 million assuming this represented 25% of the Fund value with the other 75% being leveraged from private sector sources. This is based on the definition of the target market as being innovative SMEs with up to 3,000 employees. We view this as a reasonable estimate given COVID-19 and uncertainties regarding the economic and market prospects for 2021. We have assumed that there would be several funding rounds with the EU Fund's capital being raised in stages during the 2022-27 period. Clearly, if the InvestEU funding is higher or lower, and the extent of private sector leverage remains the same, this would have a proportionate impact on the number of IPOs supported. The EU Fund should be open for at least 5-7 years to allow the investment rate to build up from what will probably be a slow beginning in the immediate post-COVID-19 period and to allow share prices to reach a level where disinvestment can take place on a profitable basis. Private sector co-investors should be asked to agree to a lock-up period of ideally 6-12 months after an IPO.

Section 3 of the report highlights a range of benefits that could arise from the EU Fund's interventions to EU stock markets, SMEs and the wider economy. Only some of the expected effects can be quantified and this involves assuming similar growth rates in SME employment and turnover post-IPO during the 2022-27 period as were the case according to our analysis of trends in the 2014-20 period. However, feedback from the key stakeholders who were consulted for this study points to other significant potential benefits to the European economy.

Last and not least, many of those we consulted argued that in addition to establishing an EU Fund, steps should be taken to strengthen the wider IPO 'ecosystem'. This is unlikely to be a role for the Fund itself as its interventions will focus on investing in SMEs' capital but could be supported by a combination of EU technical assistance, and measures implemented by States and other key stakeholders such as the European Bank for Reconstruction and Development (EBRD). Furthermore, the EU Fund itself would not be able to directly address the EU equity market fragmentation as the creation of a common listing for EU SMEs across different exchanges would remain outside the scope of an EU Fund. However, it could facilitate the integration of equity markets by cooperating with Member States' national authorities or the main stock exchange groups operating in the EU through tailored investment strategies.

Appendix A: List of Interviews

Key stakeholders	Contact	Interviews
Phase 2 Consultations		
DG FISMA	Morana Mavricek	16-Apr
DG FISMA	Gorka Apraiz Tormo	16 Apr
European Business Angels Network	Jacopo Losso, Peter Cowell	21-Apr
EBRD	Hannes Takacs, Levent Tuzun	21-Apr
Centre for European Policy Studies	Karel Lannoo, Apostolos Thomadakis	21-Apr
DG ECFIN	Roman Garcia	22-Apr
DG ECFIN	Petr Hosek	23-Apr
UK Business Growth Fund	James Chew	23-Apr
EIF	Tomasz Kozlowski, Ullrich Grabenwarter	24-Apr
World Federation of Exchanges	Pedro Gurrola	27-Apr
Federation of Small Businesses	Martin McTague	27-Apr
European Association of Long-Term Investors	Helmut Von Glasenapp	28-Apr
LHV Bank (Estonia)	Ivars Bergmanis	28-Apr
Federation of European Securities Exchanges	Rainer Reiss, Sandra Andersson	29-Apr
New Financial	William Wright, Panagiotis Asimakopoulos	29-Apr
German BVI	Rudolf Siebel	30-Apr
Deutsche Borse	Niels Brab, Peter Fircke, Marco Winteroll	30-Apr
MAB, BME (junior market)	Jesus Gonzales	30-Apr
Schroders	Rory Bateman	01-May
Euronext	Guillaume Morelli, Jules Landrieu	04-May
ESMA	Evert Van Elsum, Gregory Frigo	06-May
Nasdaq Nordic / First North	Ludovic Aigrot, Adam Kostyal, Elina Yrgard, Margareta Baxen	07-May
European Investors' Association	Niels Lemmers	12-May
BlackRock	Carey Evans, Hayley Matthews, Ed Cook	13-May
DG GROW	Joachim Schwerin	13-May
Legal & General	John Godfrey	14-May
European Issuers	Irina Csender, Florence Bindelle, Tim Ward	15-May
CFA Institute	Josina Kamerling	15-May
Alternative Finance Centre Cambridge	Tania Ziegler	18-May
CITI Group	Luis Esguevilas, Howard Miller	20-May
Morgan Stanley	Martin Thorneycroft, Nicola Stark, Henrik Gobel	22-May

