

Evaluation of Finnish Industry Investment Ltd.

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Tiivistelmä Referat Abstract	
<p>Finnish Industry Investment (FII) is a government owned special purpose investment company making private equity (PE) investments directly and through funds. FII's mission is to correct market bottlenecks in the areas of perceived lack of private funding and to contribute to the Finnish innovation, entrepreneurship and growth. This evaluation assesses FII as a part of the Finnish PE ecosystem, FII's investment decision-making, management model and its governance as part of MEE Group. Additionally, the report presents recommendations on the future role of FII as a part of national industrial and innovation policies. The evaluation has been completed in autumn 2013. The evaluation has included selected peer country and organization economical and ecosystem comparisons, 58 interviews of FII stakeholders and PE market actors, and in-depth analysis of FII internal materials.</p> <p>Based on the analysis, Finland's weak point is lack of a functioning venture capital (VC) market and ecosystem especially in the later-stage VC in terms of quality and investment volumes. The key bottlenecks are lack of commercialization know-how, small investment sizes, large share of public sector and the illiquidity of exit market. The underlying problems cannot be solved with additional liquidity alone as many are also qualitative in nature.</p> <p>Overall FII has had a positive impact on the development of the Finnish PE markets. FII's organization is considered professional with adequate resources. FII invests with private investors and all investments are market-based (PPP-model). However, FII has remained a relatively passive actor in the market development and its role could be leveraged. FII should more proactively develop the PE ecosystem, support new fund making and attract private sector both domestically and internationally. Additionally FII should re-focus direct investments. FII initiatives should be temporary and focused on the bottlenecks; the later-stage VC segment as a priority area. FII should retain and build capabilities and flexibility to operate as industry policy tool for the Ministry and actively renew FII to support market development.</p> <p>FII's current target setting by MEE is considered complex and unclear chains of command hindering BoD's role. A more holistic MEE-level view is needed to leverage existing resources to ensure allocation of capital to areas with highest long-term economic impact. The governance system would benefit from higher delegation of authority to BoD and gradual transition towards more guideline-based target setting. The target setting should be focused on aspired impact and resources to be allocated to specific initiatives, making required return secondary in priority.</p>	
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Foreword

The corporate governance of the Ministry of Employment and the Economy (MEE) includes a programme for developing the strategic performance, services and productivity of the ministry and the organization in its domain, “the MEE Group”. The aim of the development programme is to meet the productivity goals, to improve effectiveness and to develop the operations of the MEE Group. This is achieved, e.g., by developing the group’s structures, more efficient organization, elimination of redundancies and merging of functions.

MEE is committed to continuous improvement of the system by reducing its complexity and enhancing its performance. The ministry evaluated Tekes and Finnvera plc, the main funding organizations of the MEE Group, in 2012. In the autumn of 2013, the Ministry commissioned an external, international team to evaluate the third funding organization under its guidance, Finnish Industry Investment (FII).

The main aim was to produce a viewpoint on the direction in which FII’s activities should be developed, taking into account the projected change in the international operating environment by 2020. The evaluation is divided into five main themes as follows:

- to construct a vision of FII as a future funding markets and enterprise policy actor from a 2020 perspective
- to evaluate the industrial and innovation policy footprint of Finnish Industry Investment.
- to form a viewpoint on whether FII has been able to remove the deficiencies in the offering of capital investment markets
- to evaluate FII’s role as part of the MEE Group
- and finally, to present recommendations on FII’s strategy, operations, structures and mission revamping requirements looking at the year 2020.

The evaluation was carried out by the international evaluation team consisting of VALOR NAG Partners Oy Antti Halonen, Matti Saarikoski and John Sulin, and of team members Herve Lebrè, Pekka Roine and Juha Ruohonen. To support the evaluation team, the ministry set up a national sounding board which consisted of experts from different fields of the Finnish venture capital system.

The evaluation includes a thorough and valuable analysis of FII’s activities and development requirements. Many of the recommendations provide the ministry and FII’s management a good basis to further develop activities and refocus their efforts to develop the Finnish capital investment market and to improve the division of duties between actors within the MEE Group.

On behalf of the Ministry, I would like to express my gratitude to everyone who participated in this work and especially to the sounding board members: Erkko Autio, Imperial College London Business School; Tapio Heikkilä, FiBAN; Mirja

Kaarlela, Tekes; Janne Känkänen, Ministry of Employment and the Economy; Juha Peltola, Finnish Venture Capital Association; Pentti Pikkarainen, Ministry of Finance; Esko Torsti, Ilmarinen Mutual Pension Insurance Company; and Jarmo Väisänen, the Prime Minister's Office. The sounding board was chaired by Sakari Immonen of the Ministry of Employment and the Economy.

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Glossary & acronyms

Anchor investor	Active investor with main responsibility in strategic development
AIFMD	Alternative Investment Fund Managers Directive
AUM	Assets under management
BoD	Board of directors
Early stage	Venture and growth capital
EIF	European Investment Fund
EIO	Enterprise and innovation department of MEE
EK	Confederation of Finnish Industries
EVCA	The European Private Equity and Venture Capital Association
EVFIN	The European Venture Fund Investors Network
FINSIF	Finland's Sustainable Investment Forum
FVCA	The Finnish Venture Capital Association
FiBAN	The Finnish Business Angels Network
FII	Finnish Industry Investment Ltd
FoF Growth	Fund of Funds, (Kasvurahastojen Rahasto or KRR). established in 2009
GP	General Partner or fund manager
GRI	Global Reporting Initiative
Growth Track	Public service model for SMEs pursuing growth and internationalization
IPO	Initial public offering or stock market listing
IRR	Internal rate of return
Later-stage	Buyout, turnaround and replacement capital
LP	Limited Partner or fund investor
Market failure	Proven market failure where state aid is allowed (EU policy & regulations)
Market bottleneck	Negative deviation from peer group or widely perceived need in interviews
MEE	The Ministry of Employment and the Economy
MEE Group	Administrative sector of MEE comprises more than 30 organizations
MoF	The Ministry of Finance
NIS	National Innovation System
Passive investor	Investor assuming a co-investor role with the anchor investor
PE, Private equity	All private equity combined consisting of buyout, growth & venture capital
PMO	Prime Minister's Office
PPP	Public private partnership -model
Sitra	The Finnish Innovation Fund
Tekes	The Finnish Funding Agency for Technology and Innovation
VC	Venture capital

Tiivistelmä

Keskeiset havainnot

1. TeSi ja Suomen pääomasijoitusmarkkinat kansainvälisessä vertailussa

Suomen pääomasijoitusmarkkinat ovat kehittyneet kokonaisuutena viimeisen 15 vuoden aikana positiivisesti erityisesti myöhäisen vaiheen osalta (buyout- ja kasvurahoitus). Sen sijaan venture capital -markkinan kehitys on ollut maltillisempaa. Pääomasijoitusmarkkinoiden hallinnoitavat pääomat ovat kasvaneet nelinkertaiseksi vuodesta 1998 ja ne olivat 5,6 mrd. euroa vuonna 2012.

Haastattelujen perusteella TeSillä on ollut merkittävä vaikutus markkinoiden positiiviseen kehitykseen ja rahastojen syntymiseen markkinoille.

TeSi on mukana sijoittajana suoraan tai epäsuorasti rahastojen kautta 510 yrityksessä joiden kokonaistyydyttämisvaikutus on yli 50 000 henkeä. TeSin sijoitusosuutta vastaava osuus työpaikoista on 3 800. TeSin toiminnan vaikuttavuutta kohdeyhtiötasolla on vaikea arvioida, mutta haastattelujen ja akateemisten tutkimusten perusteella pääomasijoitustoiminnalla on positiivinen vaikutus kohdeyritysten kansainvälistymiseen ja kasvuun. Lisäksi TeSin sijoituksilla arvioidaan olevan merkittävät epäsuorat vaikutukset (mm. verokertymä) valtion näkökulmasta.

Pitkällä aikavälillä TeSin toiminta on ollut kannattavaa, vaikka tuottotaso on ollut lievästi negatiivinen viimeisen 5 vuoden aikana (IRR -2%). Tätä ennen yhtiö on tehnyt voittoa useina vuosina. Yhtiön melko hyvästä taloudellisesta menestyksestä johtuen saavutetun vaikuttavuuden suhdetta panoksiin voidaan pitää hyvänä erityisesti verrattuna suoriin tukimuotoihin, joissa panokset menetetään.

TeSin noin 400 M€ sijoituksista noin puolet kohdistuu venture- ja kasvuvaiheeseen ja loput myöhäisempään vaiheeseen (sisältäen vakautusohjelman sijoitukset). Yhtiön osuus venture- ja kasvuvaiheen rahoituksesta Suomessa on noin 30-40 % ja vastaavasti buyout-vaiheessa noin 5 %. TeSin sijoitustoiminnan fokus on 2000-luvulla asteittain siirtynyt myöhäisemmän vaiheen rahoitukseen vastoin nykyistä markkinatarvetta.

Suomi on maailman kärkikastia tutkimuksen ja alkavien yritysten rahoituksessa, joissa julkisella sektorilla on tyypillisesti hyvin vahva rooli. Rahoituksen suhteelliset volyymit kuitenkin pienenevät nopeasti yritysten kypsyyden kasvaessa. Tarkasteltaessa aikaisen vaiheen venture-sijoitusten volyymejä, eli hyvin pitkälti innovaatioiden kaupallistamisen rahoitusta, Suomi on arvioinnin vertailuryhmän keskikastia (vertailussa mukana 8 eurooppalaista maata tarkasteltaessa pääomamarkkinoiden toimivuutta). Myöhäisemmän vaiheen venture-markkinat ovat edelleen selkeästi vertailumaita pienemmät.

Sekä haastattelujen perusteella että TeSin toteutumaton hankevirtaa arvioitaessa markkinoilla on selkeä puute kokoluokan 1-5 M€ sijoituksista. Lisäksi markkinoilta puuttuvat kaupalliset toimijat suurempien venture capital -sijoitusten osalta, joissa rahoituskierrosten yhteiskoko saattaa ylittää 10 M€. Innovaatorahoitusputken näkökulmasta edellä mainitut rahoitustarpeet ovat keskeisimmät pullonkaulat toimivien alkuvaiheen ja kasvuvaiheen rahoitusmarkkinoiden välissä.

Viimeisen viiden vuoden sijoitusvolyymien perusteella Suomen myöhemmän venture-vaiheen pääomasijoitusmarkkinat tarvitsevat yli 200 M€ lisää pääomia, jotta markkinatarve voidaan kattaa. Tästä määrästä hieman alle puolet voisi olla julkista rahoitusta. Julkisen rahoituksen tarve kohdistuu selkeästi TeSin toimintakenttään.

Johtuen kasvuvaiheen rahoituksen maltillisista historiallisista tuottotasoista (Suomen 10 v IRR 0 %) myös KRR II -rahastolle nähdään selkeä tarve markkinalla ja valtion tulisi jatkaa panostuksia tältä osin.

Buyout-vaiheen rahastot ovat yleensä kansainvälisiä ja ovat Suomen osalta tarjonneet sijoittajille erinomaisen, keskimääräistä paremman tuoton (Suomen 10 v IRR 17 %). Tältä osin julkisen sektorin osallistumistarve on muita vaiheita pienempi, sillä kaupalliset toimijat tarjoavat tällä markkinalla riittävästi likviditeettiä.

Suomen pääomasijoitusmarkkinat ovat vertailumaihin verrattuna keskittyneet ja paikalliset. Suomessa on verrattain vähän aktiivisia instituutiosijoittajia ja kansainvälisen rahoituksen osuus on matala. TeSillä on markkinoiden suurimpana toimijana nykyisin ylisuuri rooli rahastojen alkuvaiheessa ja efektiivisesti TeSi päättää uusien rahastojen syntymisestä ("gatekeeper"). Toimivan yksityisen markkinan synnyttäminen edellyttää aktiivisten sijoittajien lukumäärän kasvattamista. Vaihtoehtona voidaan harkita mm. KRR II rahastojen rahaston hallinnoinnin osittaista ulkoistamista.

TeSi tekee pääosin epäsuoria sijoituksia pääomarahastojen kautta (osuus 65 %) ja sijoittaa myös suoraan kohdeyrityksiin (osuus 35 %) yhdessä yksityisten sijoittajien kanssa. Kansainvälisessä vertailussa suorilla sijoituksilla on yhä ylisuuri painoarvo TeSin sijoitustoiminnassa. Toisaalta on otettava huomioon, että osa suorista sijoituksista tehdään yhdessä ei-rahastomuotoisten toimijoiden kanssa (mm. eläkeyhtiöt, yksityiset sijoitusyhtiöt), jolloin ne kasvattavat yksityisen pääoman ja toimijoiden määrää pääomasijoitusmarkkinalla. Käytännössä näissä sijoituksissa toimitaan samoilla periaatteilla kuin rahastosijoituksissa, mutta sijoitukset kohdistuvat yksittäisiin yhtiöihin.

2. TeSin sijoituspäätöksenteko ja johtamismalli

Kansasijoittajat ja yhteistyökumppanit pitävät TeSin toimintaa ammattimaisena ja markkina-puutteita korjaavana. TeSillä on pitkästä historiasta ja merkittävästä markkina-asemasta johtuen hyvä näkyvyys lähes kaikkiin sijoitus- ja rahastohankkeisiin Suomessa.

TeSin rakenne on yltäosalla selkeä. Toiminta on organisoitu suorien sijoitusten ja rahastosijoitusten osalta tiimeiksi. Yhtiötä johdetaan yhtenä kokonaisuutena.

Keskeisenä tavoitteena on lainsäädännössä määritelty tuottotavoite, mikä on saatanut passivoida toimintaa huonommin tuottavilla venture capital- ja kasvuvaiheen osa-alueilla.

TeSin toiminnan tuloksellisuutta eri osa-alueilla on vaikea arvioida. Ulkoinen raportointi ei perustu käypiin arvoihin (viimeisen 10 vuoden tulos käyvin arvo 59 M€ raportoitua suurempi) ja toiminnan eri osa-alueiden raportointi on suppeaa ja keskittyy lähinnä taloudelliseen tulokseen ulkoisessa ja sisäisessä raportoinnissa.

Pienenä asiantuntijaorganisaationa (29 henkilöä) TeSin osaaminen on keskittynyt suppeaan joukkoon avainhenkilöitä. TeSin palkkataso on vertailuyrityksiä matalampi, mutta organisaation koko on vastaavasti suurempi (hallinnoitavat varat per henkilö). Henkilöstö on vahvasti sitoutunutta.

Verrattuna Pohjoismaisiin julkisiin pääomasijoitusyhtiöihin TeSin toiminta on kustannus-näkökulmasta tehokasta. TeSin kustannukset, 1 % pääomista, ovat samalla tasolla Argentumin (0.9 %) kanssa ja alle puolet Industrifondenin (2.4 %) ja Vaekstfondenin (2.0 %) toimintakuluista. TeSin kustannukset ovat myös alhaisemmat verrattaessa neljään yksityiseen Suomessa toimivaan sijoitusyhtiöön (1.3 %).

Suorien raportoitujen kustannusten lisäksi sijoitustoimintaan kohdistuu huomattava kustannuksia rahastopalkkioista, joita ei raportoida (nettomääräinen tulotus sijoituksista). Rahastopalkkiot ovat lähes yhtä suuret kuin muut kustannukset yhteensä (20–30 M€ maksettuja palkkioita nykyrahastoissa). Rahastopalkkiot ovat yleisten markkinakäytäntöjen mukaiset ja samat sekä TeSille että muille sijoittajille.

TeSillä ei ole merkittävää roolia markkinoiden yleisessä kehittämisessä vaan kustannukset kohdistuvat lähes täysin yksittäisiin sijoituksiin. Nykyinen toimintamalli ei optimaalisesti kehitä markkinoiden yksityisen sektorin palveluosaamista eikä panosta markkinan yleiseen kehittämiseen.

TeSin sijoituspäätösten arviointi on hankekohtaista ja subjektiivista, eikä suoraan perustu osa-aluekohtaiseen sijoituskriteeristöön. TeSi on laatinut ensimmäisen merkittävän salkun vaikuttavuusarvioinnin 2013 ja aikaisemmin toiminnan vaikuttavuuden seuranta on ollut rajoitettua. Vaikuttavuudelle ei ole asetettu aiemmin seurattavia mittareita osa-alueittain. Mikäli TeSin teollisuuspoliittista vaikuttavuutta halutaan lisätä ja pääomia halutaan kohdistaa vaikuttavuuden mukaan, tulisi TeSin kehittää tavoiteasetantaa, raportointia ja seurantaa tältä osin.

TeSin hallituksella on rajoitettu rooli sijoituspäätöksenteossa. Hallitus ei osallistu irtaantumispäätösten tekemiseen, ja esimerkiksi hylättyjä hankkeita on alettu seurata vasta hiljakkoin. Hallituksella ei ole myöskään ollut KRR I:n osalta roolia investointipäätöksissä alkuperäisen sijoitussitoumuksen jälkeen. Tämä ongelma ollaan korjaamassa käynnistettävän KRR II:n osalta.

TeSin sijoitustoiminta on melko varovaista suhteessa käytettäviin resursseihin. Yhtiön toiminta on rahoitettu omalla pääomalla ja nykyiset pääomat kattavat myös tulevat sitoumukset lähes täysimääräisesti. Yhtiön likviditeetti (sijoittamaton sitoutunut pääoma) on ollut viimeisen 10 vuoden ajan keskimäärin 207 M€. Likviditeetin sijoittaminen on ulkoistettu ulkoisille varainhoitajille. Nykyiset omistajan asettamat

reunaehdot mahdollistaisivat yli 300 M€ lisäsitoumukset (nykyiset sijoitukset ja sitoumukset 585 M€ ja potentiaali 917 M€ vuonna 2012 ilman suunniteltuja 120 M€ lisäpääomituksia omistajalta).

3. TeSin hallintomalli ja rooli osana TEM-konsernia

TeSin hallintomallissa on siirrytty yksityisen sektorin hallitukseen ja hallituksen puheenjohtajaan, mikä on lisännyt yhtiön päätöksenteon itsenäisyyttä ja luonut tarpeen selkiyttää aiempaa hallintomallia.

TeSi toimii huomattavan itsenäisesti, eikä omistajaohjauksen asettamilla reunaehdoilla ole käytännössä vaikutusta yhtiön toimintaan. Omistajaohjauksen tavoiteasetannan moniulotteisuus ja osittainen päällekkäisyys jättää yhtiölle huomattavan tulkinnanvaran, eikä siten välttämättä aktiivisesti ohjaa toimintaa.

TEM:n tulisi tästä syystä pyrkiä läheisempään strategiseen ja kaksisuuntaiseen dialogiin yhtiön toiminnan ja omistajatavoitteiden yhdenmukaisuuden varmistamiseksi erityisesti TeSin ja muiden TEM-konsernin yksiköiden hallitusten puheenjohtajien kanssa yhteisellä foorumilla.

TeSin toiminnassa on vain vähän päällekkäisyyksiä muihin TEM-konsernin toimijoihin nähden. Sen sijaan voidaan esittää kysymys eri toimijoiden väliin jäävien harmaiden alueiden kattamisesta julkishallinnon näkökulmasta. Keskeisiä esimerkkejä tällaisista osa-alueista ovat Finnveran ja jatkossa Tekesin alkuvaiheen sijoitusten ja TeSin myöhemmän vaiheen venture-sijoitusten väliin jäävä aukko, ulkomaisen pääoman houkuttelu Suomeen (Invest in Finland), pääomasijoitusmarkkinan yleinen kehittäminen ja markkinointi sekä sijoittaja- ja yritystapahtumat.

Asiakasnäkökulmasta julkisen innovaatorahoituksen toimijakenttä on hajanainen ja koostuu laajasta kirjosta toimijoita ja hankkeita. Valtio voisi hyötyä kokonaisuvaltaisesta ja pitkän aikavälin kattavasta suunnitelmasta rahoitusmarkkinoiden kehittämiseksi ja julkisen omistajuuden tuomien mahdollisuuksien täysimääräiseksi hyödyntämiseksi teollisuuspolitiikan työkaluna.

Suositukset TeSin roolin ja toiminnan kehittämiseksi

Keskeisenä kantavana teemana on TeSin tavoitetason nosto ja toiminnan aktivointi markkinoiden kehittämisessä ja toteutuksen varmistamisessa. Tavoitteena olisi olla pitkällä aikavälillä luoda vertailumaita parempi yksityiseen rahoitukseen perustuva innovaatioiden kaupallistamisrahoitus- ja pääomasijoitusmarkkina ja sitä tukeva ekosysteemi. Lyhyellä aikavälillä tulisi varmistaa nykyisen julkisrahoitusjärjestelmän toimivuus yhtenä kokonaisuutena, sekä edellytysten luominen toimivan yksityiseen rahaan perustuvan markkinan syntymiselle.

Toimeksiannon suositukset on jaettu neljään osa-alueeseen:

- A.** Panostukset ja aktiivinen rooli venture capital -ekosysteemin kehittämisessä
 - 1.** Panostukset avoimen VC-ekosysteemin kehittämiseksi lisäämällä yrittäjyys- ja kansainvälistä osaamista sekä kansainvälisiä rahastoja Suomeen
 - 2.** TeSi ankkurisijoittajaksi uusissa rahastoissa sekä sijoitusten ja rahastojen suurempi yksikkökokoko, VC-toiminnan laadullinen kehittäminen kilpailun kautta
 - 3.** Uusien sijoittajien houkuttelu markkinalle, aktiivisten markkinaosapuolten määrän lisääminen ja TeSin gatekeeper-roolin asteittainen purkaminen
 - 4.** Irtautumismarkkinoiden kehittäminen
- B.** Myöhäisemmän venture capital -vaiheen panostus ja TeSin suorien sijoitusten kohdentaminen suuriin VC-hankkeisiin sekä teollisuuspoliittisiin sijoituksiin
 - 5.** Pääomien lisääminen myöhäisemmän vaiheen venture capital -alueelle, tavoitteena yli 200–250 M€ sitoumukset (josta 100 M€ voisi olla julkista rahaa)
 - 6.** TeSin pääomien tehokkaampi käyttö – lisäpanostukset nykyresurssein
 - 7.** TeSin suorien sijoitusten uudelleenfokusointi suuriin VC-hankkeisiin ja teollisuuspoliittisiin markkinaehtoiisiin investointeihin PPP-mallin (Public-Private Partnership) mukaisesti – salkun yksinkertaistaminen ja pääomien kierto
- C.** TeSin toiminnan aktiivinen uudistaminen
 - 8.** Toiminnan suuntaaminen markkinapullonkauloja korjaaviin määräaikaisiin hankkeisiin
 - 9.** TeSin toimintamallien ja organisaation aktiivinen uudistaminen ja uuden mallin mukaisen osaamisen varmistaminen ja uudet markkinakäytännöt
- D.** Omistaja-ohjauksen suuntaaminen strategisempaan suuntaan
 - 10.** TEM-toimijoiden hallitusten roolin vahvistaminen ja aktiivisempi osallistuminen TEM:n strategiseen suunnitteluun ja päätöksentekoon
 - 11.** Omistajaohjauksen muuttaminen strategisempaan suuntaan, ja strategisten tavoitteiden toteutumisen seurannan järjestäminen osa-alueittain nykyisen kokonaistuloksen optimoinnin sijasta
 - 12.** Yhteistyön aktivointi julkisten toimijoiden välillä kaikkien pääomasijoitustoiminnan ekosysteemin kehittymisen esteiden poistamiseksi ja kehityksen tukemiseksi

1 Executive summary

Finnish Industry Investment (FII) is a government-owned special purpose investment company and makes private equity investments directly and through funds to correct market bottlenecks in the areas of perceived lack of private funding and to contribute to the Finnish innovation, entrepreneurship and growth. This evaluation assesses FII activities as a part of Finnish private equity system, FII investment decision-making and management model, and the governance of FII as a part of MEE Group. The report presents recommendations on the future role of FII as a part of national industrial and innovation policies.

The evaluation was performed during the fall of 2013 and was based on both desktop analyses of FII and third party materials, as well as on a relatively wide round of stakeholder and expert interviews. The performance of FII and the Finnish private equity market was benchmarked against a group of European established markets as well as a selected group of other developed private equity markets.

Previous evaluation of FII was performed in 2002 by Gordon Murray and Markku Maula. Murray and Maula address small size of the Finnish markets and need for early-stage venture capital as key bottlenecks in the Finnish market. Furthermore, they maintain that mixed and frequently incompatible target setting for FII and other activities have deviated FII from the focus of correcting early-stage market bottleneck. Rather than investing directly they promote indirect intervention, upside leverage and fund investments (including regional funds). Murray & Maula recommend that no permanent direct investment organizations should be built within FII, but that FII should have capabilities of orchestrating investments with demonstrated national importance.

Furthermore Murray & Maula call for improvement in target setting and performance measurement, including FII backed funds' performance in identified market bottleneck areas. They also claim that short term financial return target may have caused confusion in FII objectives. They regard governance as ineffective and coordination as an area with improvement potential. They also call for fundamental measures e.g. taxation to overcome obstacles for growth. As regard to other recommendations made by Murray & Maula, the current evaluation team holds them still valid and to large extent unresolved.

The evaluation team has observed variations in the perceived role of FII among parties interviewed and therefore also opinions on FII impact and effectiveness vary. The opinions and views on FII performance and impact depend on the perspective of the observer. The opinions of evaluation team and parties interviewed were highly divided by the aspect whether FII performance is judged as a continuum for early-stage innovation financing and industry policy instrument or from the perspective of market-based activities. This also relates to the ongoing discussion on potential

use of asymmetry measures and to need for reorganization of public ownership governance and potential launching of new industry policy instruments.

All in all the evaluation team perceives FII activities as professional and generally in line with prior target setting. In wider perspective FII is a well-functioning industry policy tool (public sector perspective) and a professional market-based investor (market perspective). Similarly MEE target setting is in principle correctly focused but leaving room for different interpretations. The evaluation team wishes to recommend certain modifications on the current FII operating and governance model, as well as on FII market focus to better address the market needs in the future. Furthermore some recommendations even extend beyond the original scope of the assignment.