Key stakeholders	Contact	Interviews
Phase 2 Consultations		
BPI France	Lola Merveille, Chirstian Dunbarry, Emmanuel Blot, Cindy Ung	27-May
DG GROW	Armando Melone	27-May
Invest Europe	Martin Bresson, Christophe Verboomen	28-May
International Capital Markets Association	Katie Kelly	28-May
KFW	Felix Koehn, Thorsten Billing	28-May
Talinn Nasdaq	Kaarel Otts	3-Jun
Warsaw Stock Exchange	Maciej Bombol, Piotr Gebala	5-Jun
Deutsche Bank	Marcus Stein	5-Jun
Better Finance	Guillaume Prache, Stefan Vojcu, Edoardo Carlucci	8-Jun
European Banking Federation	Burcak Inel	8-Jun
FESE Workshop with 18 listing experts	(Athens SE, Deutsche Borse, Euronext, Nasdaq, BME)	10-Jun
Borsa Italiana	Barbara Lunghi, Giorgia Migaldi	8-Jul
OECD	Iota Nassr	6-Aug

Key stakeholders	Contact	Interviews
Phase 3 Consultations		
Interviews		
CITI	Luis Esguevilas, Howard Miller	9-Jul
BVI German Fund Association	Rudolf Siebel	15-Jul
EIF	Tomasz Kozlowski, Ullrich Grabenwarter	15-Jul
KFW	Felix Koehn, Thorsten Billing	16-Jul
Deutsche Bank	Marcus Stein	17-Jul
BpiFrance (first Interview)	Lola Merveille, Florent Debienne	20-Jul
GPW Venture	Maciej Bombol, Piotr Gebala, Piotr Cwik	21-Jul
Morgan Stanley	Martin Thorneycroft, Nicola Stark, Henrik Gobel	27-Jul
BpiFrance (second interview)	Maylis Ferrere, Chirstian Dunbarry, Emmanuel Blot, Cindy Ung	30-Jul
HSBC	James Chew	30-Jul
EBRD	Hannes Takacs, Levent Tuzun	31-Jul
New Financial	William Wright	11-Aug
Focus Groups		
Italian financial platforms	Various Fintech platforms	22-Jul
European Issuers	Small issuers committee (various members)	23-Jul

Key stakeholders	Contact	Interviews
Phase 3 Consultations		
Italian financial platforms	Various Fintech platforms	22-Jul
Surveys		
Association for Financial Markets in Europe	Various Members	Early to mid-August
German BVI	Various Members	
CFA Institute	Various Members	
European Investors	Various Members	
European Banking Federation	Various Members	