1.1 Evaluation findings and development challenges

Finland has developed a relatively functioning later-stage private equity market but is lacking a well-functioning venture capital ecosystem. Finland currently has a funding gap in 1-5 M€ investment range, where both interviews and FII deal flow indicate room for significantly higher investment activity. The problems in the venture capital segment are fundamental by nature. Without a well-functioning venture capital segment the need for and role of the whole early-stage innovation financing system should be questioned.

The Finnish target companies are claimed to lack know-how especially in internationalization and growth. Historically the early-stage funding - primarily from public sources - has been focused more on quantity than quality of the ventures. Finland has an adequate number of venture initiatives compared to peer countries but with much smaller resources per company. Compared to peer-countries the Finnish investment size is less than half in the venture stage and only two thirds in the growth stage. Similarly, Finnish funds are much smaller with only half of AUM per fund compared to peer countries. Sub-par performance of investments and poor historical returns have reduced private sector willingness to invest in the venture capital segment thereby creating a need for public sector participation to ensure adequate liquidity. The Finnish venture capital system already has a high public sector share of funding, and exceptionally high share of public direct investments. This is in conflict with the prevailing academic thinking, with strong preference to indirect participation through funds. Recently decisions have been made to transform the public participation towards more indirect also in Finland.

The Finnish private equity exit markets lack liquidity compared to international peer markets both in terms of corporate M&A and IPO volumes. Finland essentially lacks a functioning IPO market for smaller companies, whereas Sweden has a well-functioning First North market place. The well-functioning stock market and activation of corporate venturing and M&A may require public initiatives both in terms of listing activity and regulatory infrastructure development. The practical

implication for FII could be the continued (but strengthened) practice of evaluating stock market as preferred path or more active role in the marketing of existing ventures to potential industrial buyers.

FII operations are based on PPP-model (public-private partnership) and leverage private capital both in terms of funding and risk syndication. All FII investments are market-based and require minimum 50% of private financing. Historically FII has assumed a passive role in the targets and funds, but based on interview comments could assume more active role in market development and attracting private capital without interfering in the target company strategic decision making.

From the fund managers' perspective the Finnish investor base is very narrow. Compared to peers Finnish funds are more local and have lower than average share of commitments from international investors. Finland desperately lacks active private investors and has relatively few active institutional investors especially in the early-stage. The problem is magnified by the fact that majority of early-stage fund financing is pooled and distributed through FII managed FoF Growth, making FII effectively a gatekeeper for new funds in Finland. In 8 recent funds with both FII and FoF Growth as investors the combined average share of these two parties has been 30%, exceeding 40% in two funds.

FII cost of impact has been low, as FII has made close to zero financial result (compared to more subsidy based system used in the pre-commercial stage, where all impact is attained through significant direct costs). FII is claimed to have had historically a strong positive impact on the market development in the growth and buyout stages. FII has invested in majority of the private equity funds in Finland and based on fund interviews these investments have catalyzed growth of funds and target companies. On the other hand, FII or other public sector initiatives have not yet been successful in building a functioning early-stage private equity financing market. Nevertheless, the Finnish public sector initiative's performance in the early-stage is at par with private sector and international benchmarks. FII has demonstrated almost similar results with both direct and fund investments, although the performance of direct investments is slightly below indirect investments. In addition to direct and fund investments in the early-stage, FII also invests in later-stage funds and makes selective investments in international funds to attract international capital to Finland. Some of the later-stage and international fund investments have been profit motivated and as such do not help removing market bottlenecks. Additionally FII has several specific investment programs (e.g. mining and stabilization), which are driven by industrial policy.

FII operates relatively independently and the operations have been in principle self-financing, although the state has provided FII with new equity for essentially all new initiatives. The profit motive on portfolio level and poor performance of the venture capital segment have made FII risk averse and the investment capacity has not been fully utilized for optimum impact. In the current state with planned further capitalization, FII has major unutilized investment potential, sufficient to meet all proposed additional allocations if used effectively.

Public support system and also FII appear to have a relatively complex and fragmented structure and multidimensional target setting making the system difficult to govern and leaving room for sub-optimization on unit level. MEE is adopting a new private sector chairmen-based governance model which imposes new requirements for governance procedures and roles. In the new set-up operational entities will become more independent and therefore higher level of inter-organizational collaboration and coordination is needed. The need for collaboration is also required for wide range of corrective initiatives that extend beyond focus area of any single entity.

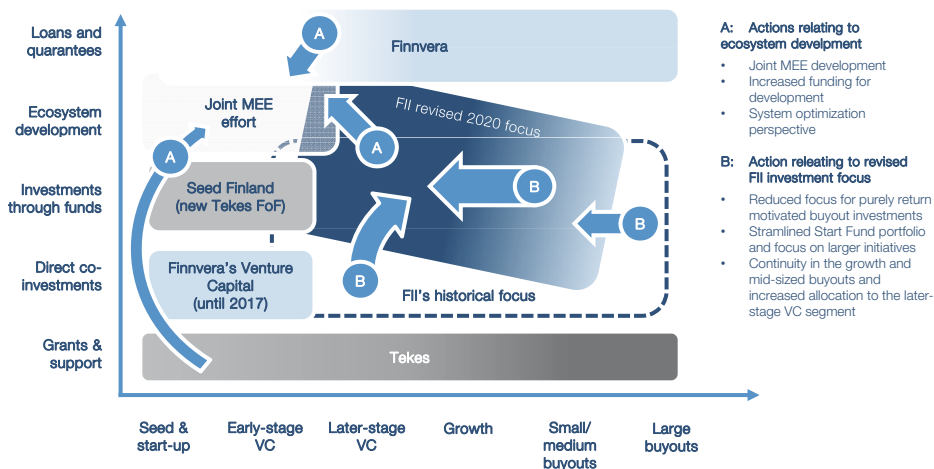
1.2 Key policy recommendations and actions

Finland has a highly active public support for the development of working private equity markets and this approach should be continued. However, in the future the focus should be in developing the quality of a working financing system for growth- and export-oriented companies. Among others this aspect should be highlighted in the selection of FII investment cases and co-investors. Proposed FII focus on larger venture initiatives with critical mass would also contribute to the tighter selection and qualitative development of the market.

The role and all activities of the public sector should be revised more towards temporary interventions to correct the market bottlenecks. Due to the long term nature of the private equity the interventions should have sufficiently long horizon (e.g. 10-15 years) but nevertheless have a pre-agreed fixed term and target setting, which are being communicated ex-ante to markets. Rather than optimizing the total result of the portfolio FII should focus on and be measured against reaching the initiative objectives (e.g. building a well-functioning later stage venture capital with adequate funding from private sources). FII and MEE should adopt a holistic view on the whole market and have a balanced portfolio of initiatives addressing the most critical market bottlenecks in the private equity markets and evaluate new opportunities and areas to leverage PPP model to accelerate the industry policy impact of public ownership.

Specifically, relating to the private equity market development, the evaluation team recommends that addressing the liquidity needs in the later-stage venture capital should be a key priority for FII in the coming years. The evaluation team regards FII to have an important role after the activities of Tekes in the very early-stage. The evaluation team recommends that FII should be kept as a separate entity and focus on providing continuity in liquidity for the private equity market development. FII should provide continuity in the medium term through investing in growth-stage and to some extent in buyout-phases, but withdraw from the areas with sufficient private funding to address new market bottleneck areas. Most importantly FII should adopt an even more active role in the market development and the system optimization through other measures than mere provision of liquidity. The change in FII focus is depicted in the figure below.

Figure 1. Illustration of public sector's role in future in PE market development



Source: VALOR analysis

In the future both MEE and FII ambition level should be raised. The ambition for the Finnish market should be to excel the international peers both in terms of volume of private funding and in terms of quality of the investment cases, especially at the earlier stages of innovation commercialization and financing. For example FII could assume a more proactive role in the fundraising of new funds and actively flag intention to participate in funds and management teams that have passed the FII evaluation process. Similarly FII could use its resources more actively on market development initiatives outside individual investment cases.

MEE should actively drive the MEE group organizations and other public entities towards reaching the ambition, and use the full instrument assortment at hand for optimal result. MEE should collaborate actively with key MEE entity BoDs and private sector (e.g. FVCA) in identification and prioritization of the market bottlenecks and developing the best approach on how to address these bottlenecks. The prioritization should be based on best economic impact for resources at hand from the public sector overall perspective (including indirect impact).

The required further liquidity in the later-stage venture segment can be met with FII's current resources and planned further capital injections through more active investing and reallocations within FII portfolio. Recently discussed potential multiplying of the public innovation financing may pose a risk on the overall quality of the investments made and delay development of well-functioning private equity markets. In order to avoid potential quality problems the planned increase in public participation should be increased at the rate with the market can absorb new liquidity and according to volume needs to finance available high quality investment initiatives.

The evaluation team wishes to make the following policy recommendations with related initiatives as follows. The recommendations and actions are directed both

to FII and MEE. The recommendations are further described in detail in Chapter 6 of this document.

- (A) Improve Finnish venture capital ecosystem**
 - 1. Foster and fund open VC ecosystem development by increasing entrepreneurial, growth and internationalization know-how and by bringing international funds to Finland
 - 2. Improve quality and critical mass through competition, FII as anchor investor in new funds
 - 3. Attract international capital and new active LP's to eliminate FII gatekeeper-role
 - 4. Activate the exit market to release funds for new investments
- (B) Increase liquidity in later-stage venture capital and re-focus FII's direct investments to larger initiatives and industry policy investments**
 - 5. Increase liquidity in the later stage venture capital by 250 M€ (100 M€ from FII)
 - 6. Use FII capital more actively and efficiently- further liquidity with existing resources
 - 7. Re-focus direct investments to larger initiatives and industry policy driven PPP-investments
- (C) Renew FII actively and focus on temporary interventions**
 - 8. Focus on temporary interventions on market bottlenecks
 - 9. Renew and align FII structure, skill-set and offering actively to new focus areas
- (D) Focus governance on strategic guidance and remove all obstacles for an efficient ecosystem**
 - 10. Delegate authority and involve MEE BoDs more strategically in MEE planning
 - 11. Focus governance on strategic guidance & measure strategic objectives (not annual result)
 - 12. MEE Group to show leadership in collaboration to build a powerful ecosystem

Overall, the accelerated development of the Finnish private equity markets call for more active approach from FII and major adjustments to the changing priorities. In the future FII should address key market bottlenecks with active corrective measures and therefore be organized and resourced accordingly. FII should more actively develop VC ecosystem in Finland, attract new investors to Finnish PE markets, actively develop market practices, increase the liquidity of later-stage VC markets and discontinue direct investments outside market bottlenecks areas. Additionally MEE should delegate more authority to FII BoD, which should be responsible for steering FII to be as beneficial for the Finland as possible, realigning FII's operations within the guidelines of this evaluation.

2 FII objectives & strategy

Finnish Industry Investment Ltd (FII) is a wholly government owned special purpose investment company. FII was launched in 1995 to accelerate the availability of risk capital for small and medium sized companies. The company's original mission was to promote innovative entrepreneurship, to improve Finnish companies' prospects for growth and internationalization, and to develop Finland's industrial structure and the private equity sector.

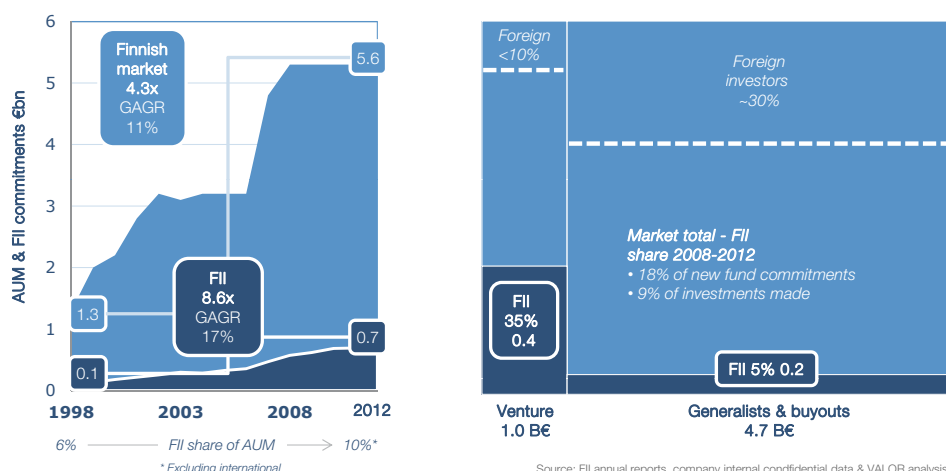
2.1 FII objectives

FII provides private equity financing for SMEs. Historically there has been positive market development and growth in Finland private equity market (AUM has four-fold to 5.6 €bn in last 15 years), especially in the buyout stage. FII is a key player in the Finnish private equity market having main focus in the venture capital and growth stages.

FII objectives and core purpose has remained essentially the same with minor modifications. In 2012 annual report FII itself describes the operations as follows: "FII is part of the Finnish national innovation system, which seeks to stimulate Finnish industry, promote the development and deployment of new technology, while creating new growth companies, jobs and wellbeing. FII contributes to the innovation system services by providing venture capital and private equity financing to companies. By increasing the availability of risk financing and by activating private investors for risk-taking, we create prerequisites for growth and job creation."

Since the inception, the Finnish private equity market has changed significantly and some of the FII's initial targets have been achieved. The FII role in the market has developed throughout the years. Historically FII has contributed significantly to development of buyout and growth stage private equity market segments in Finland and now faces even more challenging task to build a working later-stage venture capital markets. Based on interview comments FII has established its position as an important market participant with highly professional organization.

Figure 2. Finnish PE market development and FII



As depicted in the figure above, during the last 15 years the Finnish PE market AUM has increased over to four-fold compared to starting point at 1998. At the same time FII commitments to the PE market have increased to over 8-fold and FII share of AUM in the Finnish market has at the same time increased from 6% to current 10%. Thus FII is a key player in the Finnish PE market, and has potential to develop the market even further.

2.2 FII portfolio and investments

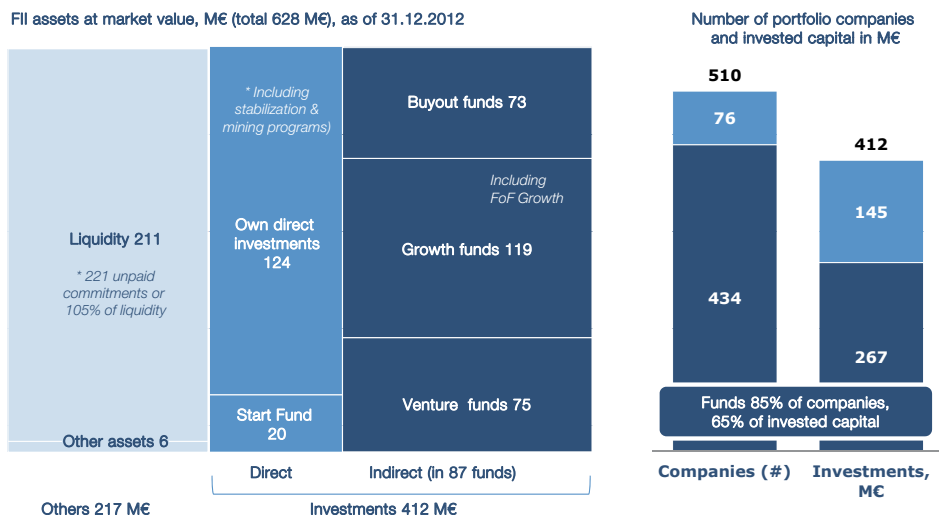
FII has 0.6 €bn in assets of which two thirds are co-invested with private investors or invested through funds to over 500 companies. FII operates primarily through private equity funds but also makes direct investments. The focus of FII has shifted towards the more developed later stage private equity in the last 10 years mainly due to the recent stabilization program and FoF Growth investments.

FII portfolio has grown rapidly during last 10 years. The FII balance sheet has grown on average by 8% growth rate to more than double from 266 M€ in 2002 to current 569 M€.

FII invests in funds and makes direct investments with co-investors. In 2012 the market value of FII assets was 628 M€ as depicted below. Market value of FII investments was 412 M€ consisting of 267 M€ or 65 % of funds and 145 M€ or 35 % of direct investments. In 2002 direct investments share was 23%. The FII operations have shifted gradually towards increased direct investments, partially due to stabilization investment program. In addition to investment activities, FII assets consist of 211 M€ liquid securities and cash and of 6 M€ of other assets. The liquidity

is required to finance the current unpaid commitments of 222 M€. Essentially all unpaid commitments are related to funds.

Figure 3. FII portfolio composition



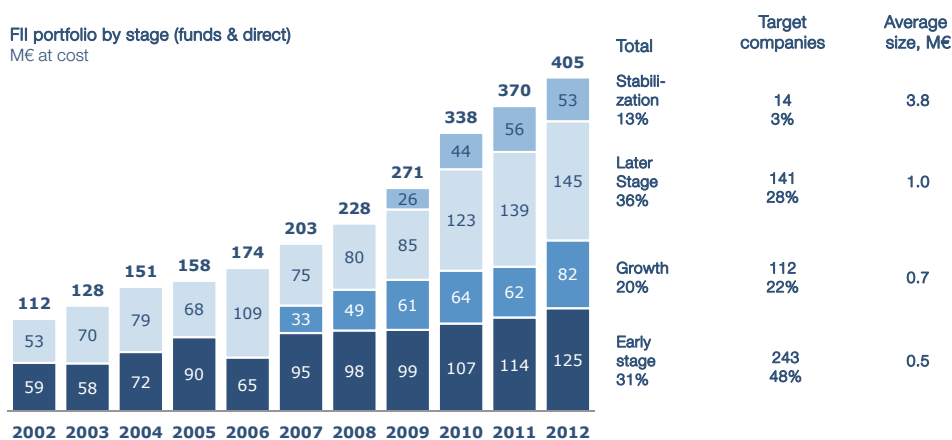
Source: FII annual reports, company internal confidential data & VALOR analysis

During last five years (2008-2012) FII has invested annually close to 100 M€ on average. FII annual commitments have been 92 M€ in new commitments and paid 90 M€ p.a. in capital calls and direct investments to funds. During the same period funds and portfolio exits have returned approximately half of the capital or 42 M€ p.a. The average net investment has been 48 M€.

FII has over 200 M€ in unpaid commitments over 402 M€ invested in the portfolio companies. Early-stage investments account for 23%, growth investments 39% and later-stage investments account for 37% of current investments and unpaid commitments combined.

FII invests at early-stage companies through venture capital funds and directly through Start Fund (SF). The share of early-stage investments has decreased from 53% of investments in 2002 to 31% in 2012, although doubled from 59 M€ to 125 M€. Taking into account the growth financing (reported separately since 2007) the combined share of growth and venture-stages of FII investments has remained essentially the same (53% in 2002 and 51% in 2012). Venture- and growth stage investments account for 207 M€ of total 405 M€ investment portfolio (including both direct and fund investments). These developments are shown in figure below.

Figure 4. FII portfolio development throughout 2002-2012



Since 2002 the number of reported early-stage target companies has decreased slightly (not taking into account companies reported under growth-stage) from 265 to 243. Positive trend can be observed in the average investment per company rising from 0.2 M€ to current 0.5 M€ per target. This is in line with clear need for higher concentration of investment to the most promising initiatives.

The historical trend toward smaller share of early-stage investments has two underlying drivers. Firstly, FII has launched a 100 M€ stabilization program in 2009 and secondly FII has made significant commitments to growth-stage funds (partially through FoF Growth). Low participation of larger institutional investors at the early-stage emphasizes the role of FII as local lead investor from international investors' perspective although FII assumes a passive approach for the day-to-day management of the targets. Historically FII has operated solely as a passive co-investor with one or several private investors investing more than 50%. As a market-based co-investor FII's investments are highly dependent on availability of private capital. FII can only contribute to emergence of new funds through own active approach and higher allocations. Despite being passive on the target-level the management of FII perceives that FII acts as anchor investor for new funds but this role could be strengthened even further. FII catalyzes private capital through actively supporting new fund teams with no prior track record, participation in funds, and through facilitation of investment decision-making for private institutional investors. However based on interview input FII does not actually contribute to the underlying problems why private capital is scarce at the early-stage like low IRR for investors.

FII has contributed to the market liquidity and its investment volumes are claimed by FII to have a counter-cyclical nature. Financial crisis has affected private sector allocations in private equity but, however, with relatively constant investment volumes, FII has provided continuity. FII investments have been counter-cyclical and

FII's new commitments account for 18% of total during five-year period of 2008-2012. Actual annual investment volumes appear to support this claim and FII's allocations to fund commitments and direct investments have doubled from 203 M€ at year end 2007 to 405 M€ in 2012. Based on interview feedback local fund managers regard constant investment volumes important for the continuity of the funds in Finland.

The main direct impact of FII operations is currently the funds provided. FII and co-investors investments also provide continuity through facilitation of target companies debt funding, promoting growth through lowering barriers for growth-oriented corporate investment activity and c) through signaling of the target company attractiveness as an investment target. FII has had major impact on the (continued) availability of debt capital. Based on interview comments, FII's and other investors' relatively small private equity investments have significantly contributed to continued availability of debt capital and thereby continuity of the target companies especially in stabilization program portfolio.

All FII investments in funds and direct investments account for less than half of the transaction or the commitment (on average 7% share of funds/targets throughout the portfolio). FII has an enabler role in catalysis of the private capital. FII regularly claims to have a strong leverage impact, but especially in larger funds with small FII participation the FII impact and causality can be questioned.

Indirectly FII improves the liquidity through catalysis of domestic private capital and attracting foreign capital to Finland, through networking, collaboration and promoting industry best practices. Based on stakeholder evaluation performed by Innolink in 2012 for FII, the awareness of FII activities is relatively high, especially in venture capital and FoF activities but less in buy-outs or mining and stabilization investments.

2.3 FII direct investments

FII has fragmented direct investment portfolio consisting of 76 companies. Historically the fragmentation has been higher but FII has trimmed small Start Fund investments and currently focuses on larger investment cases. Through direct investment unit, FII can also in the future make market based interventions if needed.

FII has made 90 direct investments or on average 18 investments during last 5 years. On average investment has been 1.8 M€. Half or 45 investments have been follow-on investments in the existing portfolio companies, or 28 M€ in total (0.6 M€ on average). The remaining 134 M€ has been invested in 45 new target companies (3.0 M€ on average including large stabilization investments). 4 or 9% of the current investments in 44 companies have been in the portfolio longer than 5 years.

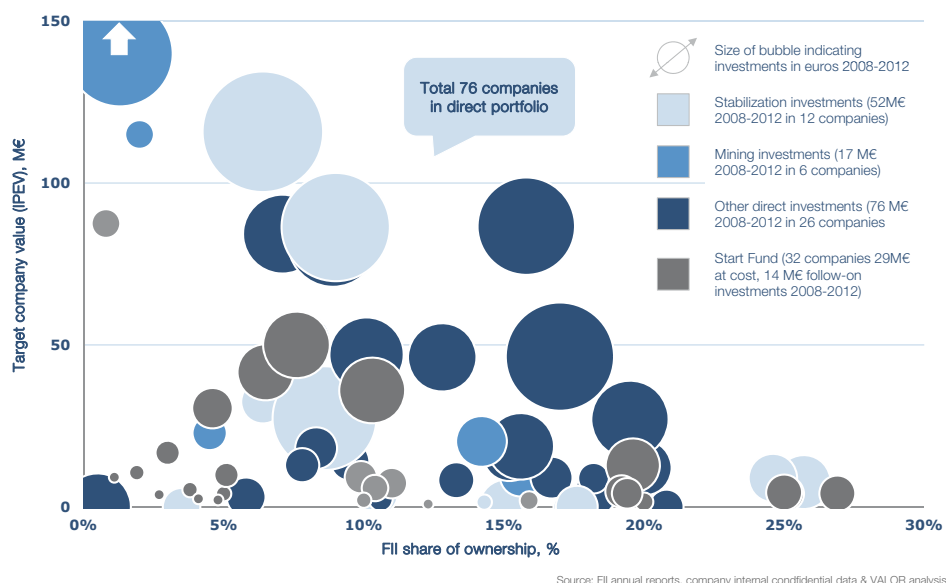
FII's direct investments are further divided into FII's own direct investments and early-stage investments made by Start Fund (SF). FII's direct investments have mixed

reporting practices, but FII reports recent stabilization program and mining, service & cleantech investments as separate business lines. The multidimensional grouping is relatively complex.

FII has trimmed its SF portfolio and reduced the number of companies from 82 to 32 during last 5 years. FII has made investments in 76 companies (mainly follow-on investments) with average ticket size of 0.2 M€ (14 M€ in total). SF investments are therefore much smaller than in other direct investments.

FII's direct investments' current distribution is depicted in the graph below.

Figure 5. FII direct investments in the current portfolio



FII promotes the diversity in the Finnish economy. FII's geographic focus of investments in Finland is in balance with structure of the economy. Investments cover a wide range of industries, but according to FII management, have been biased to technology investments. FII is not industry-focused but it separately reports investments in the MEE's governance letter-imposed target industries. These target industry sectors currently cover cleantech, mining and services. The target sectors account for 49% of FII's direct investments (acquisition cost of 80 M€ of total 162 M€). Investments in target sectors have grown to 2.7 fold since 2008 (30 M€ or 36% of total). Cleantech accounts for half of FII's 80 M€ investments and the remaining half is distributed almost equally to mining and services. FII's stabilization initiative investments account for 11 M€ or 14% of total 80 M€ in target industries. In total 80% FII's investments are in three target industries and in stabilization program.

FII has been active in the mining sector for relatively long time and has developed unique know-how at the early-stage mining investments in Finland. Based on

interview comments from investors, the mining initiative was rightly timed and very positive. The mining sector is still considered to have high future potential and FII participation should therefore be continued in this segment.

FII has a potential to be used for industry policy-driven interventions in critical market bottleneck areas. FII has not made investments without private sector participation. In addition to market-based investments FII has a potential to intervene in the areas where no private capital can be found based on industry policy considerations. All prior FII initiatives, including Start Fund, mining and stabilization are based on principle of co-investing with private investors. In principle FII can be used as the State's tool for such investments outside normal public budget-based decision-making. Typically such investments would be decided upon outside FII at the owner level.