Appendix B: List of Secondary Sources

- Accountancy Europe, (n.d.). Public consultation on building a proportionate regulatory environment to support SME listing. Retrieved April 9, 2020, from https://www.accountancyeurope.eu/wp-content/uploads/Response-form_EC-consultation_Barriers-to-SME-listing_Feb2018.pdf
- Bakhtiari, S., Breunig, R., magnani, lisa, & Zhang, J. (2020). Financial Constraints and Small and Medium Enterprises: A Review. Retrieved from http://ftp.iza.org/dp12936.pdf
- Bessler, W., & Seim, M. (2012). The performance of venture-backed IPOs in Europe. *Venture Capital*, *14*(4), 215–239. doi: 10.1080/13691066.2012.702447
- BGF. (n.d.). What we do. https://www.bgf.co.uk/what-we-do/
- British Private Equity and Venture Capital Association and PwC. (2020). The UK private equity IPO report: Private equity-backed IPOs:1 January 2009 – 31 December 2017 (2020). https://www.pwc.co.uk/services/risk-assurance/insights/the-uk-private-equity-ipo-report.html
- CAISSE DES DÉPÔTS. (2019). Investing in the growth of technology SMEs. https://www.caissedesdepots.fr/en/news/investing-growth-technology-smes
- Capizzi, V., Giovannini, R., & Pesic, V. (2011). The Role of Venture Capital and Private Equity for Innovation and Development of SMEs: Evidence from Italian Puzzle. Journal of Applied Finance & Banking, vol.1, no.3, 189–239. Retrieved from https://iris.uniupo.it/retrieve/handle/11579/32701/5211/2011_JAFB_189_239.pdf
- Colin Mason, European Commission, Joint Research Centre, 'The Coronavirus economic crisis: its impact on venture capital and high growth enterprises, April 2020.
- Chargemaster – An Electrifying Exit, from: https://www.ukcfa.org.uk/resources/case-studies/
- Croce, A., Martí, J., & Murtinu, S. (2012). The Impact of Venture Capital on the Productivity Growth of European Entrepreneurial Firms: Screening or Value-added Effect? *SSRN Electronic Journal*. doi: 10.2139/ssrn.1705225
- Czarnitzki, D., & Hottenrott, H. (2009). R&D investment and financing constraints of small and medium-sized firms. *Small Business Economics*, *36*(1), 65–83. doi: 10.1007/s11187-009-9189-3
- D. Liberto. (2019). Junior Equity from: https://www.investopedia.com/terms/j/junior-equity.asp
- Deloitte & CEPS. (2019). Study on the drivers of investments in equity by insurers and pension funds. https://ec.europa.eu/info/publications/191216-insurers-pension-funds-investments-in-equity_en
- Demary, Markus and Klaus-Heiner Röhl, 2017, Why are Fewer German Companies Choosing to Join the Stock Market, LSE Business Review, https://blogs.lse.ac.uk/businessreview/2017/12/08/why-are-fewer-german-companies-choosing-to-join-the-stock-market/
- DerMarderosian, Lia and Mitteness, R. (2017). 'Legal Considerations in Pre-IPO Crossover Financings'. Bloomberg Law.
- ECB. (2020). April euro area bank lending survey.
- Euronext, (n.d.). Caisse des Dépôts and Euronext throw their weight behind listed high-tech SMEs. Retrieved April 9, 2020, from https://www.euronext.com/en/about/media/euronext-press-releases/caisse-des-depots-euronext-listed-smes

- Euronext. (n.d.). Euronext Tech Croissance. https://live.euronext.com/en/product/indices/FR0013425352-XPAR/market-information
- European Commission. (2017). Guidance on State aid in European Structural and Investment (ESI) Funds Financial instruments in the 2014-2020 programming period
- European Commission. (2019). Memo - The InvestEU Programme: Questions and Answers. https://ec.europa.eu/commission/presscorner/detail/en/MEMO_19_2135
- European Commission. (2020). *European Economic Forecast, Spring 2020.* European Economy Institutional Paper 125, May 2020.
- European Commission. (2020). Commission Staff Working Document SWD, 98 final, Section 3.
- European Commission. (n.d.). Technical Group 4: Further development of financial instruments and application in practice, From: https://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupDetailDoc&id=19082&no=2
- European Investment Fund. (2019). EIF Equity Portfolio. https://www.eif.org/what_we_do/equity/eif-equity-portfolio.pdf
- European IPO Report 2020. (n.d.). Retrieved April 6, 2020, from https://fese.eu/app/uploads/2020/03/European-IPO-Report-2020.pdf
- Fatica, S., Hemmelgarn, T., & Nicodeme, G. (2013). The Debt-Equity Tax Bias: Consequences and Solutions. *Reflets Et Perspectives De La Vie Économique*, *LII*(1), 5. doi: 10.3917/rpve.521.0005
- Federation of European Stock Exchanges, 'Capital Market Union by 2024 – A Vision for Europe', 2019.
- FESE, FESE position on the use of private-public funds for the IPOs of EU SMEs, 9 June 2020.
- Flynn, D. (2018). AIM listing vs standard listing on the Main Market: What's the difference?
- Halland, H., Noël, M., Tordo, S., & Kloper-Owens, J. J. (2016). Strategic Investment Funds: Opportunities and Challenges. Policy Research Working Papers. doi:10.1596/1813-9450-7851
- Helbing, P., Lucey, B. M., & Vigne, S. (2019). Online Appendix: The Determinants of IPO Withdrawal - Evidence from Europe. *SSRN Electronic Journal*. doi: 10.2139/ssrn.3335810
- Ilyabeylin. (2016, March 29). Financial Distress Risk in Initial Public Offerings: How Much Do Venture Capitalists Matter? Retrieved April 6, 2020, from https://clsbluesky.law.columbia.edu/2016/03/29/financial-distress-risk-in-initial-public-offerings-how-much-do-venture-capitalists-matter/
- IPO Watch Europe 2019. (n.d.). Retrieved April 7, 2020, from https://www.pwc.co.uk/audit-assurance/assets/pdf/ipo-watch-q4-2019-annual-review.pdf
- Kahle, Kathleen and René M. Stulz, 2017, The Shrinking Number of Public Corporations in the US, LSE Business Review, https://blogs.lse.ac.uk/businessreview/2017/10/17/the-shrinking-number-of-public-corporations-in-the-us/
- Kelyn, B. (2017). European Union Law of State Aid. Oxford University Press.
- K-Growth. (2019). Korea Growth Investment Corporation and Growth Ladder Fund.
- K-Growth. (n.d.). About the Growth Ladder Fund (the "GLF"). https://eng.kgrowth.or.kr/page/fund_about.asp
- Klis, K. and Vidovics-Dancs, A. (2019) Multilateral Trading Platform in Europe and Hungary. *Economy and Finance*