2.4 FII and FoF fund investments

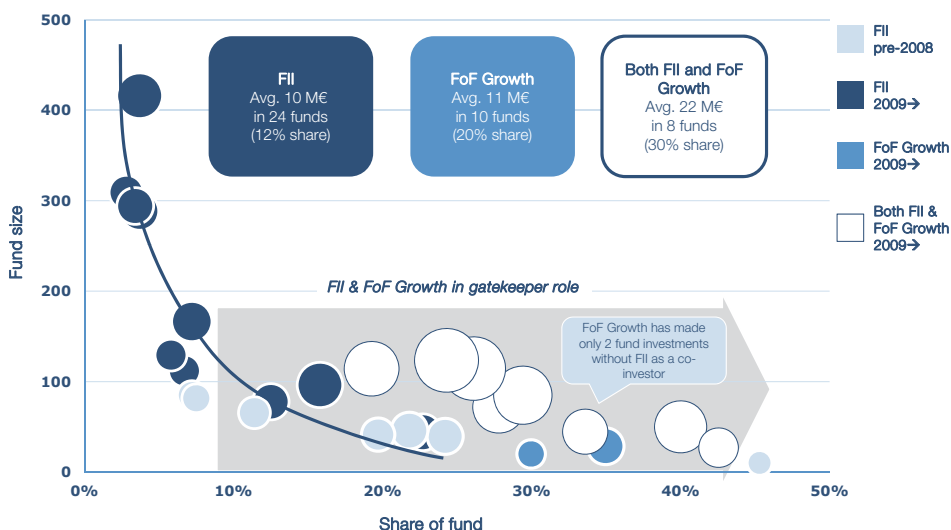
Majority of FII liquidity impact through own and recent Fund-of-Fund (FoF Growth), which FII solely manages. FII has become the largest venture and growth stage investor with participation in majority of funds in Finland. Due to FII large share and other investors' passive approach FII effectively has a gatekeeper role for new funds.

FII has contributed significantly to market liquidity. Finnish private equity markets have developed rapidly during last 15 years. Assets under management in the Finnish private equity funds have grown to more than four-fold at average growth rate of 11% from 1.3 €bn to 5.6 €bn. At the same time period FII commitments have grown almost nine-fold from 84 M€ at average growth rate of 17% to 719 M€. FII share of total commitments has more than doubled from 6% in 1998 to 13% in 2012.

From Finnish fund manager perspective FII is among the largest private equity investors along large pension funds. FII has commitments in 69 Finnish private equity funds managed by 27 fund management companies. This is approximately 60% of total 46 management companies in Finland. FII management claims to have visibility to essentially all new funds and fund management company initiatives in Finland.

In total FII has approximately 10% of the total 5.6 bn total assets under management (AUM) of Finnish fund managers. FII has a stronger role in the Finnish venture market with AUM of 1 €bn with estimated share of 35%. Taking into account the third party investments in FoF Growth FII share of investments is even higher. Respectively the share is lower, approximately 5% share, at later-stage generalist & buyout segment with AUM of 4.7 €bn. During last five years FII has made a total of 266 M€ in new fund commitments into 25 funds. The FII share of these funds is 10% and an average investment has been 10.7 M€. These funds have a total capital of 2785 M€. Of the capital 1.1 €bn is in Finnish management companies, which is approximately half of total 2.5 €bn capital raised in Finland during the same period.

Figure 6. FII & FoF Growth (KRR) commitments to new funds 2008-2012



Source: FII annual reports, company internal confidential data & VALOR analysis

In total FII's 516 M€ commitments in 86 funds in the portfolio at 2012 contributed 7% to total of 7.4 €bn commitments in those funds. Based on interview comments, FII participation may have catalyzed the target funds to raise more capital. However, with a relatively low share of FII capital in funds, causality of catalysis is moderate at best. In total 86 funds are managed by 41 management companies (2.1 funds per management company). The size variation in funds and AUM by manager is relatively high. 7 largest funds exceeds 200 M€ in size and together stand for 57% of total commitments. 22 funds are in 50-200 M€ size range and have 30% of all commitments. In addition to these FII portfolio contains a large number of funds lacking the critical mass required. 57 or two thirds of funds have commitments below 50 M€ with average size of 17 M€ with only 13% of total commitments.

These commitments can be divided into two categories: independent investments and investments in funds where FoF Growth is also an investor. FII has made commitments in 23 funds during last five years or on average 5 commitments p.a. In 2012 FII had investments in 86 (+6 or 8%) funds and in 2007 80 funds (17 funds discontinued or ended during last 5 years). The total value of new commitments has been 222 M€ or 10 M€ per fund. In addition FoF Growth has made 10 new commitments, of which 8 are overlapping with FII's own direct fund commitments. This, as shown in figure above, results FoF Growth making only 2 investments independent of FII participation. FII has made 157 M€ other direct commitments (alongside 80 M€ in direct commitments for FoF Growth funds) to 15 other funds. 90% of these commitments have been made 2008-2010. Majority 60% or 98 M€ of these commitments have been made to 10 foreign funds. FII's share in the foreign

funds has been only a marginal 6% of total 1.7 €bn raised capital. Essentially all non FoF Growth -related investments have been focused either to later-stage with sole financial return rationale or to international funds with only modest market bottleneck correction impact.

FII has made 124 M€ in new fund commitments during last five years to FoF Growth funds. FII has made 80 M€ (65% of total) direct new commitments to funds committed 44 M€ (35% of total). FII's total FoF Growth commitment is 54 M€ or 40% of the total 134 M€. In total 110 M€ or 81% was committed to fund investments at by 2012. FII's commitments to FoF Growth target funds outweigh other FoF Growth's investors' commitments by factor of 2. FII's 124 M€ fund commitments have catalyzed and contributed to raising of 690 M€ in capital to funds (5.5x FII's commitments).

A joint FoF Growth -effort is not fully in line with current market practices and institutional investors' approaches. Large pension funds are competing to reach superior returns through differentiated portfolios. This is especially valid for assets with higher risk and return like private equity investments. Furthermore FoF Growth approach is likely to reduce diversity in fund teams compared to individual decision-making. FoF Growth competes directly with private sector fund-of-funds. However, other fund-of-funds are not active in the early-stage fund investments in Finland. Also private sector service providers were considered when selecting FII as the management company for FoF Growth. FoF Growth clarifies and speeds up investment decision-making from new funds' perspective. Historically funds have lacked active anchor investors in Finland. Institutional investors typically give indicative soft commitments or indications of interest. The funds' investor base is typically relatively fragmented with each investor holding a small share of the fund commitments. Lack of coordination among institutional investors and without firm commitments new funds' final decision to launch operations carry higher risk and the process is likely to take longer time. FII and FoF Growth could assume more proactive sponsor role for funds where they intend to invest and clearly flag the interest at the early-stage with subject to gaining acceptance from other investors to participate.

Based on interview comments FII is regarded to be a gatekeeper for new funds, a de-facto decision maker whether new fund is launched or not. FII management and BoD perceive this position undesirable. This position is even further strengthened with new FoF Growth. FII manages new fund of fund and is active in new venture team & fund initiative evaluation, and typically commits 20-40% of new fund's capital. Large pension funds and other institutional investors typically target larger funds at later-stage. They also have limited resources and they rely heavily on other investors' due diligence for new funds. This development is likely to continue with new planned FoF Growth II, which will also be managed by FII. However, other investors perceive FII input valuable and would likely have lower commitments to earlier stage funds without FII services.

2.5 International investments & foreign capital

Although FII focus is in Finland, FII already has a significant international exposure through own international fund commitments and indirectly through funds' international investments. Similarly FII collaborates with international peer organizations and has active role in attracting international public financing to Finland.

FII is already relatively international. Almost one fourth of FII investments and commitments are in foreign companies or funds. In addition, part of the commitments and capital in the Finnish funds is directed to foreign companies. We estimate that a third of FII's capital flows outside Finland.

FII attracts international capital to Finland by investing in international private equity funds and by co-investing together with international investors in Finnish companies. Majority of FII's impact takes place through funds. FII has total commitments of 679 M€ in funds and direct investments of 213 M€ (at cost) account, combined 890 M€ of which 159 M€ are committed to foreign funds and 33 M€ invested in foreign companies directly.

FII has made 155 M€ commitments to 17 foreign funds. FII has a long track record of foreign commitments and the earliest in the current portfolio was made in 1999. In total these funds have capital of 8.8 €bn. FII has a relatively small share, and therefore limited potential to have a direct impact on the foreign target fund activities. In selection of foreign funds, FII evaluates among other criteria the plans to invest in the Finnish market. 10 of current foreign funds in the portfolio – representing 56% of foreign commitments – have impact to Finnish market as FII's investment rationale. Over time the foreign funds have invested in 21 Finnish companies. FII considers further commitments to manager's new funds only if the Finland linkage has been realized as planned. The remaining 7 funds with 44% of FII's commitments in foreign funds have only performance rationale to finance FII's operations. FII BoD could consider including investments solely targeted for performance/profits into financial assets. FoF Growth does not invest in foreign funds at the moment. FII and FoF Growth could more actively promote foreign funds launching local dedicated teams to Finnish market or a commitment to build local presence, thereby being effectively comparable to Finnish funds. Based on prior discussions with target funds, FII management does not perceive earmarking of funds feasible.

FII has indirect effect on foreign institutional investor decisions to make commitments to Finnish funds. From international investor perspective, FII has an important role as reference point and source of information as one of the active LP's in the market. FII management perceives market-based activities as a precondition for the attained credibility. As one of the leading investors and wide participation FII is often referred to in the decision-making phase. International investors regard in FII fund due diligence as highly professional. According to the stakeholder survey

conducted in 2012, FII is regarded a preferred partner and reported to be highly professional by foreign investors.

The current portfolio contains 10 direct investments in foreign companies, half of which are originally Finnish technology companies and others operate in the mining sector, partially also in Finland. FII's 33M € investments in foreign companies are relatively small (5% of total 690 M€ investments and commitments). FII does not invest in foreign companies without direct Finland linkage. Historically FII has developed collaboration initiatives with some foreign investors. In 2010 FII launched a three-year 50 M€ 50/50 co-investment program with Russian Corporation of Nanotechnologies (Rusnano). The initiative has lead for example into 25 M€ investment in Beneq. Otherwise FII's role appears limited in attracting foreign private investors to the portfolio company investment rounds, although in 2012 alone foreign investors were involved in 10 of 17 direct investments

FII has close working relations with European Investment Fund (EIF), a major co-investor in large funds, due to historical reasons. Several FII senior managers have been previously employed by EIF. EIF has made 170 M€ commitments in Finnish funds in addition to FII's 120 M€ commitments to these funds. These funds have a total capital 760 M€, and combined share of FII and EIF is 38% of these funds. FII regularly participates in and promotes industry organization activities and networking initiatives. As a member, FII has actively participated in European Venture Capital Association (EVCA) and Finnish Venture Capital Association (FVCA) activities. FII follows the guidelines of EVCA and FVCA associations concerning ethics and corporate governance. FII has founded a new collaboration platform; European Venture Fund Investors Network (EVFIN), with other European public private equity market organizations in 2011. EVFIN organizes workshops ("sharing best practices") and has among other things performed a wide benchmarking study of public peer organizations in Europe

2.6 Impact on target companies & know-how

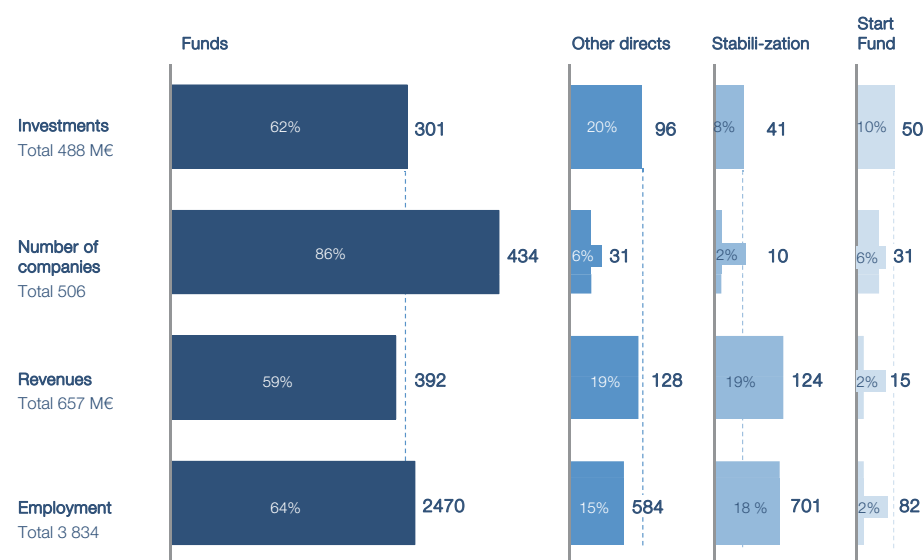
FII is financing companies with over 50.000 employees, but FII's implied share of employment is 3.800 employees. Private equity in general has positive impact on target company performance and growth but FII impact has been stagnant recently. This is partly explained by difficult market situation. Most impact is created through FII's fund and other direct investments.

Private equity investments are typically perceived to accelerate structural changes and industry consolidation and to have a positive impact in the investment and entrepreneurial activity. Availability of risk capital lowers the barriers for the required change and lowers the associated risks through syndication. FII contributes to market risk-taking mentality and promotes entrepreneurship in general beyond FII's investments and commitments. The indirect effects cannot be directly measured but can have major impact in the overall development of the competitiveness of the Finnish economy.

Private equity funds are typically regarded more demanding than their industry peers. The private equity funds adopt best practices across portfolios and contribute to emergence of new market practices. Similar to companies acquired by large international corporations, private equity investment targets have access to accumulated know-how through fund managers' networks and lessons learned in other portfolio companies. The best practices adopted in the private equity industry are leveraged also in the companies outside private equity industry. Based on interview input private equity has positive side effects in the economy as a whole.

Relatively small share of the Finnish companies are part of FII investments. At the year-end 2012 FII had investments in 510 companies, of which 86% through funds and 14% directly. These companies generate a total revenue of 8.3 € bn and employ 50 000 persons. FII's capital weighted share (of commitments in funds and direct investments) is 7%. Therefore FII's calculated share of employment is 3834 employees and 657 M€ in revenues, much of which at later-stage companies. A claim can be made of higher impact through enabling and preservation of existing businesses, but no clear evidence can be provided of such causality with such low share of total commitments. The split of FII investments and FII's calculated share of revenue, employment and number of companies is shown in figure below.

Figure 7. FII investments' underlying figures by investment type



1) Startfund excluding Churnside Leasing B.V.; Stabilization excluding Panostaja Oyj, Machinery Group Oy; Other direct excluding Maventa Oy

2) Based on 2012 figures

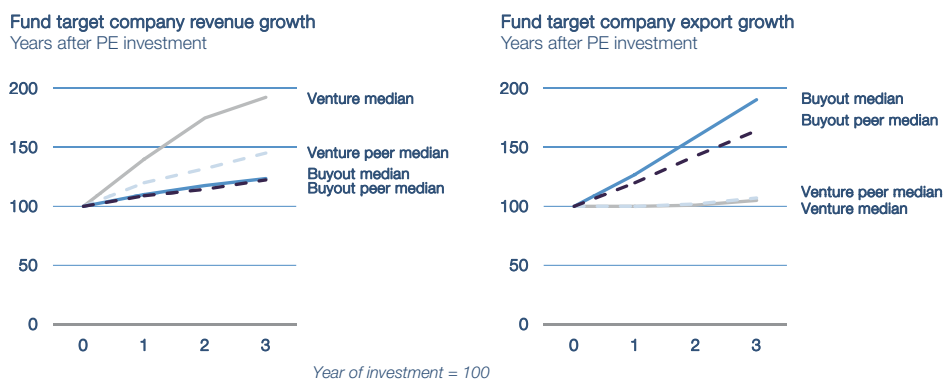
Source: FII annual reports, company internal confidential data & Valor analysis

Majority of FII's economic impact comes from fund investments. Approximately 60% of FII's implied impact on revenues (64% of employment) is through funds, whereas direct investments account for the remaining 40% (36% of employment).

Stabilization and other direct investments account for 38% of both employment and revenues, whereas SF accounts for only 2%.

The FII fund investment majority (around 80%) are made to Finnish PE funds. Based on EVCA and FVCA research, the fund target companies have grown faster than their peer companies both in terms of revenue and employment. The faster growth is explained both by investments in organic growth, innovations and acquisitions. Additionally the target companies seem to have internationalized faster than their peer companies. It also seems that private equity funds are especially important in filling a significant financing gap for innovative young firms for which private equity enables growth, as the companies might not have even got founded due to lack of financing. Based on recent FVCA study, on average the Finnish private equity target companies have grown from 1.2 M€ in revenues to 2.8 M€ during the investment period. As FII has invested in most of the private equity funds that participated in the study, FII has for its part of the fund investments catalyzed this growth.

Figure 8. Finnish evidence of the impact of PE to target companies

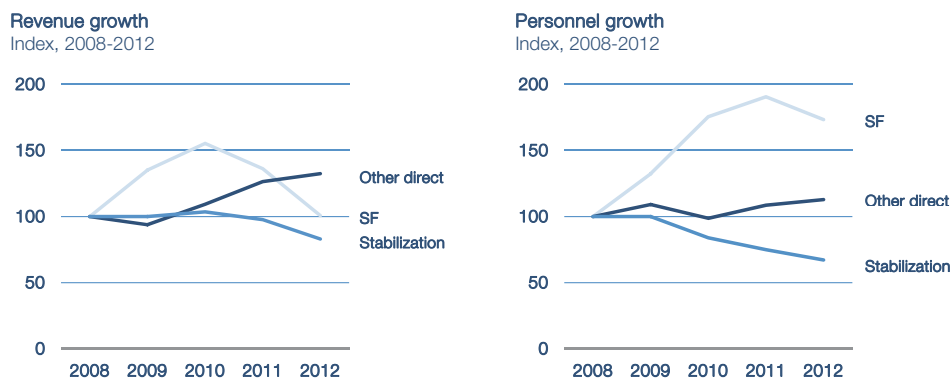


Source: Alén, 2013 & VALOR analysis

The evaluation team also tracked performance of 71¹ companies of the direct investment in the current portfolio. Evaluated FII's direct target companies had 2.2 €bn revenues and employed 12.3 thousand persons in 2012. The revenue growth has been 190 M€ (+9 %) and the total direct portfolio employment has grown by 1174 employees (+11 %) during 2008-2012. FII's implied share (weighted by investment size) of revenue growth is calculated +28 M€ (or +14 %) and +135 employees (or +12 %) for the portfolio of 71 companies. The average EBIT of sales was -4.7 % for the total portfolio, FII's implied share being -3.5 %. Based on the results, FII's direct investments have enabled growth in revenues and employment but portfolio companies have not been financially profitable on average.

¹ Churnside Leasing B.V., Panostaja Oyj, Machinery Group Oy, Maventa Oy and Suominen Oy were excluded due to unavailable information or major restructuring in the portfolio company.

Figure 9. FII direct investments effect on revenue & personnel growth



) 2008 = 100 for SF & Other direct, 2009 = 100 for Stabilization

Source FII annual reports, company internal confidential data, company annual reports and webpages, Balance, & VALOR analysis

Essentially almost all growth is generated in other direct investments outside stabilization and SF. Stabilization targets have succeeded in protecting the continuity of operations but have had a negative impact in revenues (-270 M€ in total and -15 M€ in FII's share) and in employment (-1110 employees in total and -110 employees in FII's share)². SF portfolio had a slightly positive change in revenues in FII's share of 0.5 M€ (+12 M€ in total) but a positive impact of +35 persons in FII's share in employment (+565 persons in total) during the same period. On portfolio level the FII growth impact cannot be considered satisfactory despite the challenging market environment. In comparison, during 2008-2012 total private sector employment in Finland reduced by 48 000 or by 3%.

The impact of FII in target company growth is also highly polarized. The top-5 companies in the sample of 71 companies accounted to +402 M€ growth in revenues of which FII's share was +47 M€ in years between 2008-2012. The rest of the companies lost 212 M€ in revenues of which FII's share was -20 M€ during the same period. FII's share of the total change was +28 M€ in revenues for the same period using the sample of 71 companies. Top-5 companies in the portfolio generated 1800 new jobs in total of which FII's share was +250 employees. The other than top-5 companies lost 625 employees and FII's share of this was -115. The top-5 companies in revenues growth accounted to 17% of total direct portfolio investments.

As a conclusion, evaluation team assess that FII fund investments have catalyzed indirectly significant growth of portfolio companies. On average the Finnish private equity target companies have grown over two-fold during the investment period. However, the impact in direct investments is ambiguous. The stabilization program has been able to intervene the distressed target companies as their negative trend

2 If including Suominen, the impact of stabilization program in portfolio companies was +7 M€ in revenues, or -90 employees.

in revenue development has alleviated. The SF investments have performed poorly when measured by revenue development and return on investment. However, their effect on target company employment has been significant. Other direct investments have performed relatively well during recent years, but their growth rate is below other private equity fund's performance.

3 FII organization and decision-making

FII is an expert organization with 29 employees and relying heavily on in-house capabilities. FII investment decision making is focused on the initial investment phase, as FII as a passive co-investor typically relies heavily on fund managers and co-investors in the strategic decision making. Overall FII appears to have a professional and efficient organization.

3.1 FII organization & resourcing

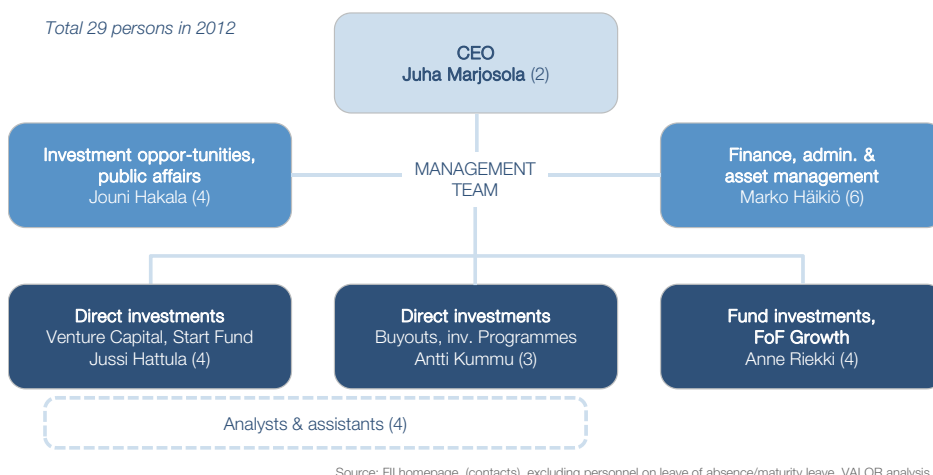
FII has a simple operating structure and business is organized by type of investment to direct and fund teams. FII has a long operating history and is regarded professional in both operating areas. Due to tendency not to discontinue prior activities, the organization and FII asset base have grown constantly, becoming an assembly of relatively small sub-portfolios.

FII legal structure is simple. FII is a 100% owned group and consists of four companies. In addition to the parent company Finnish Industry Investment Ltd the company owns 100% of Start Fund 1 Ky, Start Fund Management Ltd and Tesi Fund Management Ltd. Majority of assets and operations are in the parent company. At year end 2012 shares in the subsidiaries were 4% of parent total assets.

FII has two totally different areas of investment activities; fund commitments and direct investments. The two different areas are supported by dedicated investment teams and direct investments are divided to two teams. FII business units are relatively independent and have clear areas of responsibility. FII shares administrative and analytics functions, which though are fairly separate apart from normal accounting and finance functions. The evaluation of new investment opportunities and business development is organized directly under the CEO as a separate function.

On top-level FII is organized into fund and direct investments. FII's organization structure addresses only partially the need for different skill sets in different stages of financing. FII direct investment activities are organized as separate teams for early and later-stage investments. Similarly fund investments are divided into separate business lines by stage of financing but essentially managed and operated as a single entity due to a small number of people involved. The organization structure is depicted in organization chart below.

Figure 10. FII organization in 2012



FII operations are mainly based on in-house activities. The new investment case evaluation and management of investments are performed internally. FII uses third party service providers on case-by-case basis. The third party services mainly consist of assignments relating to financial and legal due diligence evaluations, and selectively on business and technology due diligence assignments. Typically co-investors and target companies pay the due diligence fees. Fees are budgeted when possible and FII CEO makes decisions on the ex-budget procurements. Large procurements are opened to competitive bidding.

According to FII's stakeholder survey four most important aspects of FII activities are confidentiality, private equity know-how, business know-how and preparation. Compared to FII average, the company had above average performance in confidentiality but below average in private equity market know-how, business know-how, impact and speed of decision-making. The deviations are relatively small and FII has improved the overall score continuously since 2004.

FII team and management are regarded highly committed and professional by essentially all parties interviewed during the course of evaluation. Furthermore, feedback indicates a very positive development during the recent years with a major improvement in service attitude. FII team is generally regarded as investment professionals rather than public servants. The stakeholder surveys performed by third party research organizations support these findings. 510 respondents grade FII professionalism good (4.0 on 1-5 scale) and have generally positive perception (61% of respondents). The perception was highest among BoD, FII's investment committee and among international collaboration partners, and lowest among public sector peers, ministries, and innovation field/think tanks.

FII as a public co-investor allocates funds to meet market needs. FII has a required rate of return and makes investments on market terms similar to those offered to co-investors. FII has delegated clear areas of responsibility and the investment decisions are effectively made case-by-case by a small team of key professionals within FII. With a long-standing highly professional management team the current investment decision-making model appears to function well and to be in line with owner guidelines. However, FII has a tendency not to discontinue prior activities, and as a result FII has become an assembly of relatively small sub-portfolios with significantly varying know-how requirements and modest performance.

3.2 Compensation and FII cost structure

FII cost structure and compensation levels appear efficient compared to peer organizations from the owner perspective. Historically FII costs have grown at the same rate with assets and the focus in cost base has shifted to personnel and in-house operations reducing accumulation of know-how and development of the local private service sector in Finland.

FII incentives are in line with government policies & standing guidelines (amended August 13, 2012). The incentives for the employees are based on basic salary and annual bonus. All employees are included in the bonus system, but annual bonus potential varies by organizational level from directors 30%, managers 22.5%, experts 15% and other employees 7.5%. Reaching full bonus potential would require an extraordinary success from an employee and good performance of the company. The BoD can adjust bonuses downward due to other factors. The bonus is based on three components (i) 30% MEE & FII strategy realization and impact, (ii) 40% operative objective realization, and (iii) financial performance vis-a-vis target governed by law. FII personnel do not receive compensation from board participations in the target companies.

Employees do not have long-term incentives. This has been raised as potential issue in expert interviews. Due to long-term nature of operations, the general industry practice in private equity favors output and performance-based long-term incentives especially for the key professionals. As a general rule, private equity institutional investors (LP's) expect management to invest in the target companies and fund management companies are highly incentivized above certain hurdle rate. If considered for FII, the incentive system should not be solely based on financial results but rather reflect other target setting and impact. Similarly current management compensation is not structured to give incentives for risk taking.

Good employee satisfaction and low personnel turnover indicate that recent more stringent remuneration guidelines do not pose a critical bottleneck for operations. FII reports that a personnel survey conducted in 2012 shows good satisfaction level of personnel compared to peer companies. The employee satisfaction has improved since the last survey in 2010. FII has also been able to attract new talent as number

of employees has risen from 21 in 2008 to current personnel of 29 in 2012. Thus, the number of employees has risen 38%, which is at par to the growth in the total investment and commitment growth of 34 %. Long tenures and low personnel turnover confirm further good personnel satisfaction level.

Personnel costs per employee of FII falls below Nordic and private sector peers, both for CEO and other employees. In 2012 FII CEO received total compensation of 0.252 million, whereas Nordic public and private sector peer CEO's received 55% higher average compensation of 0.390 million. Of Nordic public sector peers the highest compensation was paid at Norwegian Argentum (0.682 million), but also Industrifonden (0.380 million) and Vaekstfonden (0.336 million) were at 42% higher level. For other employees the benchmarking indicated similar results as for the CEO. Private peer average compensation for other employees in 2012 was 0.134 million and public sector peers almost at the same level at 0.137 (0.106 without outlier Argentum). FII average compensation for other employees was 0.087 million in 2012 and therefore relevant peer (excluding Argentum) compensation was 43% higher than in FII. It should be noted that Argentum total operating costs are below both FII and other Nordic public peers due to smaller organization.

Based on FII's internal interview comments FII has right level of resources in investments, analysis and preparation phases. However, FII has relatively large organization relative to asset base under management compared to peer organizations. Public peer organizations have 1.4x and private peer organizations 2.2x higher assets/employee ratio but use 1.9x more third party services (other operating costs). Going forwards FII should consider further allocation of resources for 3rd party as an alternative for in-house activities. This would also contribute to creation and accumulation of know-how in the private service sector. Further use of resources for investment case and fund evaluations could potentially improve quality of investment decision-making and thereby contribute to the better performance of FII portfolio.

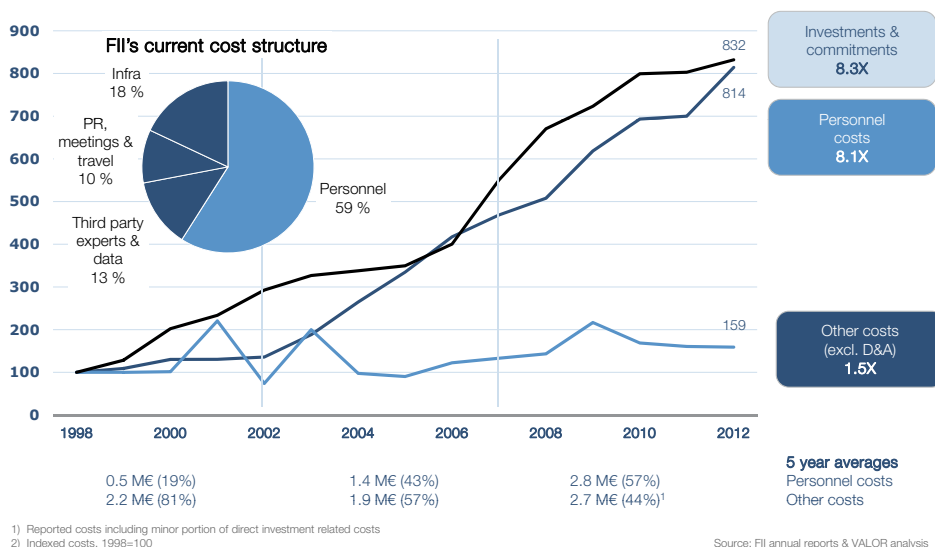
Lower than peer salaries and lack of long-term incentives pose a significant risk to FII continuity. FII has a small group of key professionals who are regarded critical for continuity of the business. Potential loss of key personnel may result in major know-how and networking contact loss from FII perspective and affect development of the Finnish private equity markets. FII appears to have a relatively high job security compared to private sector. Should FII decide to raise ambition level and performance standards, higher incentives should also be considered in this context. The interview comments are mixed relating to FII activity and ambition level.

FII management team has undergone minor modifications during the last ten years. The CEO & President of FII has remained the same since the founding of FII in 1995. The average tenure of other management team members in FII was approximately 7 years in 2012. The long tenures have contributed to long-term development of the market and FII's internal operating procedures. FII management has historically rotated the responsibility areas, but succession planning and

in-house fallback solutions should be further evaluated by the BoD. Specifically BoD should also prepare for the eventual retirement of the FII's current CEO.

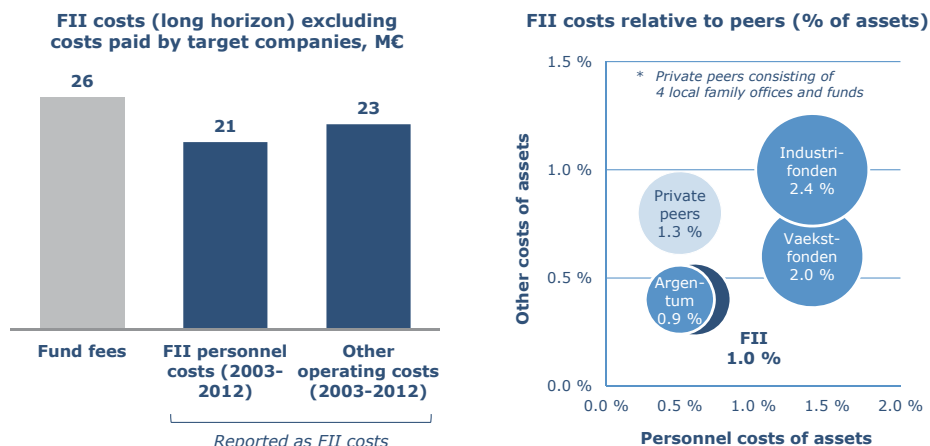
During the last 15 years, FII personnel costs have increased at the same pace as FII investments & commitments. Other costs excluding depreciation and amortization have grown at a significantly lower speed. The FII cost development is illustrated in the figure below.

Figure 11. FII current cost structure and development



FII has paid 21 M€ personnel expenses during last 10 years, of which 17.2 M€ or 84% in salaries and fees. In 2012, 4% of salaries and fees were paid to FII BoD and remaining 96% or 2.7 M€ to total of 29 employees. CEO and management team salaries represent half and other employees the remaining half of the salaries and the fees paid. The annual total salaries correspond to 0.5% of FII assets in 2012. FII has made 25 M€ purchases and investments during last 10 years consisting of 1.1 M€ in machinery and equipment investments and 23.6 M€ of other operating costs. Budgeted other costs in 2012 consist of 1.0 M€ (42%) of operating costs including third party expert services, 0.9 M€ (39%) of office and infrastructure, 0.5 M€ (19%) of administrative and other costs. In total operating costs in 2012 were 0.4% of FII assets.

Figure 12. FII cost break-down over last 10-years



1) Including estimated fund fees not included in FII P&L statement

Source FII annual reports, company internal confidential data, companies' annual reports and webpages & VALOR analysis

In addition to FII's own costs, funds generate significant indirect costs. FII reports that 8.5% or 26 M€ of called in fund capital of 301 M€ has been used for fund fees. Based on FII share in the funds we have estimated that total of 365 M€ has been paid in fees for the 86 funds in the portfolio (4.2 M€ per fund). These fees are not reported as part of FII income statement, as funds report net performance to the limited partners. FII reported 44 M€ in operating costs in years 2003-2012. Allocated by market value (funds 65% and direct 35%) FII costs would imply total cost to direct investments of 15 M€ or 11% of market value for direct investments relative to 54 M€ or 20% for fund investments. As a result direct investments would appear to carry lower associated costs than in fund investments.

3.3 Capital allocation

FII operations and investment commitments are long term by nature. FII investment operations are relatively risk averse and capital allocations are mainly driven by overall portfolio return and profitability optimization.

FII is claimed to have right-sized resources for the market needs. Many interviewed parties call for continuity in provision of capital, and therefore drastic changes in allocations are not aspired. FII investment activity has remained essentially the same during recent years and the evaluation team and many parties interviewed raise the concern of FII's ability to rapidly invest significantly more. Even 50% increase in allocations would be considered problematic, the deal flow being a bottleneck.

FII investments are long-term by nature and allocation changes are gradual and take several years to materialize in new investments, especially if made through

funds. The commitments made to funds are typically up to 10 years, although the funds make capital calls at the time of investments and return capital at exit. Since 2002 the average FII fund investments and commitments have been 1.8 times higher than the amount invested (at cost, not taking into account returned profits). Similarly, FII's direct investments have long holding periods and consist of series of separate investment decisions. FII makes strategy plans for 2 years and allocation projections for 4 years. MEE allocation guidance cover maximum period of 2-3 years.

In the FII business plan dated to 2013, the allocations are assumed to be roughly on the same level in funds but project an increase in the direct investments compared to the previous plan. At the same time, current committed but unpaid commitments, mainly in growth-stage, are expected to materialize into investments. The returned capital is expected to exceed capital calls to investments until 2015 and investment levels are expected to remain close to recent averages. The current plans are allocated by stage (venture, growth, and buyouts), but the allocations are only indicative as many funds operate in various stages.

FII also considers quality of initiatives and evaluates where the most demand/room exists for investments as part of the allocation process. Therefore FII investments appear to be driven by natural demand less than truly market bottleneck -based interventions. FII adjusts investment focus based on market environment and available deal flow. FII investments are not linked to annual target volumes but are rather an iterative result of available uninvested capital and available deal flow with best prospects. Allocations lack exit perspective and in FII planning are assumed to be held to maturity. The long commitments limit FII's ability to intervene in more temporary basis. For the evaluation team it appears that portfolio allocation is a result of investment activity rather than a strategic tool for prioritization of market bottlenecks through new commitments. FII strategic plans do not consider cost/impact or total risk positions in the allocations in the different sectors. However, the plans include sensitivity analyses relating to liquidity position of FII.

3.4 Evaluation of new initiatives

FII investment decision making is greatly influenced by the third parties due to the current co-investment model, although FII evaluates the investment cases internally. The investment evaluation appears well structured and professional.

FII acts as a co-investor to private investors. FII share of funding never exceeds 50% in direct investments and it is typically much lower in fund commitments. FII does not seek the anchor investor position, but rather assumes a more passive role both for fund commitments and direct investments. FII claims to have an excellent deal flow visibility to essentially all investment cases in Finland. FII has invested in the 16% of the evaluated 1076 cases during last five years. The figure is slightly higher than in Finnvera's Venture Capital Investments with comparable hit-rate of

13% (196 investments of 1491 evaluated cases since 2005). The hit rate is more than four times higher in investment programs and direct investments than in funds. Project rejection rationale typically due to project delays and FII's own strategy, less than one fourth rejected due to poor quality of the project.

FII investment case evaluations are performed internally. FII leverages own analyst resources for the case evaluations. In selected cases FII uses third party services & experts to support at the investment decision -phase. FII has a structured approach to evaluating potential investment targets for direct investments in the selected focus industries. For example in mining, FII has hired an industry expert and systematically mapped companies and evaluated new initiatives as potential investments. Similar approach is being applied for the marine industry, where no investments have been made yet.

Part of FII direct investment deal flow is generated by third party investors and target companies seeking financing. In cases with active anchor/lead investor FII relies on the analyses prepared by co-investors. FII actively seeks to increase the ambition level and amount invested as part of the investment process. The evaluation team considers this as a positive course of action.

FII investments vary highly in size. Largest fund commitment was 15.4 M€ (average 9.7 M€), whereas median add-on investment in direct investments was 0.4 M€ (average direct investment including new investment 1.8 M€) in 2008-2012. The rejection rates appear to be higher than average in the identified 1-5 M€ funding gap size range in the direct investments, implying a clear market need that is also observed in the market statistics.

Fund commitments are made through third party generated deal flow. Typically fund teams meet simultaneously with large number of institutional investors seeking commitments. The international practice of using third party placement agents appears to be less applied in the Finnish early-stage funds. FII performs an in-house fund due diligence and participates actively in the fund's investment case development. Based on interview feedback potential fund teams regard this input valuable but call for even more active and service oriented approach for FII. Recent stakeholder interviews also imply an expectation for higher level of activity towards co-investors.

FII has a neutral approach on the market practices. FII does not take active measures for discrimination of funds based on historical performance, but exert soft guidance on fund investment activities as a part of ongoing monitoring and dialogue with the fund teams. The evaluation team questions whether FII could leverage its position to develop local fee structures and fund structures to better meet local market needs. Based on FII capital weighted share we have estimated that 86 funds in FII portfolio have generated total of 365 M€ in fees or 4.2 M€ per fund with typically relatively small team of professionals. FII should therefore evaluate opportunities to influence the market practice of fee structures to drive performance and further reward for superior performance. MEE and FII should consider higher allocations

to best funds and active elimination of funds with the worst track record. The potential benefit of higher discrimination is to create positive competition between funds for new commitments. With high share in the market FII could contribute to more ambitious performance standards and emergence of larger world-class fund management companies.

Typically fundraising takes long time and requires several iterations before final approvals. Therefore FII has a relatively large pool of alternative fund initiatives to choose from. However, it appears that FII does not have any clear criteria for the new commitments and decisions are made according to “choosing the best of available”-basis.

3.5 BoD approval process for new investments

FII investments are approved by BoD typically along the management recommendations. The approval process in general is in accordance to good governance model (except for FoF Growth where FII BoD has no role after initial commitment is made).

FII investment commitments in funds are presented as investment proposals for the FII BoD's approval. FII's fund team prepares the investment proposals based on in-house fund team due diligence. FII's fund team due diligence is regarded to be of high quality by fellow co-investors and based on interview feedback regularly referred to in other investors' internal decision-making. FII management team approves the proposals to be presented for the FII BoD. Typically FII BoD makes decision according to proposals. Based on interview comments it appears that historically FII BoD has had limited visibility to rejected deal flow, but the reporting of rejected deal flow has been improved to some extent.

Similarly direct investments are approved by the FII BoD based on the investment proposals prepared by Direct Investment teams and approved for presentation to BoD by FII management team. Based FII BoD member interviews investment decision-making is not solely based on financial attractiveness of the investment case but also includes considerations on the potential economic impact. Similarly to fund investments, FII appears not to have a clear required return for the cases.

FII's fund investment activities consist of FII's own fund commitments and of management of third party FoF Growth investments. FoF Growth is managed by FII 100% owned subsidiary Tesi Management Ltd. and investment decision-making includes third party investor representation in the investment committee. FII manages FoF Growth and prepares investment proposals but FII BoD does not make decisions on fund commitments. FoF Growth has a separate investment committee with representation from key institutional investors. Based on interviews large institutional investors also perform their own internal analysis on the new fund initiatives and are typically considering also separate direct investments in the funds alongside FoF Growth commitments. Thereby, FII BoD is not part of the

decision-making related to FoF Growth commitments after approval of the initial commitment. This issue however is already identified and will be considered as part of the follow-on fund terms.

Limited critique has been raised in interviews relating to FII's ability to make fast investment decisions as all investment proposals are approved by the BoD. Potential delays in decision-making may risk FII becoming a second choice for the best initiatives. FII management sometimes presents new cases as potential investments even before actual investment proposal. FII could consider accelerating decision-making process with higher use of conditional approvals especially.

3.6 Portfolio management and exits

FII relies on active third party anchor investors in the strategic and exit decision making, and participates in the portfolio management mainly as an observer. Due to passive role, FII can only facilitate know-how development, sharing of best practices and networking. The passive role limits FII's possibilities to develop the market and achieve overall desired outcomes, such as target company IPO's.

After positive investment decision, FII assigns an investment manager for each case. If third party board members are assigned FII participates in the target companies in supervisory role. In the actual decision-making on the target development FII relies on the other investors and is relatively passive. It appears that bringing in the necessary know-how for the target company development is also mainly the responsibility of other investors. Private anchor investors typically decide on the timing of the exit and make other key strategic decisions although FII assumes BoD seats in an observer role. Therefore, initial screening of right investment targets is critical for FII financial performance. On the other hand FII managers have a dual role as board members and concerns have been raised that it is sometimes unclear whether managers are thinking from FII perspective as a whole.

FII has relatively advanced portfolio reporting on management level that is mainly focused on the financial performance. Since lately, FII has also started to perform an economic impact evaluation on annual basis for the portfolio as a whole. However, based on interview comments FII could consider tighter follow-up on the ex-post performance of funds and direct investments against the original investment criteria. The evaluations should include also qualitative aspects on top of original numerical target setting and should be handled both on management and BoD levels.

In the interviews a claim has been made that FII employee as public servants would have constrained decision-making. In the current mode FII operates as passive investors, and therefore this constrained is yet to be tested. The evaluation team wants to raise concern in this respect relating to potential situation where FII would actively drive discontinuation of poorly performing companies and management teams.

FII promotes sustainable investment in Finland. FII is a member of Finland's Sustainable Investment Forum (FINSIF), founded by Finnish investors and other investment professionals. FINSIF promotes responsible investment taking into account factors related to the environment, society, and corporate governance. As a part of investment process FII evaluates responsibility issues and requires that portfolio companies and funds address the responsibility issues. FII monitors and promotes responsible investment policies through continuous dialogue with fund managers and investment targets.

FII, as a passive investor, cannot enforce best practices on fund level after initial commitment. When making the commitment FII can prioritize funds that comply with FII criteria and indirectly influence other investors to do the same. Therefore, FII can only facilitate know-how development, sharing of best practices and networking. Based on interview comments FII has had a major impact on the market development in Finland.

FII addresses escalating capital commitments in the private equity with active approach for stock market listings. Currently FII regards stock market listings as a preferred exit path and encourages target companies to evaluate stock market listing as source for new capital. The earlier stage stock market activity has been so far very limited.

4 FII as part of MEE Group

MEE operations cover a wide range of activities, each of which having their own characteristics and target setting. MEE seeks to improve efficiency and impact through improved coordination of different MEE organizations and entities as part of MEE Corporate. MEE does not seek to create an integrated group but exercises relatively loose guidance on FII and other other MEE organization activities. Based on interview input MEE is still regarded as a group of relatively independent organizations.

As also highlighted in the previous Tekes evaluation the national system is complex and consists of large number of organizations and initiatives. Although the overlaps are relatively small and roles are clear for the organizations themselves, the system makes it unclear for fund teams and target companies to decide where to turn to and what are the exact roles of different actors in the decision-making.

4.1 FII governance and reporting

FII belongs to MEE Group but as a limited liability company is governed by a private sector BoD. Although MEE provides FII with strategic guidance, FII operates independently from other MEE entities. FII governance and reporting are professional but relatively complex thereby contributing to the independence.

The evaluation team considers FII governance system to function relatively well. FII operates as a part of the MEE Group and reports to MEE's Enterprise and Innovation Department (EIO). FII is a wholly government owned special purpose company and its operations are governed by law. FII is in practice governed by MEE appointed board of directors (BoD) and governs the operations through an annual governance letter. In strict sense FII operates within the legal framework governing its operations.

As a limited company, FII operations are supervised by a board of directors (BoD). Based on the current corporate law, the BoD members as individuals are responsible to make decisions that benefit the company. By law, no BoD member is a representative of a single owner. Among other things BoD is responsible for the company strategy, appointment of CEO and ensuring of the financial reporting and governance. FII BoD has three committees: Nomination, Remuneration and Controlling. The corporate governance model works well in the private sector but has its disadvantages in the public sector.

MEE as representatives of the sole shareholder appoint the FII BoD members and provide guidance for FII's strategic direction. FII is part of MEE Performance Guidance. The key tool for communicating the owner aspirations to the BoD is the

annual governance letter provided by MEE. The governance letter includes overall objectives and priorities as well as the required reporting to the owner. FII responds to the governance letter how it has met the targets set by the owner and what actions have been taken. Alongside formal governance procedures FII management and BoD consult the owner in major strategic decisions.

FII BoD members are not employed by FII but receive a normal monthly and meeting -based compensation, which is not linked to FII performance. FII BoD convenes typically on monthly basis (14 meetings in 2012 with absence rate of 3% for the current private sector BoD members). Compared to Nordic public peers (Industrifonden, Argentum and Vaekstfonden) BoD compensation appears to be at par with market practices but somewhat lower than in Finnish private investment companies. FII also has a non-executive Investment Council to manage stakeholder relations. The Council typically convenes annually. FII management and BoD members perceive Investment Council as an important forum for informing stakeholders, although Investment Council does not participate in strategy development or any other decision-making in the FII. MEE could consider further activation of Investment Council and even extending a single shared Investment Council to cover multiple MEE organizations.

Of the seven FII BoD members, five are from the private sector. As in Tekes & Finnvera, also FII's chairman of the board is from private sector since 2012. The change to private sector chairman is fairly recent. The Chairmen of key MEE organizations regard the collaboration with the owner as well functioning. However, this recent change has raised the question on the roles of MEE and BoD in the strategic planning and governance as well as a clear need for more active two-directional dialogue between MEE and FII BoD. Strong private sector representation in the BoD implies growing independence of the FII decision-making on day-to-day matters. Based on FII BoD member interviews strategic guidance is regarded to be on right level of detail and functioning well. FII management and BoD do not consider other indirect political pressures from third parties to have excessive influence on the decision-making. In principle short-term political interests should be kept aside from special purpose company decision-making in order not to interfere with long-term activities. FII appears to be relatively open for third party input and ideas but also appears to have high integrity in decision-making.

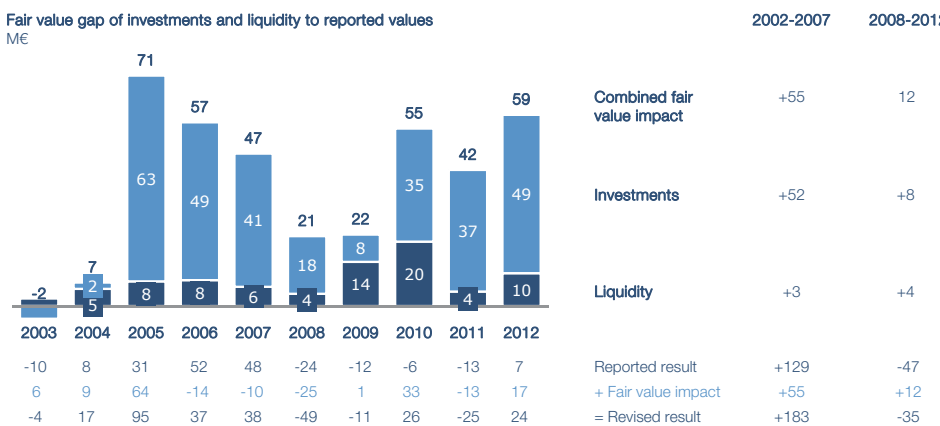
FII is perceived to operate relatively independently. FII appears to have created organizational inertia based on historical initiatives. However, some interview comments especially from the third parties question whether FII ownership guidance steering chain of command has clear roles. The interviewed parties involved in MEE and its strategy dialogue perceive that the level of governance has improved and that it is functioning relatively well already. The evaluation team perceives the independence FII as a result of relatively good and consistent performance of the current long-term management, discontinuities in the governance, and rather complex and multidimensional target setting.

FII management has undergone only minor changes during recent years, whereas MEE has had several minister changes and MEE key people responsible for FII guidance changes. FII has been appointed for large number of new initiatives and has become a rather complex set of activities over time due to long-term nature of operations. With changing target setting over time FII has become also fairly complex from measurement and governance perspective. MEE could consider reduced number of earmarked tasks and follow-up of the performance on task/initiative level. A narrower scope with more interrelated activities FII would be easies from governance perspective.

FII has a private sector auditor and is subject to public sector National Audit Office (NAO) audits and evaluations. Furthermore, MEE has a separate internal audit unit and control procedures. FII BoD has three committees, including audit committee as recommended by Governance code of listed companies (recommendation 27).

FII reports the results bi-annually and as a limited company complies with Finnish Accounting Standards. The depth of FII reporting has improved significantly in the recent years. Since 2012 FII's own operations are aligned to recommendations relating to sustainable investments and reported according to Global Reporting Initiative (GRI) standards. Reporting model is in line with the State resolution of 3rd November 2011, for unlisted government-owned companies. FII complies with all reporting requirements for a private company. However, as a public special purpose company FII could improve visibility on its activities and performance without jeopardizing the confidentiality. FII portfolio is mainly reported on group level based on book values with major deviations in sub-portfolio performance. FII does not fully disclose the performance of sub-portfolios or business units and has multiple partially overlapping dimensions in the reporting.

Figure 13. Fair value impact on FII reported total results



Source: FII annual reports, company internal confidential data & VALOR analysis

Furthermore reporting should be based on fair values and FII could consider potentially adopting IFRS accounting standards. The more simplified system would contribute to more fact based discussions and decision-making relating to allocation of FII's resources. The annual impact of fair value reporting throughout 2003-2012 is illustrated on the figure above. Combined the fair value reporting would have increased FII result 55 million euros.