- Kraemer-Eis, H., Signore, S., & Prencipe, D. (2018). The European venture capital landscape: an EIF perspective. *EIF Research & Market Analysis*, *1*. Retrieved from https://www.eif.org/news_centre/publications/eif_wp_34.pdf
- Lee, J. and Jung, T. (2017). Policy-driven expansion of venture capital Industry: an empirical examination of contexts, factors, and effects behind the recent surge of Korean venture capital industry. *Academy of Entrepreneurship Journal*.
- Lehmann, A. (2019, September 16). EU support for SME IPOs should be part of a broader package that unlocks equity finance. Retrieved April 9, 2020, from https://www.bruegel.org/2019/09/eu-support-for-sme-ipos-should-be-part-of-a-broader-package-that-unlocks-equity-finance/
- Market Watch. (2020). "Private-equity-backed IPOs aren't performing, driving more companies to remain private instead". https://www.marketwatch.com/story/private-equity-backed-ipos-arent-performing-that-is-driving-more-companies-to-stay-private-2020-02-25.
- Megginson, W. L., Meles, A., Sampagnaro, G., & Verdoliva, V. (2016). Financial Distress Risk in Initial Public Offerings: How Much Do Venture Capitalists Matter? *SSRN Electronic Journal*. doi: 10.2139/ssrn.2723620
- Nassr, I. K., & Wehinger, G. (2016). Opportunities and limitations of public equity markets for SMEs. *OECD Journal: Financial Market Trends*, *2015*(1), 49–84. doi: 10.1787/fmt-2015-5jrs051fvnjk
- New Approaches to SME and Entrepreneurship Financing: Broadening the Range of Instruments. (n.d.). Retrieved April 7, 2020, from https://www.oecd.org/cfe/smes/New-Approaches-SME-full-report.pdf
- OECD. (2019). OECD Equity Market Review Asia 2019
- OECD. (2020). Coronavirus (COVID-19): SME policy responses.
- OECD/Eurostat. (2005). "The measurement of scientific and technological activities: proposed guidelines for collecting and interpreting innovation data. Oslo manual, Paris. http://ec.europa.eu/eurostat/ramon/statmanuals/files/9205111E.pdf
- Pacheco Pardo, R. and Klingler-Vidra, R. (2019). The Entrepreneurial Developmental State: What is the Perceived Impact of South Korea's Creative Economy Action Plan on Entrepreneurial Activity? *Asian Studies Review*, 43:2, pp.313-331.
- Parker, L. (2019). EBRD backs funding platform Funderbeam to plug SEE's equity gap. https://www.euromoney.com/article/b1h5spv07h2z24/ebrd-backs-funding-platform-funderbeam-to-plug-sees-equity-gap
- Principles for Responsible Investment. (2019). Investment policy: process and practice – a guide for practitioners.
- PWC. (2019). Listing in Korea – A Guide to Listing on the European Exchange.
- PwC. (2019). The Economist Intelligence Unit, 'Capital markets in 2030: The future of equity capital markets', p.12 EU IPO Task Force Report
- Reffell, C. (2019). Crowdfunding and Venture Capital Working Together, from: https://crowdsourcingweek.com/blog/crowdfunding-and-venture-capital-working-together/
- Su-jeong, H. & Jin-Seong, K. (n.d.). KONEX'investment threshold' lowers. http://news.hankyung.com/article/2019013085851
- Thomadakis, A. (n.d.). Developing EU Capital Markets for SMEs: Mission impossible?. Retrieved April 9, 2020, from http://aei.pitt.edu/93251/1/ECMI_Commentary_EU_Capital_Markets_for_SMEs_A_Thomadakis_0.pdf

- TOWARDS BETTER CAPITAL MARKETS SOLUTIONS FOR SME FINANCING. (n.d.). Retrieved April 6, 2020, from https://www.oliverwyman.com/content/dam/oliver-wyman/global/en/files/insights/financial-services/2014/July/FINAL3_BetterCapitalMarketMechanismsSMEs.pdf
- Vertesy D., Del Sorbo M., Damioli G. (2017). High growth, innovative enterprises in Europe. JRC Technical Reports
- Vismara, Silvio & Paleari, Stefano & Ritter, Jay. (2012). Europe's Second Markets for Small Companies. European Financial Management. 18. 10.2139/ssrn.1957140.
- World Federation of Exchanges, W. F. E. (n.d.). SME Financing and Equity Markets. Retrieved April 9, 2020, from https://www.world-exchanges.org/storage/app/media/research/Studies_Reports/WFE Report on Equity Market Financing of SMEs.pdf
- Zachariadis, I. (2019). Enabling SMEs' access to capital markets. *EPRS | European Parliamentary Research Service*. Retrieved from https://www.europarl.europa.eu/RegData/etudes/BRIE/2018/630311/EPRS_BRI(2018)630311_EN.pdf

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: https://europa.eu/european-union/contact_en

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 email via: https://europa.eu/european-union/contact_en

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 at: https://publications.europa.eu/en/publications. Multiple copies of free publications may be obtained by contacting Europe Direct or your local information centre (see https://europa.eu/european-union/contact_en).

EU law and related documents

For access to legal information from the EU, including all EU law since 1952 in all the official language versions, go to EUR-Lex at: http://eur-lex.europa.eu

Open data from the EU

The EU Open Data Portal (http://data.europa.eu/euodp/en) provides access to datasets from the EU. Data can be downloaded and reused for free, for both commercial and non-commercial purposes.

KC-09-21-099-EN-N

Publications Office

doi: 10.2765/962994
ISBN 978-92-76-34382-0