FII portfolio performance reporting is relatively complex. FII and FoF Growth investments overlap and create complexity in the FII reporting. FII reports fund commitments and investments as group and internally reports venture capital, growth funds and buyout funds as separate business lines. In practice targets generally fall in the main classification. However, the funds may contain targets belonging to several categories and the classification is indicative only. FII could consider developing system for a more advanced and uniform reporting of the performance for parts of the portfolio and for the company as a whole. FII could also consider a new simplified grouping of the investments based on aspired outcome.

4.2 FII target setting

FII operations are defined in law and further interpreted by MEE in the annual governance letter. Overall the target setting is in line with the market needs, but the balance between economic impact and profitability objectives may require clarification. Furthermore the current relatively complex and multidimensional target setting may have caused confusion in the strategic priorities.

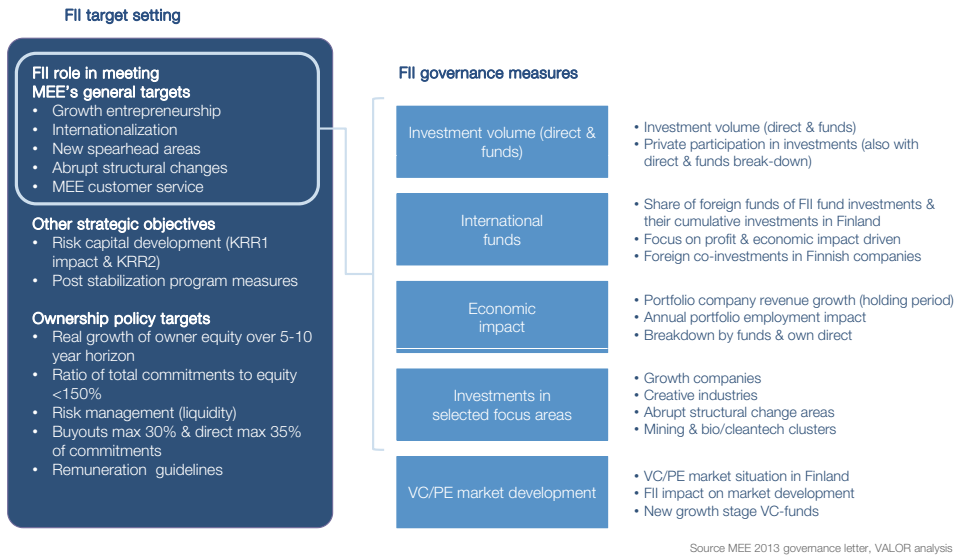
FII operates according to the purpose set in the law and contributes positively to MEE imposed objectives. However, over the years FII has assumed new roles and activities and as a result has become a relatively complex set of activities, and as a result lacks a clear future direction. With relatively loose multidimensional target setting and guidance from the owner, FII has very high operational freedom.

FII and other MEE unit target setting appear to have improved and in principle MEE objectives and FII activities are aligned. The MEE target setting is shifting towards more principle level guidance with a lower level of detail. Although FII target setting is relatively clear, the practical implications and interpretations appear to vary between parties interviewed. Especially the question of the right balance between economic indirect impact and FII profitability appear to be in the center of the discussion. These different interpretations may affect decision-making and lack of common understanding of FII investment criteria may result in non-optimal allocation of FII resources, and therefore further clarification may be needed. FII governance appears to operate with same principles for all activities and MEE and FII BoD should also consider adjusting the priorities by operating area.

FII target setting consists of MEE's general targets, FII specific strategic objectives and ownership policy targets. Some of the more general targets are set in the law.

However, more specific guidance is given via MEE governance letters and the targets are followed on a high level. The overall target setting and governance measures of FII are summarized in the figure below.

Figure 14. FII target setting and governance measures



The objective of FII is to promote Finnish small and mid-sized enterprises primarily through fund investments. In addition FII can make direct investments especially in long-term high-risk corporate initiatives. FII fund investment should be directed to correct market failures (added 2006). FII can make foreign fund investments that promote economic growth in Finland. The law governing FII operations was last revised in on March 26th, 2009 with regard to specific change needs as follows:

- *Changing the role of public private equity investments.* FII focuses on growth and internationalization phase companies and fund investments should specifically focus on venture capital funds
- *Internationalization of private equity markets.* FII activates international investments and international networking of fund management companies. Precondition for international investments is Finnish interest.
- *Launch of new stabilization program* for the 2009-2012 period as part of 100 M€ new capital injection to alleviate need for equity in challenging market environment. The objective of the program is to fund viable businesses under temporary distress and to promote necessary structural changes. The target companies in the stabilization program must have potential for profitable operations.

MEE governance letter for 2013 further specifies venture capital fund investments to focus on promoting the emergence of market-based venture capital funds in collaboration with domestic and foreign investors. Similarly direct investments should promote growth of innovative companies and internationalization investments.

FII has a role in MEE strategy realization and is subject to MEE ownership and governance steering. Key tool for MEE ownership steering is the annual governance letter with direct linkage to (i) MEE Corporate strategy, (ii) MEE target setting 2011-2013, (iii) EIO objectives for 2013-2015, and (iv) Government resolution on state ownership policy. FII operations are in line with the law and MEE owner governance.

MEE strategic objectives with stated targets

Code	Target	Subtargets
TL 0	Strategy realization according to following principles	including TL 0.1 Higher utilization of E-Services and TL 0.3 Improved customer services
TL 1	Promote high value added and growth/ export oriented and businesses	including TL 1.1 Policy measures are targeted to renewing and growth oriented enterprises, TL 1.2 Higher risk taking in public financing, and TL 1.3 Improved internationalization capacity of SME's
TL 3	Higher energy independence	including TL 3.1 Improved functioning of the electricity markets, and TL 3.2 Renewable energy 33% of final energy consumption by 2015
TL 4	Eliminate structural barriers to competition	

Specifically MEE has set FII targets related to TL 1.1 Policy measures are targeted to renewing and growth oriented enterprises. Other MEE organizations with specified targets relating to TL 1.1 are Finnvera, Finpro, Geological Survey of Finland, The Finnish Tourist Board, Tekes and VTT.

FII's operations are governed by law. The law states FII must be profitable in the long-term. Additionally FII objectives include private equity market development, fund investments, investments in different industries and direct investments. These objectives are elaborated as follows:

Private equity market development: FII promotes emergence of market-based venture funds in collaboration with domestic and international investors and FII investments facilitate investments made by growth and export oriented enterprises. FII promotes internationalization of Finnish private equity markets and invests in foreign funds with direct economic impact for Finland.

Fund investments: FII makes investments in international private equity funds with an objective to promote investments in Finnish growth companies. FII promotes internationalization of growth financing through fund investments and fund management network growth. In later-stage funds FII focuses on funds that support long-term development of the enterprises. FII invests in funds to promote

emergence of international early and growth-stage funds in Finland and Nordic region for growth industries. FII starts preparations for FoF Growth II.

Investments in different industries: FII continues active investments in cleantech and makes market-based investments in mining to promote new mining initiatives and participates in mineral strategy roll-out. FII investments have no industry limitations. FII participates actively in supporting businesses and invests when feasible in abrupt structural change areas. FII evaluates investment opportunities arising from structural changes in different industries/sectors.

Direct investments: FII participates in market-based investment syndication with private investors and actively catalyzes investments through own investment evaluations and seeking investors with the current owners. FII's direct investments facilitate investments made by growth- and export-oriented enterprises. FII's direct syndication investments aim to improve competitiveness in attractive industries (e.g. cleantech, mining and services)

MEE Group development initiatives

FII operations are aligned to MEE strategic targets and FII investments support MEE Group strategy and National Innovation Strategy realization and meeting segment-specific targets. FII invests in industries that support national energy independence objective and innovation policy realization and focuses on growth-oriented enterprises (e.g. creative-, care-, and forest-industries). The investments are increasingly focused on growth and internationalization.

FII collaborates with Tekes (NIY/Vigo), Finnvera (Venture Capital Investments/Avera/Veraventure), and actively promotes growth and internationalization of enterprises in collaborations with Tekes, Finnvera and Avera. FII participates actively in MEE Group development initiatives, contributes to MEE Action Group 1 target realization, Growth Track and Enterprise Finland investor event organization. FII develops its services in accordance to MEE service strategy, MEE quality recommendations, customer satisfaction and service image.

The MEE states that realization of TL 1.1 relates mainly to EIO and related organization activities and has therefore set further targets for 2014-2015. The EIO target setting specifies follow-up indicators for reaching the targets.

In the 2013 governance letter MEE provides further clarification on the target setting (relating to private equity market development and post-stabilization program activities), on ownership policy (required return, liquidity, risks management and allocations), as well as on reporting (including key follow-up indicators). The follow-up indicators lack specific target levels and other target setting provides guidance relating to participation in specific initiatives. Above those, EIO/MEE states specifically two measurable targets to revenue growth of target companies seeking internationalization (+50% from 2011 to 2015) and number of such enterprises (+20%). These targets indicate MEE aspiration to transform FII into more export-oriented investment activities.

MEE target setting specifying the initiatives, in which it wishes FII to participate positively, contribute to MEE Group cross-organizational synergy realization. The required key actions provide FII clear guidance on the operational priorities. These actions can be followed-up and measured.

FII's strategy and internal target setting are aligned to MEE target setting. FII has contributed significantly on reaching MEE targets and acted on new initiatives in a timely manner. However, the volume-oriented target setting may deviate attention from the qualitative aspects and temporary nature of the public participation. The qualitative measures in the functioning of the market are currently not measured or followed up and both MEE target setting and FII strategy documentation lack all aspects on how FII expects to exit from the current fields of activities.

4.3 FII performance and required return

On each individual investment decision level FII operations are market based and profit driven but on portfolio level focused to market segments with varying profitability and risk levels. FII operations are highly cyclical and therefore strong historical performance is in contrast to the recent close to zero financial returns. The venture segment has generated negative returns, whereas buyout segment are highly attractive (also for private investors). FII performance is mostly in line with the market averages.

FII's activities are based on market driven fund investments and direct investments made together with private co-investors. Although FII perceives itself as a market-based investor, economic impact of the investment case appears to be a major part of the total investment evaluation criteria. Based on interview input FII does not have clear uniform required rate of return for investment decision-making. Investments are made based on pre-agreed allocations subject to availability of funds from new capital injections to FII and returned capital from prior investments. The target level required return criteria has only indirect linkage to portfolio performance due to risk realization and deviations in the performance of the investment targets from the original plan.

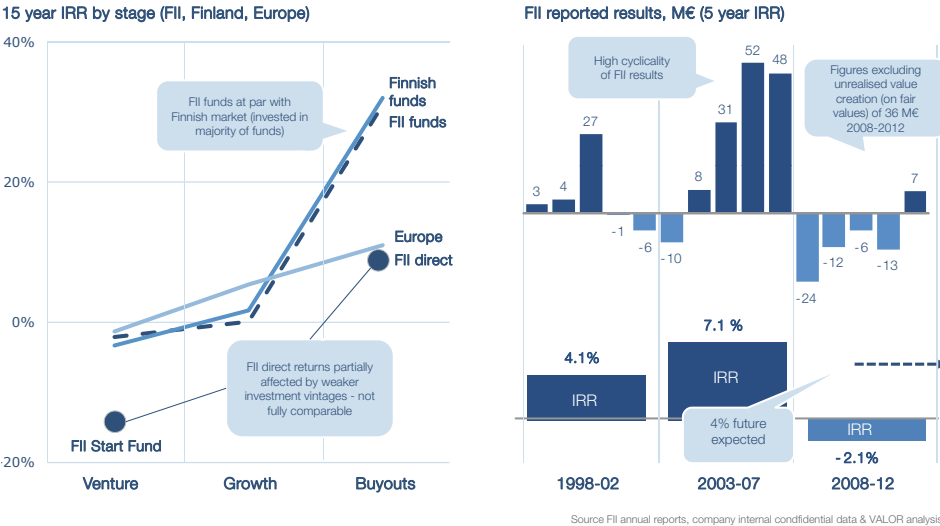
FII law regulates the required return of FII activities. FII should be profitable in the long-term. MEE has interpreted long-term profitability to mean 5-10 year horizon. FII reported 5 year rolling weighted return on equity was -2.0 % p.a. FII has currently de-facto a soft zero target return. During pre-crisis period (2003-2007) FII added value 177 M€ (IRR 21%) and lost value 35 M€ during last five years (IRR -2%). The State has invested 470 M€ at the year-end 2012, of which 242 M€ in during last 10 years. Taking into account the unrealized profits, the difference between market and book values in liquidity (10 M€) and in investments (49 M€), the market value of equity stood at 626 M€ at year end 2012.

During the 2003-2012 FII value creation has been 142 M€ or IRR of 8% on market value adjusted equity. During the same period FII financing income from investment

in liquid funds has been 91 M€ (pre-tax), which corresponds to almost two thirds of the total value creation. Based on historical averages of 5 year government bond yields, we estimate that annual risk-free financing cost of capital employed to FII is 15-20 M€ for 2012 assets. During the ten years the cost of funding has been 117 M€ on market value of equity without risk adjustments. Therefore FII has barely covered the cost of capital and made loss of approximately 50 M€ on fund and direct investment activities (excluding financial income from investments of the excess liquidity). However, it should be noted that FII, unlike its grant and subsidy based peers, probably has had higher impact for its investments.

FII performance track record varies highly between stages of funding. Since inception in 1995 FII's buyout investments have generated IRR of 31% whereas early-stage investments and growth-stage fund investments have generated IRR of -2% and 0%. In comparison to fund investments direct investments have generated lower returns compared to comparable stage fund investments. Assuming higher future allocations at the early-stage with lower performance track record the future performance is likely to be lower than the historical. FII and PE market IRR's are illustrated in the figures below.

Figure 15. Financial return of funds in Finland & Europe, and FII historical performance



During last five years (2008-2012) FII has made a loss of 12 M€ with its core activities. The fair value of investments has grown on average 36 M€ p.a. or 75% of 48 M€ net invested during the same period. FII's moderate performance appears to be mainly due to volume-driven operations in the early-stage venture capital markets and high realized technology risks. Based on feedback from FII management, the poor performance of venture investments has been a clear disappointment against

expectations, but is in line with the performance of other public initiatives and comparable private vintage adjusted portfolios in this field.

In last 10 years FII has paid 48 M€ for the State in form of dividends, interest and taxes. FII capital is equity and therefore has not generated interest income for the State. Moreover FII has not paid any dividends during last 10 years. FII has paid 48.1 M€ of reported 49.1 M€ taxes during last 10 years. Due to book losses FII did not pay taxes in 2012. Paid 10 year average taxes correspond 0.8% of 2012 assets.

In addition to direct financial flows relating to FII, the investment activity and target companies are likely to have generated much higher total value and tax streams to the State than FII in total. The indirect effects of the stimulus to the economy and correction of the market bottlenecks are generally considered significant. FII focuses on companies that have the best potential for value creation through growth and internationalization. FII also assesses the project's significance to the Finnish economy, technical expertise and employment creation. FII generates indirectly significant tax revenues for the State and creates new business for the private equity community and service providers. Private equity funds as demanding owners facilitate structural changes in the economy and accelerate the growth of the companies. Although FII has relatively modest performance track record in terms of profits during last years, the evaluation team believes that the indirect impact justifies FII activities.

In the discussions with the project team and in expert interviews an issue of abandoning the required return criteria has been raised. FII management and BoD members perceive required return criteria critical to attracting and retaining the best talent and being an acceptable/attractive partner for co-investors. Furthermore pending EU regulations are likely to further limit the freedom of movement for subsidized public investment activities. According to interview comments FII is seldom considered as a market distortion, although it is not regarded as a profit maximize, nor to operate solely for profit from portfolio allocation perspective.

The interview comments relating to required rate of return are highly mixed and have various perspectives. The pro required return -arguments are typically related to guiding investment to better quality targets and need for clear role operating on same terms with co-investors. Typically these arguments raise the concern relating to the complications of partial subsidization vis-à-vis international and other investors operating without FII participation. Similarly investments are considered a superior form of public participation over outright grants and subsidies and in line with current strong trend in EU away from the pure subsidies. FII management believes strongly in market-based activities and considers it as a cornerstone of FII operations and key driver for FII's ability to attract and retain talent. The arguments for abandoning the required rate of return typically relate to the higher required public participation in the early-stage venture capital with bad historical financial performance and need for temporary measures attracting investors to this segment to develop the market. These arguments are often related to the claimed need for asymmetry in the early-stage venture capital. This argumentation is typically

supported with industry policy motives and claims for high indirect benefits e.g. employment or taxes generated.

Majority of parties interviewed however, consider FII's current portfolio total return approach as potential distortion for allocation of investments on group level to areas where public participation is most needed. The profit optimization on group level steers FII investments to the best functioning market segments with existing private funding sources and with linkages to the compensation increase organizational resistance to necessary industry policy or market bottleneck intervention -driven investments. Generally the interviewed parties consider therefore required rate of return as a necessary guiding tool on individual investment level but less on group level. The group level allocation should be a balanced combination of policy targets and financial performance.

Most of the parties interviewed - typically investment professionals - perceive a functioning market with limited or no public participation as the aspired outcome in the long-term. Healthy market returns are also typically perceived as a precondition for attracting private funding in all segments. Therefore the evaluation team recommends that all FII investment activities should be aligned to this objective rather than further distortion of the market requiring permanent public participation. The good performance of FII would greatly contribute to the long-term development of the market. Even with a modest return, if successful and reached, FII can have growing asset base to further develop the market reducing need for further capital injections from the State. In illustrative calculation a 10% portfolio return would double FII assets by 2020 and exceeding 5 year rolling inflation rate of 2% would grow nominal asset base by 20% by 2020.

FII's current mode of operations is in line with MEE guidance and complies with pending new EU legislation. However with current financing structure FII could assume higher risks and withstand associated potential losses to accelerate market development. On the other hand adequate returns reduce the need for further capital injections from the State and would accumulate resources for even higher level of public participation in the future. The evaluation team recommends that the required return should not be abandoned from this perspective, but rather to constitute as one criterion for all investment activities among other criteria. The other criteria depend on the required level of intervention and should be evaluated from long-term economic impact perspective on initiative level. The FII performance should then be evaluated against reaching the objectives set for different initiatives.

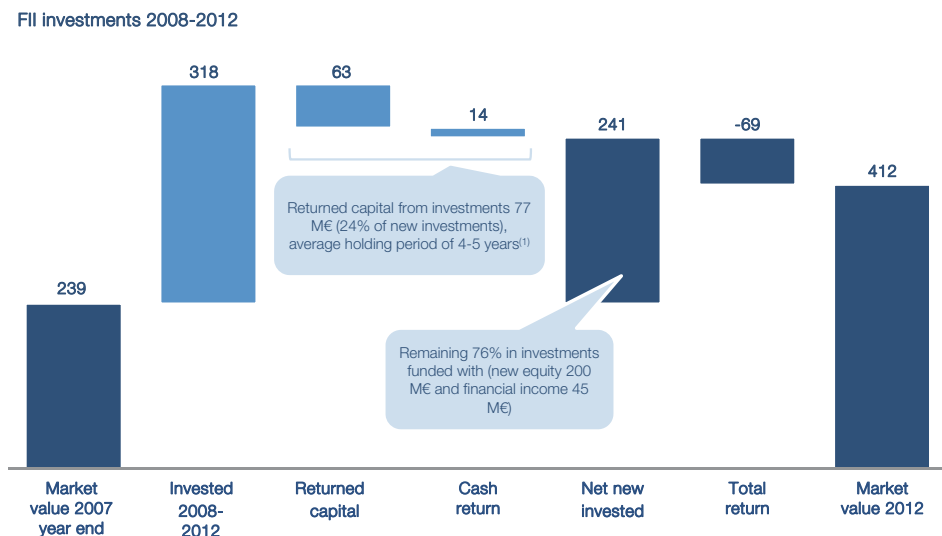
4.4 Liquidity and funding

FII does not have any debt and has essentially full backing for the current unpaid commitments. A third of FII capital is invested in market securities, making it important source of income for FII. With more efficient use of resources FII could significantly increase the current investment volumes.

FII operations are equity financed and FII does not have any debt. The non-interest bearing debt payables stood at 1.7 M€ or 0.3% of total 569 M€ assets in 2012. FII assets at market values was 625 M€ or 59 M€ above reported book values. MEE provides FII with new capital injections. During evaluation period 2008-2012 government has subscribed new share issues of the 200 M€ (50 M€ in 2012 and 150 M€ in 2009) in FII to current total of 470 M€. Furthermore MEE is planning 120 M€ new capital injections for FII (30 M€ p.a.) for the 2014-2017 period. 2012 share issue was directed to retain the planned investment volume level. FII has used 2009 share issue proceeds to finance 54 M€ participation in the 135 M€ FoF Growth co-established with Finnish employment pension organizations, and to launch a 100 M€ stabilization finance program in 2009. In 2013 20 M€ unused portion of the stabilization finance program was re-allocated to investments in marine cluster of companies, and in the bioeconomy and cleantech sectors. Half of the planned 120 M€ capital injection is allocated to the launch of FoF Growth II and the remaining half for other investment activities.

When looking FII net capital flows over time, FII has since beginning of 2008 invested 318 M€ to new funds and target companies, has received 63 M€ in capital and 14 M€ in cash distributions. Hence the net amount invested through 2008-2012 equals 241 M€. This net investment has been financed with 200 M€ new equity and financial income from the cash reserves. The net capital flows are depicted in the figure below.

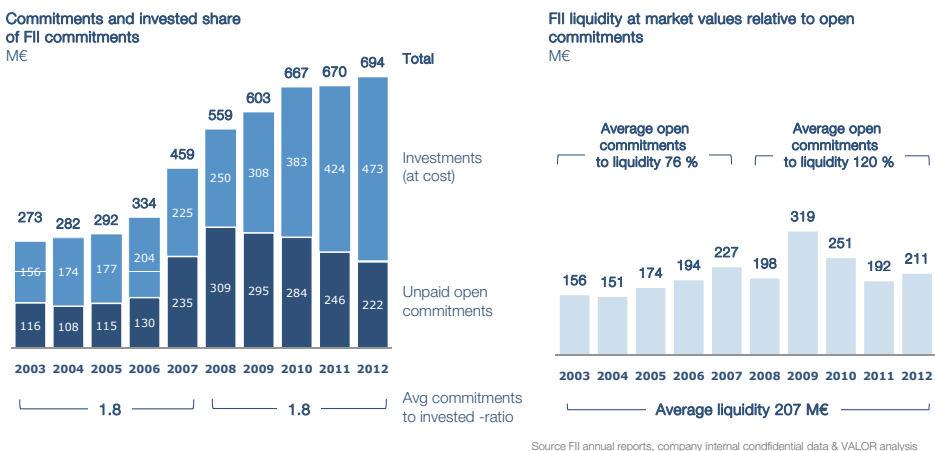
Figure 16. FII net capital flows and investments



Source FII annual reports, company internal confidential data & VALOR analysis

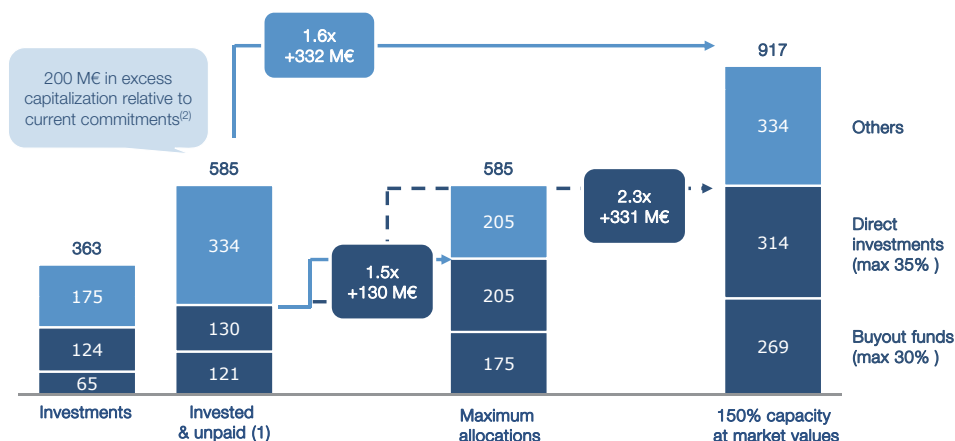
FII has major further investment potential with current resourcing. Current ownership policy target of maximum allowed ratio of total commitments to equity of 150% with current capital structure would allow for 157 M€ higher commitments. Historically the actual amount of invested has been significantly lower than the total outstanding commitments due to portfolio diversification. FII's investments at year end 2012 stood at 477 M€ and unpaid commitments of FII stood at 217 M€. Therefore only 68% of FII's commitments were actually invested. The capital invested has increased 2.6x and the open commitments have remained at the same level during last 5 years. This development is depicted in figure below. The low exit volumes have not yet affected FII's ability to make new investments and commitments at historical level (2008-2012 average 92 M€ p.a.).

Figure 17. FII liquidity and open commitments



MEE has imposed portfolio allocation guidance for FII in the 2012 governance letter. The direct investments should not exceed 35% and the buyout investments should not exceed 30% of the investments and commitments. These limits have been followed, and the direct investments and commitments were 130 M€ or 23% on reported book values or 25% at market values (151 M€) as is shown in figure below. Similarly buyout fund investments and commitments were 21% (121-129 M€) both in book and market values. The portfolio allocation guidelines have limited practical relevance with current FII resources. At year end FII investments and unpaid commitments stood at 585 M€ at book value and 630 M€ at market values. Furthermore FII has imposed restriction that investments and commitments should not exceed 150% of equity. At book values FII investments and commitments stood at 103% of equity at book values.

Figure 18. FII investment capacity



1) At book values at year end 2012

2) Buyout allocations as a constraint, would imply 400 M€ equity need instead of current 611 M€ equity at market values

Source: FII annual reports, company internal confidential data & VALOR analysis

Investment of liquidity has been a significant source of income for FII. During last 10 years market-based pre-tax income from liquidity investments has been 91 M€ or 94% of FII consolidated equity above government investments of 470 M€. The liquidity investments are managed by third party fund management companies and require no active participation from FII organization. The average financing income of 4.3% exceeds the historical five-year government bond yield of 2.8% by 1.5% implying a non-risk-free component in the investment decision-making that is not contributing to FII core functions. However, the market value based result of the liquidity investments has been positive in eight of the last ten years.

4.5 MEE Group and other relevant public entities

FII is one of the key public entities with market based investment activities and the largest concentration of the private equity know-how in the fragmented public structure. Although most of the relevant entities are organized under MEE governance the FII has operational linkages also to other public entities. Essentially all entities have operated very independently, but joint efforts are needed in the future.

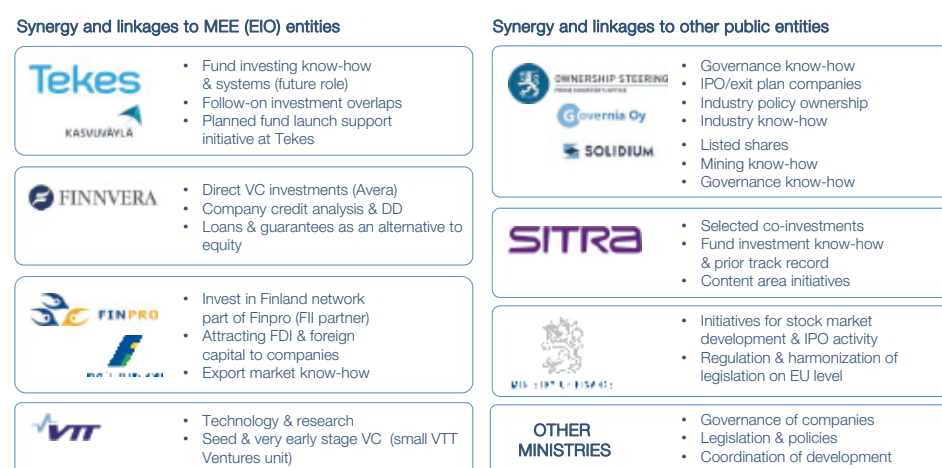
Finland has a complex structure of public support for the national innovations system with large number of organizations and initiatives. In addition to MEE Group entities FII related activities extend beyond ministry borders (PMO Ownership Steering unit entities) and even include independent units (Sitra) that is reporting directly to the parliament. Although the role overlaps are fairly limited between

public entities several organizations may be investors in the same company. In these situations the public sector may not exceed 50% as a general EU imposed rule governing public subsidies.

Essentially all parties interviewed do not consider MEE as an integrated group, and even question the rationale for high level of integration between MEE units. The MEE group thinking is perceived to be limited and according to some interviewed people should be extended to cover all public activities and initiatives in this sector even beyond ministerial borders. Furthermore some market bottleneck corrective interventions may contain activities beyond the units directly involved in the private equity markets (e.g. taxation issues). In the current state MEE is regarded to lack group management thinking, clear guidance and tools to enforce the realization. The interview comments call for more clear roles for the entities and clear borderline between public intervention and purely private sector -based activities.

The system is operated as a group of independent units, but according to interview input is not optimized as a whole. MEE is undergoing a process towards higher level of coordination and the different entities are only learning to think as one entity. The transition process has been started fairly recently and the results are yet to be delivered. Based on interview feedback the large MEE entities are still perceived to sub-optimize their own performance in the respective core focus areas. MEE, and FII as part of MEE Group, have a challenging task to coordinate roles and to address the most critical development needs, especially in the grey areas between key organizations' core activities.

Figure 19. FII synergy and linkages to MEE (EIO) and other public entities



Source: Company websites & VALOR analysis

Tekes, Finnvera, Finpro and VTT have operational linkages to FII. In addition to EIO linkages, also Sitra and PMO Ownership Steering (including Solidium and

Governia) have operational synergies and linkages to FII. MEE Group strategy aims to reduce overlaps between different MEE organizations. Of the above mentioned organizations Tekes, Finnvera, Sitra and PMO Ownership Steering operations are related to investments and private equity. The linkages between other public organizations and FII are elaborated on the figure above.

FII has fairly clear and straightforward mission to make Finnish private equity markets work, and is the only entity with private equity markets as the sole purpose. FII is by far the biggest private equity investor within public sector in Finland. FII operates in the later-stages of financing and FII operations overlap only partially with Tekes' planned seed phase investments and current Sitra focus limits investments to few focus areas defined in Sitra's strategy. FII is the core concentration of private equity market know-how in the public sector. According to recent stakeholder survey FII appears to be equipped with better level of know-how than its public peers.

FII has a very limited customer overlap with MEE group and other relevant public entities in the fund investments and only a moderate overlap in the direct investments. As a passive investor funds and anchor investors typically drive decision-making in other financing initiatives and dealings with other public support organizations.

Finnvera provides companies primarily with loans and guarantees but has historically been also active in the early-stage venture capital funds. Venture capital activities are operated in a separate entity with a "Chinese wall" to Finnvera's loan financing activities. Finnvera has made direct venture investments through Aloitusrahasto Vera Ltd (Avera). Avera investments are managed by Veraventure Ltd which also makes investments in regional investment companies. In addition to Avera and Veraventure, Finnvera makes private equity investments also through Matkailunkehitys Nordia Ltd and has invested in regional funds. Based on the decision in the ministry Finnvera started venture capital investments in 2004. During last 10 years Finnvera has been the largest seed and early-stage venture capital provider in Finland. Finnvera claims that it has 1/3 of Finnish start-ups in its portfolio and has been claimed to be overly aggressive and also invested in lower quality initiatives. As a result the financial performance of these investments is moderate. The contrary argument has also been raised in the interviews that Finnvera Venture Capital Investments have received excessive negative image and that it has taken larger risks than private investors as mandated

Finnvera Venture Capital Investments and FII are claimed to have relatively modest collaboration due to market gap after Finnvera Venture Capital Investments' focus investment size range below FII's minimum investments size. FII investment decision-making is also independent from Finnvera's debt funding on individual investment case level although many of FII's target companies are presumably also Finnvera's customers. MEE could consider using Finnvera's debt instruments as a partial substitute for FII's growth financing activities and thereby the target companies would avoid excessive dilution or too early-stage divestiture. Based on interviews, the evaluation team suspects that the use of different funding tools

and instruments is currently not adequately coordinated from market bottleneck correction perspective.

MEE & Finnvera have decided to discontinue Finnvera's Venture Capital Investments' new investment activity in 2017 and Finnvera has been granted limited funding for further investments for the transition period. MEE has decided that Tekes will extend its role from technology grants towards seed and early-stage venture fund investments and thereby replace Finnvera's venture capital investments. Historically Tekes has not done fund investments and is setting up fund investment operations during winter 2013-2014. The State has allocated 20 M€ for Tekes for the new seed fund investments. As a part of Tekes' seed fund investments, it is also planning to launch development support funding for new fund initiatives.

Various interviewed parties question MEE rationale for continuous transfer of early-stage venture funding responsibilities between MEE entities. The discontinuation of prior activities is not regarded to optimally accumulate know-how and is likely affect the short-term market development. From this perspective the evaluation team recommends increased attention for the continuity and long-term perspective on the market development. However, the general impression on the recent changes is very positive among parties interviewed.

Planned Tekes activities are complementary to FII operations and focus as FII does not actively operate in the early-stage venture financing. Both FII and Tekes management claim the roles of these organizations in the market are relatively clear without significant overlaps. On the contrary the interviewed parties indicate a need to coordinate the potential funding gap between FII and Tekes funding size ranges. FII, Finnvera and Tekes have an ongoing dialogue on the clarification of roles, and the issue is already addressed. Tekes is already considering extending its size range to selectively also cover follow-on investments in NIY program, which will alleviate the problem. FII and Tekes are also evaluating opportunities to leverage FII know-how and existing systems/infrastructure for Tekes fund investments.

The evaluation team stresses the importance of coordination and holistic view especially during the transition period to avoid unnecessary market disturbances and to provide continuity in funding from the target company perspective. The interview feedback relating to the potential overlap of FII and future Tekes roles is highly mixed, but essentially all parties commenting the issue share the opinion that management and coordination of this interface is critical.

Also VTT (The National Research Centre) has a separate subsidiary VTT Ventures Ltd for venture investments. VTT Ventures Ltd is an early-stage corporate technology spin-off co-investment vehicle. VTT Ventures portfolio includes 20 companies in start-up phase. VTT Ventures and FII operations do not overlap as FII investments focus on later-stage of target company development. However VTT has superior technology know-how in selected industries that could be further leveraged as part of capital allocation and investment evaluations.

Finpro is a public-private organization indirectly under MEE governance. Finpro is the national trade, internationalization and investment development organization and unlike Tekes and Finnvera it does not provide companies with funding, but rather consulting in different phases of internationalization. The current level of collaboration with FII is low. MEE governance letter and target setting for FII includes strong focus on internationalization of companies that would imply stronger collaboration in this area with Finpro. Invest in Finland (now part of Finpro) is responsible for attracting foreign investments to Finland. MEE should evaluate alternatives to enforce further collaboration with Finpro to leverage existing international contacts know-how and network for early-stage growth companies.

Prime Minister's Office (PMO) Ownership Steering Department is responsible for state ownership policy, the ownership steering of state-owned companies under the Prime Minister's Office, expansion of ownership base, branch reorganisations, share investments, coordination of ministries' ownership steering procedures and interministerial cooperation. Alongside typically majority government owned companies Ownership Steering has two 100% owned portfolio companies: Governia and Solidium. Governia consists of Kruunuasunnot Ltd. and Easy KM Ltd. Governia had 381 M€ in assets at year end 2012. Solidium is governing the State owned minorities in 11 listed companies. At year end 2012 Solidium net assets stood at 6550 M€.

PMO Ownership Steering units focus on market-based activities and claim to have no industry policy functions. Similarly FII claims to be market-based investor. However, factually both PMO Ownership Steering units and FII these operations have a public ownership rationale and at least indirect industry policy function. Due to these similarities the State could consider a wider holistic view on the allocation of resources and at least coordination of these activities, which at the current state appear to be very limited. Even concentration of similar activities under same governance could be considered as an option. Closer coordination would harmonize the operating principles across these activities and facilitate re-allocation of resources. From FII perspective closer collaboration with Solidium would also add to FII's credibility as market-based investor towards third parties and make division of support and market-based activities even more clear than what it is today. Potential closer coordination is should be evaluated and executed on activity level and may result on partial reallocation of roles between MEE entities. From know-how perspective relating investment, ownership and exits the benefits would be clear but a new approach would require strong MEE input on the industrial policy objectives. Based on interviews even separation of ownership and policy could be possible as a governing principle in these activities.

The potential synergy/know-how overlaps between the PMO Ownership Steering and FII can found especially in direct government investments as well as in potential pre-IPO target companies and should be further evaluated. Potential area for immediate collaboration would be FII owned shares in listed companies. In 2012 FII

owned loans and shares in 9 listed companies with 35 M€ in book value. Further motivation to collaboration in listed shares can be found in Solidium know-how in mining segment. Solidium has holdings in Talvivaara and 4 other companies with significant mining segment exposure (Outokumpu, Outotec, Metso and Kemira) with total value of 1.4 € billion.

Sitra does not report to MEE, and operates independently outside direct government guidance. Sitra's operations are based on internal funding. Sitra has been historically active in private equity investments. After adoption of the program approach 2007, the investment scope is more targeted than before. Sitra continues to make private equity investments but regards those as a tool for strategy implementation and therefore perceives itself only as a temporary market participant. Until 2007 Sitra participated actively in developing the private equity market in Finland for more than 10 years as FII type general investor. Historically Sitra has catalyzed birth of two private funds Biofund and Eqvitec, which originally were as part of Sitra. Both Sitra and FII claim to have role to complement the private sector offering. FII and Sitra have close collaboration and both leverage the each other's know-how in fund investments. Occasionally FII and Sitra have ownership interests in the same target companies or promote similar industry events, e.g. Cleantech Forum, but all in all the overlaps are fairly limited.

4.6 FII's joint activities with other MEE entities

FII collaborates on initiative level with other MEE entities, but the collaboration is relatively limited on strategic level and not fully utilizing the private sector BoD know-how. FII and other MEE entities focus should be on to support Finnish VC ecosystem development proactively.

FII collaboration with other MEE entities is fairly limited from the strategy development perspective. MEE unit strategic planning is generally perceived to focus on the individual unit and MEE dialogue rather than intra-unit collaboration. FII, Tekes and Finnvera chairmen meet once or twice annually to discuss and coordinate potential operational overlaps in the ongoing collaborative initiatives. The dialogue is unofficial and typically does not include MEE participation. The collaboration takes place mainly of BoD chairman level. On FII BoD member level the collaboration exists but is fairly limited based on FII BoD members interviewed. Specifically the evaluation team recommends further proactive role for FII and other MEE organization in identification of the market bottlenecks and developing joint initiatives and proposals for MEE on the required temporary corrective initiatives.

FII participates actively in several MEE's cross-organizational initiatives and programs. The collaboration includes among others participation in Invest in Finland, Team Finland and Growth Track initiatives among others. Growth Track provides selected growth companies with a tailored package of financing and services with objective to accelerate company growth and internationalization. FII's

role is to provide private equity as part of Growth Track offering. As the Growth Track is relatively new initiative and FII participation was decided upon in the 2012 governance letter the results and FII participation impact remains unknown.

FII collaborates with other public innovation finance organizations. FII, Tekes and Finnvera organize annually Enterprise Finland Venture Forum, which brings together Finnish growth companies and international investors. FII participates in the development of Team Finland. FII, for its part, participates in the internationalization of the local market, raising the awareness and interest towards Finland, and inward investments. FII perceives its role to be closely linked to the promotion of investments into Finland. FII actively participates in venture capital industry events aimed for bringing together investors and growth entrepreneurs. For example FII contributed as a coordinator and participated in a recent SLUSH-event as a part of Invest in Finland consortium together with Tekes and Finpro and in local events such as Corporate Cleantech Venture and Enterprise Finland Venture Forum events. FII could assume even bigger role in such events and has historically allocated relatively little resources to promote and sponsor these forums that are important for growth entrepreneur networking and internationalization.

5 Finnish private equity in international comparison

Finnish private equity market is evaluated in international context and compared to selected advanced international private equity markets both in terms of investment volumes (over 5 year period) and in terms of public participation.

5.1 Historical development and market situation

Finnish markets have developed positively but remain small compared to international peers (small absolute size, small international participation, small investment and fund size). With adequate number of funds in the market on aggregate a clear gap has emerged in the later stage venture capital stage. Similarly although Finnish markets have developed in terms of volume, the quality of the ecosystem is below best peers.

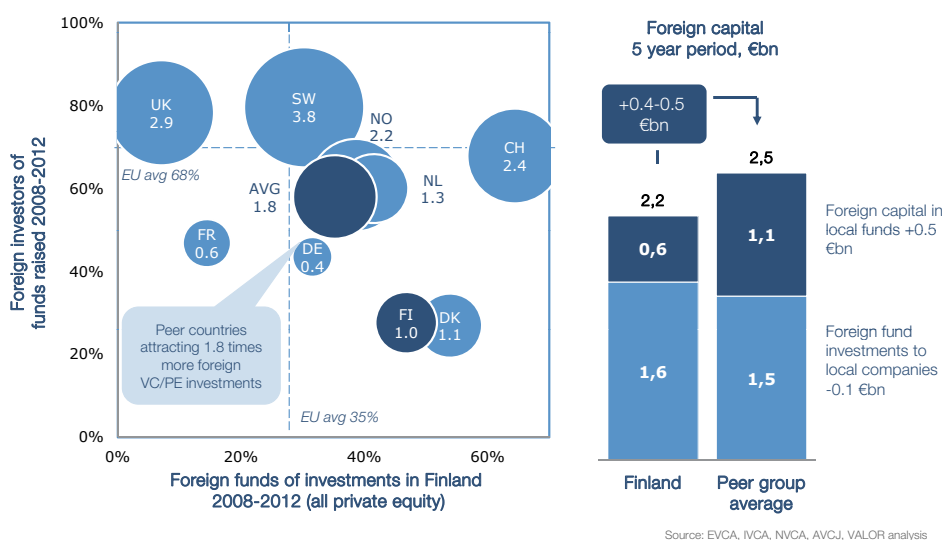
Recent development of Finnish private equity markets can be divided in two different time periods: pre-2008 financial crisis and 2008-2012 recovery periods. The financial crisis has affected the market development and reduced the availability of risk and debt capital. There have even been few short periods when almost no funding has been available and whole financial system has been at risk during last five years. Although situation has stabilized, future economic growth expectations are below historical average.

Finnish private equity markets have developed positively over the last 20 years, but the development has stagnated after 2008. During the last 15 years Finnish private equity AUM has four-fold from 1.3 €bn to 5.6 €bn, implying a CAGR of 11% for the period. However, the development during last 5 years has been slow, AUM growing with CAGR of 1% from 5.3 €bn in 2008 to current level of 5.6 €bn. With fewer new funds raised large capital overhang (uninvested excess commitments) has normalized.

Overall private equity has stabilized its position as a major source of funding for companies and as an alternative for stock market listing and traditional debt financing. Private equity falls in two key categories, direct investments and investments through funds. Funds are typically managed by a separate management company with small investment in the target (general partner or GP). Funds are mainly financed by passive institutional investors (limited partners or LPs). Fund management companies receive compensation in management fees and carry (share of profits). Funds have typically fixed duration of 10+ years and therefore fund investments are long-term by nature. Fund investments carry higher costs than listed companies and therefore investors expect higher returns from funds than from listed shares.

According to FII and other experts interviewed, the quality of Finnish funds is perceived to be developing but below their best international peer. FII participation in the market development is positive but current structures and participations may not fully leverage potential to improve the know-how in the market. With the current level of activities the development of know-how is gradual, and interfacing with international peers is fairly limited. The evaluation team therefore perceives the acceleration of the market know-how development and accumulation measures as a critical bottleneck for the market development.

Figure 20. Foreign investor share of private equity markets and potential for Finland

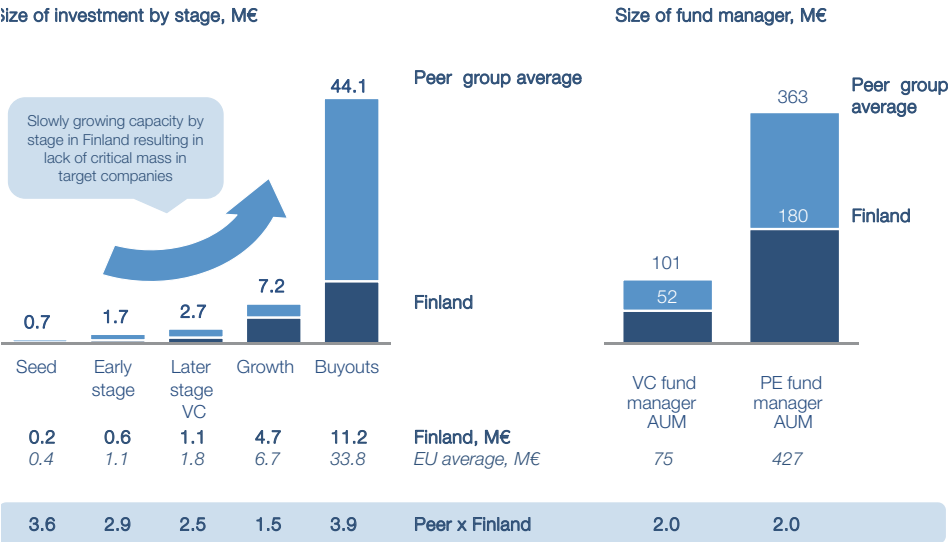


Finnish private equity market is local compared to peers. Finland has traditionally been a cabinet economy from equity perspective and the idea of Finnish ownership hinders attracting foreign capital to Finland. The gap to average is clearly visible in mapping foreign investors' share of funds raised as shown in figure above. Scaled to population, funds in peer countries attract almost two times more foreign capital on average. Only a quarter of total private equity capital in Finland is from cross-border sources compared to 78 % in the best peer country. Also Finnish funds invest very little abroad. Finnish PE invested less than fifth of their investments abroad compared to the best peer with 56% or EU peer average of 27% in 2008-2012. Foreign funds have limited or no local presence in Finland and few large buyout funds have skilled Finnish senior officials positioned in Finland. Therefore, the local nature of the private equity is visible both with Finnish companies and with Finnish funds, which lack international contacts and interfaces with few exceptions. Nevertheless,

private equity and technology businesses are already global by nature increasing need for non-domestic perspective for the market development.

Finnish funds are very small compared to international peers. On average typical VC fund in Finland has AUM of 52 M€, representing approximately half of EU peer average of 94 M€. Similarly Finnish buyout funds have average AUM of 180 M€ compared to the peer group average of 414 M€ based on EVCA statistics. Larger funds enable more credible and professional teams with international know-how, putting Finnish private equity teams into disadvantaged position compared to their international peers. Similarly fund size is critical from management fee perspective. Specifically in the venture stage larger fund size allows for add-on investments to portfolio companies and the fund is not forced out at follow-on investment rounds. This model is ventured for examples in the recent Inventure fund with consideration of a separate seed investment allocation. As a result of smaller funds also target company investments are only one third of the peer group average. The average investment size is significantly lower than in peer countries in all phases except growth financing, as shown in figure below. In growth financing, the Finnish average investment is only a third smaller than in peer countries. With shortening product cycles and increasing international competition for the best talent, Finnish companies with smaller funding are in inferior position to capture the market opportunity compared to their international competitors.

Figure 21. Finnish investment and fund size by stage compared to EU and international peers

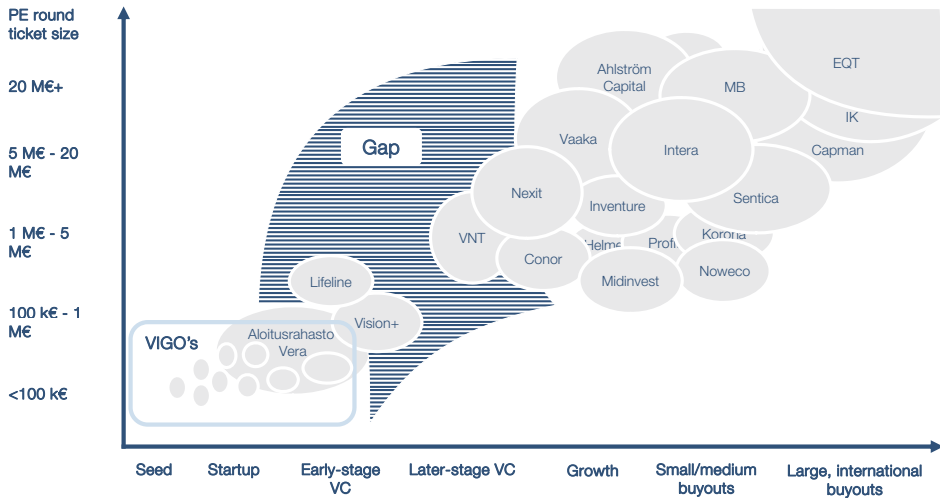


Source: FVCA, EVCA, VALOR analysis

Compared to peers and scaled to population base, Finland has adequate number of funds and fund management teams. However, the size of the funds and fund renewal are identified bottlenecks, which are explained by the lack of active anchor investors with sufficient resources and counterparties as investors. The pension funds – a key source of private equity capital in Finland – are becoming fewer due to industry consolidation. Based on interview comments, typically these institutional investors limit their participation to 10-20%, making it difficult for Finnish funds to reach critical size without foreign or public sector participation. Furthermore local pension fund commitments to Finnish funds are expected to saturate in the near future. As a result of industry consolidation the preferred ticket size is also going up making small Finnish funds less attractive investment targets especially in the early-stage.

Overall the Finnish PE environment has developed rapidly over the last 15 years. Especially growth and small/medium buyout sectors have grown and these stages have adequate number of funds, as is shown in figure below. However, the venture capital -segment lacks private capital and funds. Currently it is dominated by public capital (especially Finnvera's venture capital investments). Public sector has been active in starting new initiatives, such as Vigo-program to revitalize the VC market. Additionally business angels are becoming more active in seed and startup phases. Despite these developments, there is still a significant gap in venture capital funding in 1-5 M€ range as most of the funds active in this size range are specialized in buyout financing, not venture capital. Based on interviews and published investment strategies of the funds, the market lacks venture capital funds that would have the capacity to invest 1+ M€ in financing rounds. This fund gap in the Finnish PE-market is illustrated in the figure below.

Figure 22. Illustration of the Finnish PE landscape



Source: FVCA, company websites & VALOR analysis

5.2 Literature review on the impact of private equity

The academic research is highly positive on private equity investments both on target level and for the economy as a whole. The international findings appear to be valid also in Finland.

Following the framework of Alemany and Martí (2005), literature studying private equity is most often divided into two separate categories. The first branch of studies targets to explain the performance of the portfolio companies through the value added activities of the PE investors. Specifically, these studies concentrate on topics such as the target selection of portfolio companies or the PE investors' role in monitoring and supporting portfolio companies. Overall, even though the net value added through private equity investments is believed to be strongly positive for target companies, there are also observed some negative aspects involved. For instance, private equity is sometimes regarded as an expensive source of financing relative to the value of the services provided by the fund managers. Some argue the investors exploit their positions as the last resort for entrepreneur's and accuse them of providing funding under unfair conditions. (See e.g. Sapienza, 1992; Alemany and Martí, 2005; Cumming, 2008; Lerner, 1999; Bottazzi et al, 2008; Sørensen, 2007; Hellmann and Puri, 2000). The second discipline instead tries to explain and empirically measure the economic impact of private equity investments. These studies may also be further divided into two groups, the other focusing on the potential impact on some specific topics, such as innovation or employment, while the other tries to measure the broader overall economic impact of private equity financing. Next these findings are discussed briefly in order to create an understanding of why PE industry exists and why it is important for a society. (See e.g. Bloom et al, 2009; Kortum and Lerner, 2000; Hellmann and Puri, 2000; Strömberg, 2009)

Private equity investors appear to improve the operating performance and accelerate the growth of target companies. In venture capital the impact is mostly concentrated on firm growth in terms of revenue or employment. Employment growth is especially important in terms of impact on national level as its influence is two-fold: not only do new jobs create additional tax income and increase GDP, but also cut unemployment related costs (e.g. unemployment allowances). On buyouts, on the other hand, the impact is on firm profitability, productivity, and operational efficiency. In both set of studies the existing research generally suggests that private equity investments have a positive impact on the target companies growth and performance. (Strömberg 2009) The same positive results have also been validated in the Finnish context (see e.g. Männistö, 2009; Alén, 2013; Lähdemäki, 2007).

Additionally, empirical evidence shows that there is a strong positive correlation between venture capital and innovation (see e.g. Hellmann and Puri, 2000; Lerner, Sørensen and Strömberg, 2011). Lerner, Sørensen and Strömberg (2011) note in

their study that private equity-backed firms' patent are not only more frequently cited but also more focused on companies' core technologies. Thus, venture capital investments tend to improve innovation and related activities, which is also important on national level. Nevertheless, it is important to note that empirical findings related to innovation typically suffer from the fact that it is hard to measure and thus results do not allow making fully conclusive remark in this regard.

The existing literature also implies that private equity investment may increase internationalization activities of portfolio companies. Mäkelä and Maula (2005) study Finnish venture companies and they find that internationalization is highly dependent on the domicile of PE investors as investors tend to pull their portfolio companies toward their own home markets. Thus, the impact on internationalization of portfolio companies is especially well-grounded in the case of foreign investors, implying that foreign investors represent a core asset to companies and countries inclined to international markets.

Private equity investors are often quoted to add value to target companies through actively participating in the decision-making and monitoring process of board of directors and influencing the composition of the boards. For example, the involvement in the board may play a vital role when leveraging their experience or utilizing their strategically important contacts (Hellmann and Puri, 2002; Alemany and Martí 2005), and thus extending the resources of the current businesses and capabilities. Further, in line with this, PE investor involvement in boards may play a crucial role when a company is pushing for major changes such as replacing the incumbent CEO (Lerner, 1995).

Existing literature has covered also other economic and societal impact on national level that will not be discussed thoroughly, however. This is because these findings are not generally validated in the existing literature. For example, Samila and Sorenson (2011) present that increase in venture capital funding generates significant amount of new start-ups. This is because greater availability of funds encourages prospective entrepreneurs to start new businesses, but also that the knowledge sharing in the existing ventures often create new spin-offs and, thus, pooling entrepreneurial talent. Alemany and Martí (2005) note on the other hand that corporate tax revenues increase due to additional venture capital funding. In contrast to that, Männistö (2009) found insignificant results in tax revenues growth, however.

5.3 Public sector role

After strong participation in R&D and pre-commercial phase limited indirect participation is typically preferred for public entities. Contrary to this thinking Finland has extensive public participation also directly. Vis-à-vis the tightening regulation, relatively modest historical results and already high public share the future participation is already shifting towards more indirect. As in

essentially all peer countries strong public role in the market development is encouraged.

Public participation in R&D and innovation financing is generally accepted. All peer countries have a highly active public sector in the R&D and early-stage financing but the approach varies at the later-stages. The R&D and early-stage financing is motivated by the positive externalities of R&D and entrepreneurship for the economy and society, which have been shown to exist in academic research. The main open academic research issue of public intervention in the early-stages is the cost of impact and efficiency of the use of resources (see e.g. Lerner, 2009). Unfortunately we have not reached a definite proof in this matter.

Public sector in Finland is facing a challenging task to manage structural change, alleviate effects of abrupt structural changes and provide continuity, and to catalyze new businesses and economic growth. MEE has stated in Vision 2015 to promote employment and high value-added growth and export-oriented economic activity as two key focus areas. The government has recently made major further commitments to innovation and venture capital, and has launched extensive changes to improve the effectiveness of the current organizations. In the absence of good alternatives, the State and MEE are responsible for developing a working private equity and innovation ecosystem in Finland.

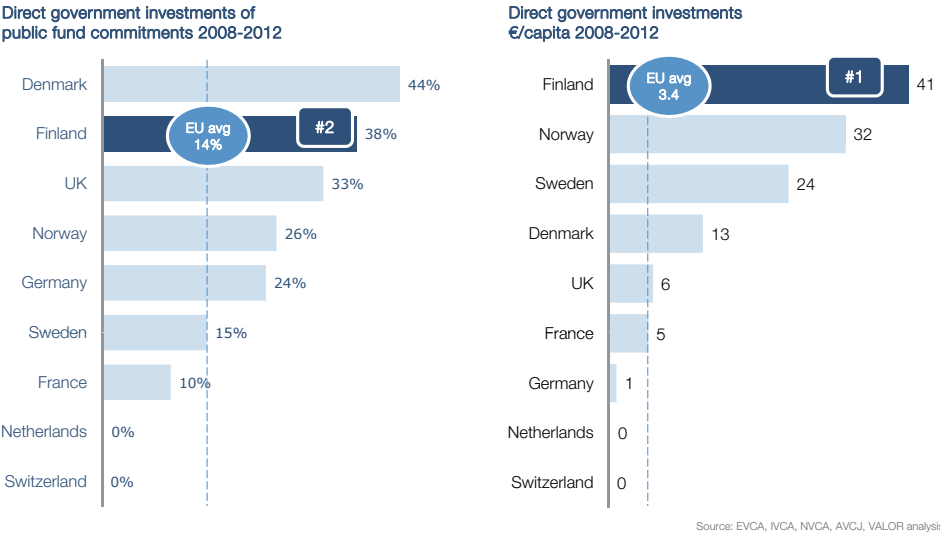
Organizing public venture capital & private equity varies from country to country. The main differences derive from organizations' missions and investment focus. The missions of the organizations vary between purely commercial operations to largely politically influenced investments. The investment focus varies both between direct and indirect investments and between early-stage VC to later-stage buy-outs. Additionally part of the public PE is organized as a separate company, others are a part of a larger governmental body.

The public participation in the private equity markets in Finland is among the highest in the world. Public participation totaled over 920 M€, or 27% of total fundraising in 2008-2012 while investments in the Finnish portfolio companies were 3.4 bn€. EU peer average of public to total fundraising was 13%, implying half of that of Finland. The high direct public activity can be seen as a hurdle to attract private capital. Finland alongside other Nordic countries has more active role in private equity markets than peers on average, which is depicted in the figure below. Nordic countries differ from other peers with typically higher than average public participation in private equity, and with participation even at the later-stage buyout markets³. Central European peers (UK, France & Germany) typically focus from seed financing to growth-stage and other international peers focus on seed and start-up phases only (Singapore) or have very limited funding participation in the market (Israel, Switzerland, Netherlands and USA). However, there is an ongoing trend towards higher public participation in Europe even at the later-stage. At least UK,

3 In buyouts Finnish public fundraising of total is 16% compared to EU peer average of 9%. Swedish public is the second highest with 14% share.

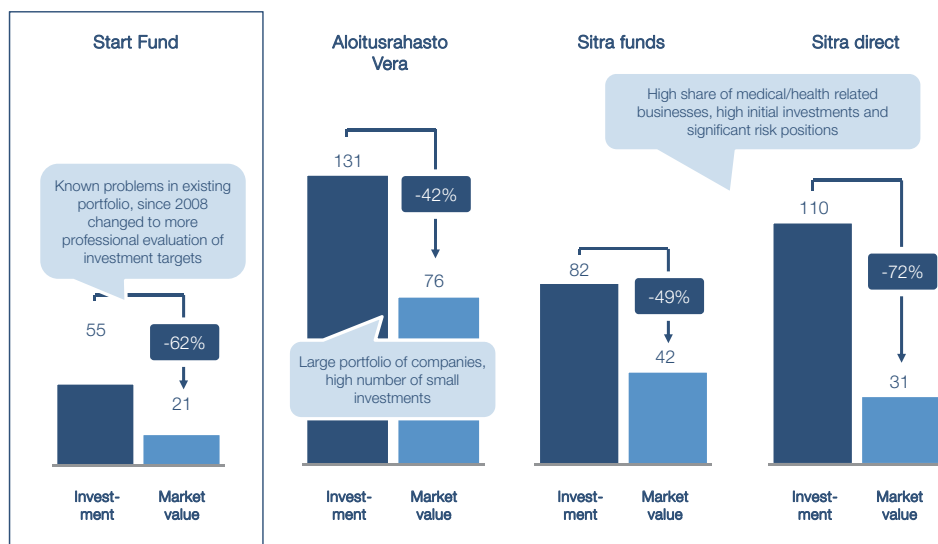
Austria and Switzerland are known to consider higher public participation in the private equity markets.

Figure 23. Government share of private equity markets in peer countries



According to prevailing academic thinking, public participation in private equity markets should be limited to indirect investments (through funds) only (see e.g. Lerner, 2009). Public servants are not perceived to be rightly incentivized to make right target selection and direct public interventions are perceived as a potential source for market distortion hindering private market development. Poor track record of public early-stage investments in Finland supports these findings. All public organizations (Sitra, Finnvera, and FII) have lost almost half of their value in the direct early-stage investments. Even if taking into account higher associated costs with fund investments, both Sitra and FII have better financial performance in investments through funds compared to own direct investments. The performance of the public early-stage investors is illustrated in the figure below.

Figure 24. Performance of the public early-stage investments since inception



Source: FII, Aloitusrahasto Vera, Sitra annual reports & accounts 2012, VALOR analysis

Finland ranks second only after Denmark in public fund commitments in 2008-2012. Finland also ranks first in direct government investments ahead of all other Nordic markets for the same period. The already high share of public funding limits the potential for more extensive public intervention in the future in Finland. Instead, the state should aim more resources to attract private capital to the market and aim for measures targeted for future smaller role of the public funding.

Private equity and capital markets in general have a clear trend towards more stringent regulation of the public sector participation and support systems. There is a strong trend in public subsidy systems away from grants. Pending new EU regulation poses also tighter restrictions on public share of funding of companies based on development stage, requiring increased share of private sector funding for large companies as a precondition for public funding. New rules are based on pari-passu principle requiring similar instruments and the same timing with true financial impact for public and private funding. From FII's perspective new rules do not pose problems with the current system. Potential breach of state-aid rules would however require high bureaucracy and ex-ante proof of market failure even for temporary interventions.

EU is also adopting a new more stringent regulation for private equity funds. Alternative Investment Fund Managers Directive (AIFMD) entered into force on 22 July 2013 and regulates fund management and marketing, and it is likely to increase bureaucracy and legal costs. In the longer term, it will harmonize market practices and facilitate cross border activities.

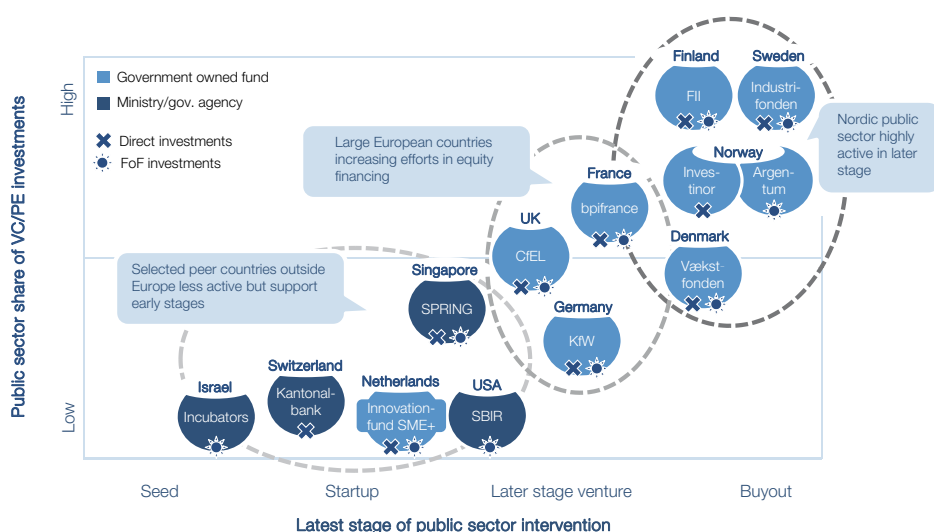
The new more harmonized legislation may increase the critical mass needed and facilitate internationalization from the fund manager perspective. The practical implication for FII could be launch of regional funds (e.g. in mining). The new legislation also lowers the barriers from institutional investor perspective for international private equity investments, partially offsetting the negative implications of the Basel III regulations.

5.4 FII's international peer organizations

FII has closest comparable companies in the other Nordic markets with Finnish-type extensive public participation also in the later stages of the private equity market. Nevertheless, FII's mixed model of direct and indirect investments with both market-based and policy-driven investments is unique and FII should be compared with its peers by function, not as an entity.

FII operates on a commercial basis as a separate company and invests both fund and direct investments. When looking at FII benchmark companies, the best peers with similar operations seem to be in the Nordic countries, namely Industrifonden, AP6 and Fouriertransform in Sweden, Argentum and Investinor in Norway, and Vaekstfonden in Denmark. These organizations' have presence in later-stage venture and buyout, whereas most European and international VC/PE organizations only operate in earlier stages of venture financing. Overall the Nordic public sector companies are more active in later stages compared to peer countries' organizations. This is illustrated in the figure below.

Figure 25. Public sector organization's operating field and role in the markets in peer countries



Sweden's Industrifonden, established already in 1979, is an evergreen fund with mission to invest in Swedish SME's with growth potential mainly at start-up and expansion stages. Industrifonden is usually an active co-investor in the companies although sole-investing is also possible. The performance of Industrifonden has been mediocre at best throughout 2000's except a single very successful IPO in 2011, when a portfolio company called Qliktech listed in Nasdaq. As a commercial, evergreen operator without government recapitalizations it is not interfering the market. However, it can be questioned whether it has impact in the Swedish PE market, which functions relatively well even without Industrifonden.

Sweden's AP6 (The Sixth AP Fund) is a Swedish national pension fund, focusing on private equity investment. Initially AP6 invested in broad range of both VC & buy-out funds and companies, but AP6 has gradually moved toward larger buy-out deals and funds. This has been motivated both through more predictable returns in the larger buy-out segment but also by optimizing fund's workload. As a result of moving to larger companies AP6 has very limited impact in Swedish society apart from financial results.

Sweden's Fouriertransform was founded in 2009 to invest in Swedish automotive industry growth companies. This was highly motivated by industry problems in Sweden (Saab bankruptcy, Volvo ownership change, etc) and political pressure was placed to help industry recover. The first years of Fouriertransform's operation were largely criticized for both lack of investments and also for investments in incumbent, non-growth companies. This critique was underlined as one of the first large investments in a formerly –publicly listed company ended up in a bankruptcy. Later the fund has focused more of its investments more in growth companies, improving performance, but the need for a separate, automotive industry focused government owned PE is still broadly questioned.

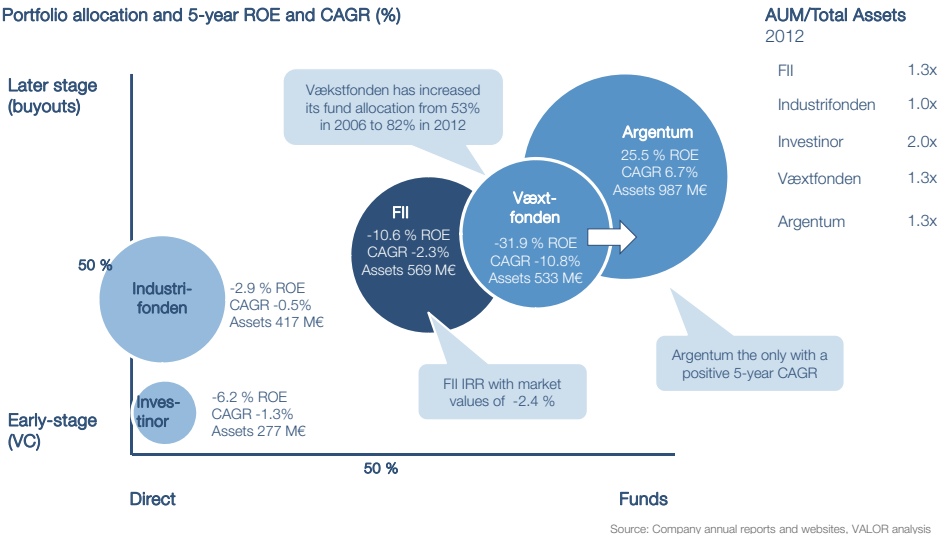
Norway's Argentum was created in 2009 with the sole mission to contribute to efficient capital markets for the Norwegian unlisted companies through fund investments. Argentum operates purely on a commercial basis, and is probably the best-performing governmental PE fund. The returns for Argentum investments have been very high, which have attracted private investors, e.g. family offices, to invest in Argentum FoF operations – currently 1/3 of Argentum funds are from private investors. Argentum has expanded operations with offices in Denmark and Sweden, and is also active throughout the Nordics. Argentum's good financial performance, ability to attract international private equity to Norway and impact in activating the Norwegian PE market seem to make it an excellent example of governmental PE fund.

Norway's Investinor was founded in 2009 to increase the growth of export oriented Norwegian companies, especially in early-stages of financing. Investinor's operational model was copied from Industrifonden and it invests only directly as a co-investor. One of the motivations for establishing Investinor was the fact that

Argentum's impact in increasing early-stage investments in Norway has been limited and a tool for direct investments was considered more effective.

Denmark's Vaekstfonden was established already in 1992 as an independent FoF operator to support and create new growth companies and greater returns on the society in Denmark. It is financed by the Danish government, majority of Vaekstfonden's operations are its commitments to Vaekskapital FoF (>70% of capital), which was established in 2011. Vaekskapital FoF is best described as the Danish equivalent of FoF Growth in Finland. Additionally Vaekstfonden has direct investments and own fund investments. Vaekstfonden's financial performance has been relatively poor but it is considered to have an important role in supporting growth companies, if not measured by financial performance only.

Figure 26. FII peer organizations' focus and historical success



As a conclusion of international peer organization comparison, it is evident that Argentum, Industrifonden and Vaekstfonden are the best peers for FII operations, although none of the peers match FII completely. Argentum is targeting only to contribute to efficient capital markets for unlisted companies, currently operating without any other industrial policy targets. It is clearly the most market-oriented player and has performed very well both in terms of growth and financial returns, as shown in figure above. Industrifonden has only operated through direct investments, where it has performed slightly better than FII. Vaekstfonden has performed significantly poorer than FII despite mostly operating through funds, but again, it is much more industrial policy oriented. For further peer organization benchmarking, FII should not be considered as a single entity, but rather a set of operations that are each benchmarked against their best peer organizations.

5.5 Seed funding and early-stage venture capital

Finland has performed well in innovation but is falling behind peers in the commercialization. At the initial stage of commercialization the Finnish public financing system is larger than in the peer countries. The early stage of the market in Finland has sub-scale funds and investments, significant quality problems, and poor historical returns.

Private equity markets consist of four phases: Seed capital and early-stage venture capital, later-stage venture capital, growth financing and buyouts. These different stages of private equity financing require fundamentally different skill sets due to differences in performance drivers and business dynamics.

Seed capital is invested at a start-up phase where companies typically seek funding and business development competence to prove the business concept and develop a viable business model. This phase requires typically fairly limited capital (from tens of thousands to a few hundred thousand euros) but extensive set of entrepreneurial competencies. It also has relatively high failure rates. Key sources for seed capital are entrepreneurs, family, friends, public research related institutions, business angels and small seed funds with high involvement in the company development.

Early-stage venture capital follows start-up phase where more capital is required for business roll-out. Early-stage venture capital investments are also relatively small and investments also have high failure rates. This activity focuses mainly on local markets and therefore investor base is mainly local.

Venture capital investment activity has stagnated and average investment volumes in 2008-2012 have been below 1998-2002 levels. Venture capital has been performing poorly since 2000 techno-bubble. Since 2003 funds have been generating low single digit or negative returns both in United States and in Europe, Finland not being an exception. In the last 15 years the Finnish venture and growth fund markets have generated zero returns according to FII internal statistics.

Finnish innovation economy has a strong early-stage target and research pipeline that is currently not fully utilized due to lack of know-how and competent venture capital. In international comparison, Finland ranks above peer average in all aspects in early-stage venture capital except for quality of research institutions and average size of seed investments based on GEM and EVCA data. The average size of seed and early-stage VC investment is 0.5 M€ in Finland compared to EU peer average of 1.2 M€. Due to poor historical returns, risk aversion and lack of venture capital know-how, majority of funding at seed phase comes from public sources. Although the need for public participation in the early-stage is widely accepted and taken as a fact, lack of private capital in early-stage is a problem for the market and growth company development since public sources typically do not possess the needed market experience.

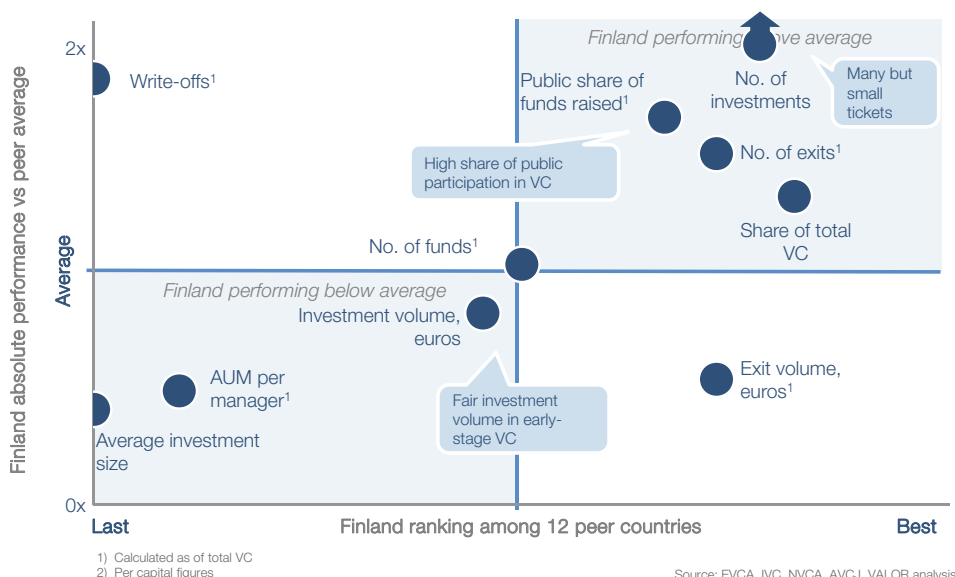
Seed /early stage	Finland	EU peer avg.	Best peer
Total inv. M€	320	280	450
Public share	>50%	30%	70%
Inv. size avg. M€	0.5	1.2	2.0
IRR	0%	-2%	6%

Finland is among the top countries in EU in terms of seed and early-stage venture capital market volumes. Finnish seed markets amounted to over 30 M€ in years between 2008 and 2012 which is at the same level as the best European peer scaled to Finnish population. Finnish early-stage venture capital markets amounted to 290 M€ in corresponding years which is slightly more than European peer average but one third less than in the best peer country. Despite lower investments in early-stage venture capital the number of funds and investments seem to be in line or better than in the best EU peer country. The main reason for the gap hence is the average investment size, which is one fourth of the best peer and under half of EU average.

Based on evaluation team assessment, also public participation is in line with the best peer and, consequently, the pipeline is adequately funded at this stage. At the early-stage of venture capital the financial performance has been below the required return of institutional investors creating a bottleneck of funding for young growth companies. Majority of key economic studies have perceived the indirect positive effects of entrepreneurship as adequate rationale for public participation. The share of public fundraising to total investment in venture capital equaled to over 50% in Finland compared to peer average of 30%. The public share in the best peer country is 70%.⁴

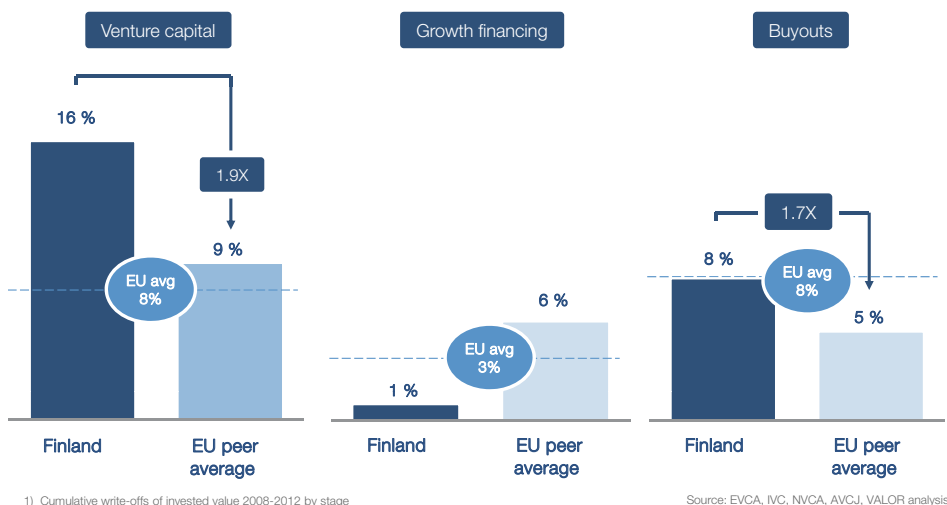
⁴ Figures for public participation are calculated for the total venture capital markets. Public share in seed and early stage venture is probably even higher than in later stage venture.

Figure 27. Finnish seed and early-stage VC market performance relative to peer countries



Compared to later-stages, know-how is more important in the early-stage, whereas capital is critical resource in the later-stages of private equity markets. Based on interview comments Finnish early-stage venture funds are seen as of poor quality and too many. This imbalance is also visible in figure above, which illustrates Finnish VC stage financing compared to peer countries. With lack of good quality targets, high share of public funding and excessive number of funds the valuations may be inflated causing problems in later-stages. The current system is claimed to have too attractive terms for the fund teams driving collection for companies for bigger management fees and simultaneously terms are claimed to be too harsh for the entrepreneurs. The problems in early stage financing are also visible in fund performance, where cumulative write-offs have been significantly higher than on EU peer countries on average.

Figure 28. Write-offs of Finnish and EU peer markets by stage



The lack of know-how in the early-stage is partially a result of historical public sector initiatives and lack of continuity. The responsible organization for early-stage venture capital market has been changed regularly and prior initiatives have been discontinued without the opportunity for know-how accumulation and approach adjustment. However the interviews indicate more positive development lately due to Vigo and NIY initiatives, which are seen to facilitate both know-how and growing investment sizes for the best companies. Additional public sector attention is expected in building a working business angel system alongside venture funds.

Compared to later-stages, the seed and very early-stage venture capital is less subjected to public sector support limitations. At the very early stage the capital availability in Finland is likely to be improved with new planned asymmetry fund initiatives in Tekes. However the current 20 M€ allocation may not be sufficient to reach critical mass in the new funds and will most likely limit these funds' activities to the seed and start-up phase only. The volume of early-stage financing is relatively small and current direct subsidies and grants will be partially replaced with investments (with some level of asymmetry) and therefore the policy change is relatively modest compared to the prior approach. However, extending the potential asymmetry to later-stages would address much higher market volume.

5.6 Later-stage venture capital

Finnish market has a critical bottle neck in the later stage venture capital stage with less than half in investment volumes than the best European peer market. Similarly to the earlier stages the investments and funds are small and

market appears to have very limited pipeline of good quality investment cases. This stage is considered to be a bottleneck in the Finnish innovation funding pipeline both from investors' and companies' perspective.

Later-stage venture capital can be essentially characterized into two categories depending on the risk and capital requirements. Smaller later-stage venture capital investments are needed for follow-on financing growth of early-stage companies with proven business concept. These investments are associated with moderate risk level and relatively large number of targets in the portfolio. Majority of Finnish venture investments fall in this category. Larger ventures with higher risk and typically strong international ambitions require high upfront investments but, however, if successful these high risk later-stage ventures also provide extremely high returns. Finland has a few recent success stories in this segment, mainly in the game industry. On portfolio level the performance of later-stage venture is highly cyclical and has been recently negative both in smaller and in larger end, reducing private investor interest to participate in this segment. Later-stage venture market is the least developed segment compared to growth and buyouts.

Later stage VC	Finland	EU peer avg.	Best peer
Total inv. M€	160	210	350
Inv. size avg. M€	1.1	2.2	3.5
IRR	0%	0%	4%

At FII focus stages of target company financing Finland appears to have a funding gap after seed investment phase in range of 1-5 M€. Later-stage venture capital market equaled 160 M€ between 2008 and 2012 in Finland. Finnish land later-stage venture ranks halfway among European peers but the activity during last 5 years is less than half of best European peer and less than one fourth of Israel and USA, the clear global leaders in this segment. The best peer EU market, scaled to Finnish population, totaled to 350 M€ during 2008-2012 period, implying a gap of around 200 M€ to the Finnish markets.

In addition, Finnish later-stage VC market is also characterized with small deal size: the average investment size is 1.1 M€ in Finland at this stage whereas the same figure is 3.5 M€ for the best peer EU country. Also the average size of Finnish fund is smaller than in peers.

The interview comments indicate that traditional VC model is not working in Finland. Typical later-stage venture targets have also investors from previous financing rounds with limited resources or at end of fund life cycle fighting to prevent dilution. With a fragmented investor base a clear anchor investor is needed but claimed to be missing in several occasions. Additionally institutional investors claim that this segment has too high fees further reducing the segment attractiveness as an investment target.

Finland absolute performance vs peer average

Y-axis: Average performance (0x to 2x)

X-axis: Finland ranking among 12 peer countries (Last to Best)

Quadrants:

- Top-Right (Finland performing above average):**
 - Public share of funds raised¹
 - No. of exits¹
 - No. of investments
- Top-Left (Finland performing above average):**
 - Write-offs¹
 - Finland has highest share of write-offs in VC among peer countries
- Center:**
 - No. of funds
 - High share of public participation in VC
- Bottom-Left (Finland performing below average):**
 - Later stage share of VC
 - AUM per manager¹
 - Average investment size
 - Investment volume, euros
 - Small funds and small investments with low volume, but average number of funds
- Bottom-Right (Finland performing below average):**
 - Exit volume, euros¹

Source: EVCA, IVC, NVCA, AVCJ, VALOR analysis

Based on interview comments, target companies are becoming increasingly professional in fundraising, but the market lacks high quality cases outside gaming industry. The quality issues cover both teams and companies with prior history of low performance standards with soft public funding in the earlier stage. Balanced combination of local and international know-how and money is required to correct this problem. Essentially all parties interviewed almost unanimously share the opinion that attracting foreign players is very important for creation of a robust venture ecosystem. The amount of money invested is considered secondary and bringing in world-class competence is regarded as the key benefit.

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initiatives. In the increasingly global venture capital markets international funds are reported to be relatively active also in Finland despite lack of local presence. Sometimes entrepreneurs also prefer to have top-tier international venture funds as investors, but typically the later-stage venture capital is still relatively local. Based on interview comments this has resulted in situation where only the best initiatives get further funding. On the positive side, Finland has promising next generation fund management companies with successful investments at the early-stage with potential to expand also into later-stage venture segment, but may require public support in establishing the first round later-stage venture funds.

5.7 Growth financing

Finnish market strongpoint is in growth financing due to recent active public initiatives and private sector involvement (FoF Growth). However entrepreneurs raise the concern of the availability of other forms of financing for working capital and international expansion.

Growth financing is required for working capital and major expansion investments. Growth-phase companies have proven track record and therefore investments have only moderate risks and relatively low failure rates. The historical performance of growth funds has been only moderately better than later-stage venture in Finland and therefore the segment does not appear as highly attractive for private investors.

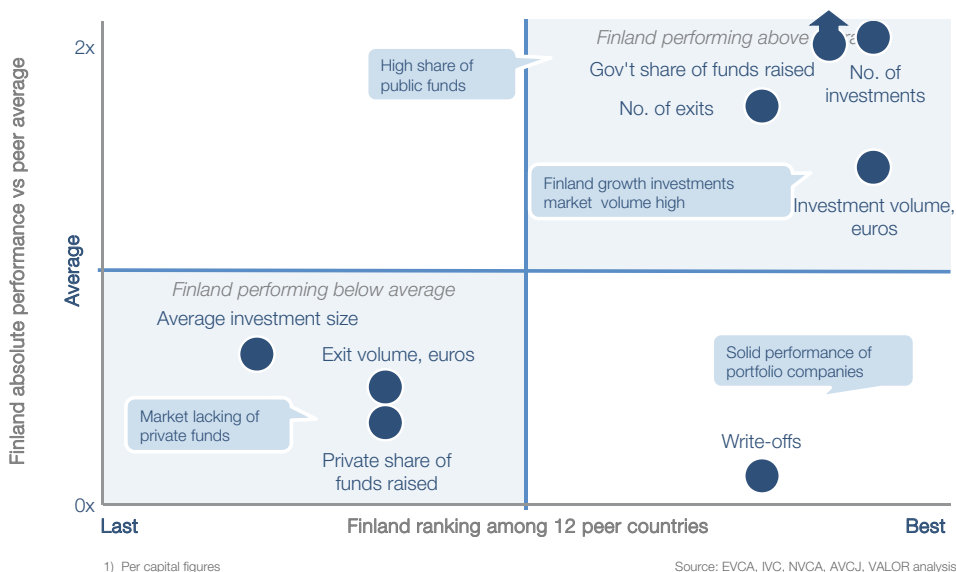
Growth financing	Finland	EU peer avg.	Best peer
Total inv.	960	640	870
Public share	43%	15%	20%
Inv. size avg. M€	5	8	14
IRR		-1%	0%

In contrast to the lower than peer market volumes in the later stage VC, the growth stage has above peer investment volumes, both in terms of public money and private money. More specifically, the total growth capital market was 960 M€ in Finland and 870 M€ in the best EU peer for the last 5-year period. Finland thus appears to exceed all EU peers at growth financing stage, although differences in fund classifications vary somewhat between countries.

The relatively good performance of growth capital is explained by high public participation. Finnish public fundraising of total investments totaled 43% in growth stage compared to best EU peer of 20%. The average share of public in EU peer markets equaled to 15% at this stage. Finland is below peer markets in terms of private growth capital. Similarly to previous funding rounds, Finnish growth financing is also characterized with small deal size: the average investment size is 5 M€ in Finland at this stage whereas the same figure is 14 M€ for the best peer EU country. Also in this stage the average size of Finnish fund is smaller than in peers.

Finland also suffers from lower than average exit volumes further reducing capital availability for new targets. Notable is also that Finnish portfolio companies appear to be of good quality as write of value share of investments is 1% in Finland and 6% for European peers.

Figure 30. Finnish growth-stage market performance relative to peer countries



Compared to later-stage venture market, the growth financing market is typically more international by nature. In the absence of international funding, target companies would likely grow at lower rate. The growth-phase companies are likely to have high export, employment and economic impact, making this segment highly attractive from the public sector perspective. Therefore continued provision of growth financing is also necessary and should not be abandoned on the cost of higher later-stage venture capital allocations.

Based on interview comments there are mixed perspectives on the functioning of the mid-market. Banking sector claim that there is only limited need for risk capital, whereas entrepreneurs claim that market is not working especially at this stage where rapid growth (growth from 20 to 100 M€ stage) would require significant working capital and possible international acquisition financing. Private equity is required especially among Finnish growth oriented SME's, as they mostly have unhealthy equity ratios and are likely to have only limited access to bank debt without equity.

As growth financing may have a large effect on export, employment and economy, the public sector intervention in this phase seems to have been appropriate. However, due to significantly larger public sector share of growth financing in Finland than in the peer countries, it should be evaluated how part of the public sector funding could be replaced by private sector investments in the medium to long-term.

5.8 Buyouts

The buyout market has performed well and generated constant high returns, making it attractive for institutional investors. Overall the buyout market internationally accounts for clear majority of all private equity the success in this segment has even further reduced attractiveness of the other stages. Although the market is already relatively developed, it has significant further potential in comparison to best peer markets.

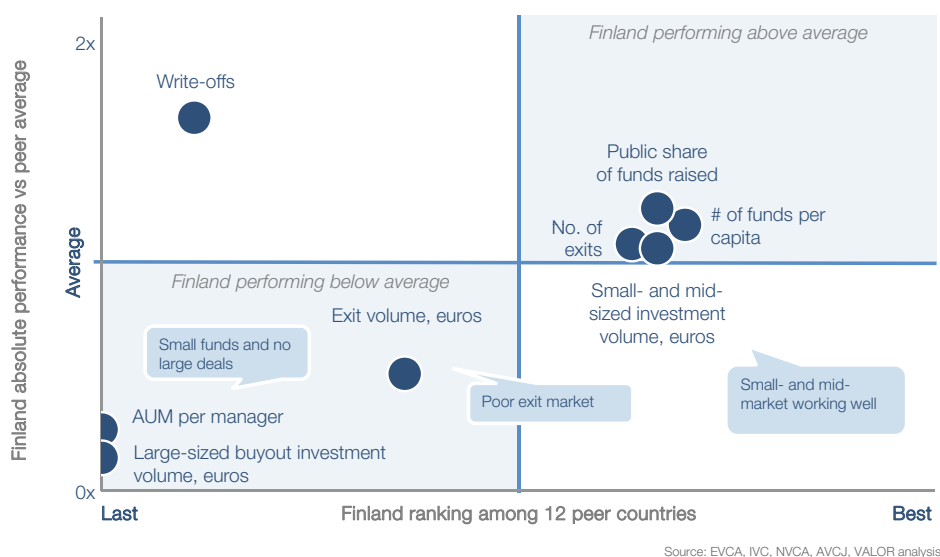
The performance of buyouts is historically among highest of all asset categories from institutional investor perspective. Whereas earlier stages have performed poorly, Finnish buyout funds have generated superior approximately 30% returns compared to their European peers of approximately 10%. Finnish buyout market appears to be relatively well functioning with a good balance of local and international investors. With long solid track record and established investor relations existing funds (and new spin-off teams) appear to have sufficient private capital available both from local and international institutional investors. The performance gap between buyouts and other private equity segments makes buyouts a preferred alternative from local institutional investor perspective driving future investments rather to other geographic markets in the buyout segment than to earlier stage funds locally.

Buyout segment investments have continued to grow. With very few exits the total tied in capital in the buyout segment has ballooned. Buyouts are perceived as an alternative for an IPO or trade sale. Unlike growth investment buyouts typically include 100% of the target company, and have high leverage ratios. Majority of buyout targets are currently sold to other buyout funds. With relatively limited targets Finnish institutional investors may be present both in selling and buying side of the transaction reducing their willingness to participate in all funds. Instead institutions seek to differentiate through fund selection.

Small & mid-sized buyouts	Finland	EU peer avg.	Best peer
Total inv. M€	1750	1620	2600
Public share	16%	9%	14%
Avg. fund size	137	538	
Inv. size avg.	10	20	26
IRR	30%	10%	

The average size of fund manager in terms of assets under management in this category is 137 M€ in Finland compared to European peer average of 538 M€ in 2012. Consequently investments are small in Finland: Average size of buyout deal in Finland was 11 M€ and 36 M€ for European peer average in years 2008 - 2012. In addition, small deals (< 15 M€ in size) accounts to 31% of buyout market compared to European peer average of 12%. Specifically small and mid-sized buyout markets totaled 1 750 M€ during years 2008 - 2012 whereas the same market exceeded 2 600 M€ in the best European peer country, creating a gap of 850 M€ to the best peer if scaled to Finnish population. Public participation is line with the best peer. This indicates that more private funding needs to be attracted if aspired to become top market at this stage.

Figure 31. Finnish buyout stage market performance relative to peer countries



At later buyouts Finnish market is relatively small compared to peers due to lack of larger targets as a relatively small home market. There was only one deal exceeding 150 M€ in Finland between years 2008 and 2012. Thus, Finnish large buyout market was also remarkably small compared to the best peer: Finnish market totaled 0.2 bn€ in this category in years 2008-2012 compared to 2.8 bn€ in the best peer in EU scaled to Finnish population. In large buyouts, there was no public funding in the years 2008 - 2012 in Finland. Best peer country comparison reveals that public participation should remain modest. More important is to ensure public support in other terms to develop working private market, and especially attract international investors to Finnish markets.

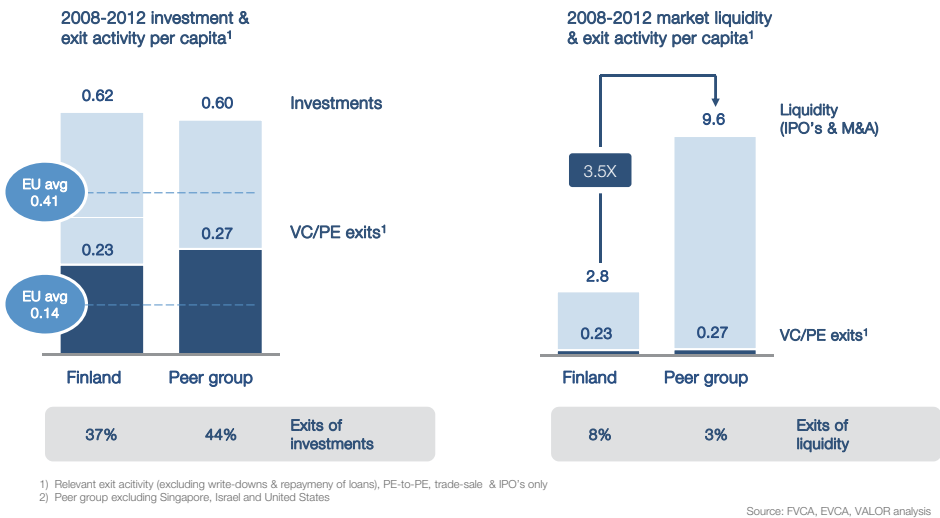
5.9 Capital markets and financing environment

Finnish capital markets are historically bank centric and illiquid in terms of market based financing in comparison to peer countries. Specifically Finland is lacking a working IPO market in the early stage. The functioning of the capital markets is critical from the private equity perspective as an alternative and as an exit path for investments.

Finnish capital markets have been traditionally highly bank centric. Recent financial crisis and low interest rate environment have reduced availability of credit for the corporate sector as a whole due to tighter liquidity requirements (Basel III). In addition bank financing does not work for early-stage and high growth companies with limited or no collateral, which raises need for alternative funding channels for essentially all companies.

Smaller corporations are evaluating higher use of bond financing as an alternative to banks as a potential source of debt capital. The bond issue market in Finland is relatively underdeveloped but likely to grow in the future. Similarly smaller companies are venturing new innovative approaches e.g. crowd financing as a potential new source of funding.

Figure 32. Liquidity of venture capital & buyout markets in Finland



Finnish stock market is relatively small and lacks new listing activity. Based on interview comments the stock market is regarded as an alternative for only large companies in Finland, whereas for examples Sweden has a highly functioning First North markets place for smaller companies. IPO and trade sale to larger corporation are critical also from private equity perspective.

The recent exit activity through IPO or industrial M&A of Finnish venture capital and private equity companies has been only somewhat lower than in peer countries, but the exit market liquidity may emerge as a key bottleneck in the future. During last five years private equity exits have been 8% of IPO's and total industrial M&A in Finland compared to more healthy 3% in peer countries on average. Scaled to population the peer countries have almost 4 times more liquid exit market than in Finland. Lack of a functioning IPO market emphasizes the need for a functioning private equity market, but at the same time limits the exit market and thus development of private equity market. Without viable exit alternatives a constant flow of increased private equity capital is needed for PE-to-PE transactions thereby reducing capital availability for new venture initiatives.

Finland is capital poor country and lacks a major financial hub, which puts Finnish companies into a disadvantage compared to their international peers. There is a clear trend toward globalization of financial markets and harmonization of Pan-European markets. Nordic markets are commonly considered as a relevant sized sub-unit among international investors. Within Nordic markets Finland is generally considered as a second choice to Sweden due to its larger market size and higher level of liquidity. National interests are generally cited as the key bottleneck to cross-border collaboration. The government should adopt a holistic view on building a working capital market in Finland and consider regional cross-border collaboration to build critical mass and attract the attention of international investors in response to globalization of capital markets and tighter liquidity from traditional funding sources. The evaluation team reasons that FII has a pivotal role in securing the functioning of private equity and venture capital funding markets but may also need to assume a wider role in this context.

The benefits of working financial markets are clear. Liquid markets are likely to generate further liquidity and lower the cost of financing for the companies. Working capital markets also contribute to continuity and are likely to reduce default rates. From private equity market perspective higher exit activity may also result in faster development of serial entrepreneurship and thereby accelerated market development.

6 Future role and focus – 2020 horizon

The evaluation team wishes to present certain policy revisions and actions for FII and MEE consideration. These recommendations are divided into the following four areas:

- (A) Improve Finnish venture capital ecosystem**
 - 1. Foster and fund open VC ecosystem development by increasing entrepreneurial, growth and internationalization know-how and by bringing international funds to Finland
 - 2. Improve quality and critical mass through competition, FII as anchor investor in new funds
 - 3. Attract international capital and new active LP's to eliminate FII gatekeeper-role
 - 4. Activate the exit market to release funds for new investments
- (B) Increase liquidity in later-stage venture capital and re-focus FII's direct investments to larger initiatives and industry policy investments**
 - 5. Increase liquidity in the later stage venture capital by 250 M€ (100 M€ from FII)
 - 6. Use FII capital more actively and efficiently - further liquidity with existing resources
 - 7. Re-focus direct investments to larger initiatives and industry policy driven PPP-investments
- (C) Renew FII actively and focus on temporary interventions**
 - 7. Focus on temporary interventions on market bottlenecks
 - 9. Renew and align FII structure, skill-set and offering actively to new focus areas
- (D) Focus governance on strategic guidance and remove all obstacles for an efficient ecosystem**
 - 10. Delegate authority and involve MEE BoDs more strategically in MEE planning
 - 11. Focus governance on strategic guidance & measure strategic objectives (not annual result)
 - 12. MEE Group to show leadership in collaboration to build a powerful ecosystem

The evaluation team recommends twelve specific initiatives to be taken relating to these areas.

6.1 Improve Finnish venture capital ecosystem

The ambition for the Finnish ecosystem should be to be the best compared to European peers both in terms of volume and in terms of quality – especially at the innovation commercialization.

Initiative #1: Foster and fund open VC ecosystem development by increasing entrepreneurial, growth and internationalization know-how and by bringing international funds to Finland

It is evident that Finland needs significant growth from new industries and services to fulfill the gap left by declining traditional industries. Recent study of Confederation of Finnish Industries (EK) states that future well-being of Finland is based on: (i) Exports and performance of the enterprises, (ii) Stable growth in the domestic demand, (iii) Efficient public sector, and (iv) Introduction of new products and services. Specifically EK stresses the importance of exports, innovation and entrepreneurship and competitiveness. The working private equity and venture capital markets are essential for success in these areas.

Finnish companies are lacking entrepreneurial, growth and internationalization know-how. The internationalization know-how is more critical for Finnish companies than for their peers in the larger economies. As a small open market and export-driven economy, Finnish companies are required to grow abroad earlier than their peers in the larger economies. Finnish market lacks internationalization success stories (except for gaming companies), reducing investor appetite and risk taking for new ventures. Additionally only few industry leaders are present in Finland with their own R&D, further reducing potential for collaboration at internationalization phase. As a result many Finnish entrepreneurs operate in the international context from the very beginning. Furthermore, as a result of the structural change, new opportunities and markets will emerge that are accessible even for smaller companies. This will provide opportunities for Finnish ventures but also increase the level of international competition.

MEE should continue pursuing efforts to align all entities, including FII, to adopt higher focus on internationalization and growth. Based on interview comments this is not yet fully reflected in the public support and financing systems and has major implications going forward. Firstly, Finland should seek to provide better operating environment for companies than in other countries. Secondly public support systems should be aligned to support international growth and focus on larger entities with global market potential. Thirdly, the approach for venture capital should be revised to be able to allocate sufficient capital for these companies in order to rapidly capture the opportunities in highly competitive international markets. Finally MEE should seek to involve large corporations to support this effort and leverage industry leaders to build a working internationalization ecosystem also for

smaller companies and venture initiatives. Similarly efforts should be directed to accumulation of entrepreneurial and internationalization know-how in the target companies, MEE should seek to improve the quality of the Finnish venture capital market participants in this respect. The higher internationalization and growth bias in MEE may also have implications on the required MEE skill-set and level of collaboration with private sector to harness the best know-how for this effort.

In the future a wide perspective is needed for innovation commercialization. For example a mere technology approach would exclude the growing service sector. Service innovation supporting especially the renewal of the Finnish public sector should be enhanced. Service and business model innovations are no longer only extensions of technology & product innovations. Accelerating rate of technology change, shortening product life cycles and globalization of economy will make the picking of winning sectors increasingly challenging, posing a growing need for flexibility in the public support systems. Similarly it is also essential to have diversity in development and wide range of initiatives. The ecosystem approach would provide a long term platform into which a wide variety of industries and operating models can be applied according to current needs more flexibly. A functioning-ecosystem in certain industries would allow cross fertilization of best practices and lessons learned over industry sectors and application also for new initiatives

The core bottleneck in the Finnish market is the poor quality of initiatives especially in the venture capital stage. Finnish private equity market suffers primarily from the lack of know-how and established funds with strong track record. Finland is lacking; (i) entrepreneurial tradition and success stories, (ii) societal framework for entrepreneurial risk-taking and (iii) international perspective and experience both among entrepreneurs and fund managers. The evaluation team considers FII's international fund investments with direct impact to the Finnish market necessary but not alone sufficient to ensure optimal accumulation of know-how in the Finnish market.

The evaluation team suggests that the accumulation of know-how could be greatly accelerated with infusion of international experience and higher activity level of international funds in the Finnish venture capital ecosystem. Building a working ecosystem is a long term initiative and accumulation of know-how could be accelerated through infusion of international expertise. For example international fund know infusion could be accelerated through joint projects with leading international funds, and attracting international funds to Finland. Similarly the entrepreneurial know-how could be accelerated through mentoring and international know-how through multi-national management teams. The international funds would also contribute to the working market in the short term in the absence of local high quality market participants. The international funds would also greatly contribute to the know-how and harmonization of local market practices thereby reducing barriers for international investments in the future.

FII and Tekes should adopt a more proactive approach and overall responsibility for the ecosystem development. In the current stage the development of ecosystem as a whole is lacking a clear driver within the public support system. FII or Tekes should be allocated additional resources to be selectively used for the best initiatives to optimally support the ecosystem development beyond individual investment cases. Historically FII activities have been highly focused on investment initiatives at hand. In the future the focus should be wider and include for example activation of the private sector to participate in the development.

Initiative #2: Improve quality and critical mass through competition, FII as anchor investor in new funds

Compared to the best peers Finland has adequate number of venture funds but these funds are generally too small and in the absence of the syndication tradition also individual financing rounds are smaller than in the peer countries. FII should contribute to creation of larger funds with sufficient size to attract world-class talent and to enable efficient operations.

Due to higher required amounts invested per initiative FII should assume also higher standards and selectivity for the initiatives. Based on interview comments, the investments should not be based on solidarity. Rather the investments should be focused to most promising companies. A clear discrimination in terms of funding is needed to focus resources for the optimal impact. Higher allocations would also create healthy competition among companies and fund teams, which would contribute to the accelerated market development.

The evaluation team recommends a systematic and competition-based approach on building bigger funds and development of business cases. Based on initial lower total commitments and investment size, the best companies and funds should be allocated more capital, supported otherwise to accelerate the development. Continued public sector funding for poorly performing teams can potentially prolong and magnify the market distortion if lesser quality teams and targets are not discontinued. Naturally public continued presence on wide front is still required also in the future. The acceleration of existing best performing funds and creation of new fund teams require totally different approach and would therefore potentially need separate allocations and evaluation approaches. FII could consider organizing the fund evaluation process as two separate activities.

FII and MEE should seek to foster creation of new venture funds and teams to create higher level of competition in the market. FII should assume a more proactive role in the fundraising of new funds and actively flag interest to participate for funds and management teams that have passed the FII evaluation process. For example FII could issue recommendations and conditional non-binding commitment letters to fund teams and selectively provide other investors with access to the fund due diligence materials and FII findings. Furthermore FII could assume even stronger

role in coaching and support for the approved teams or promote combinations of teams to gain larger initial size in the funds and adequate skill set.

The strive for bigger fund size and internationalization would also imply abandoning current strict rules for international activities and also FII should be allowed to adopt a more pragmatic approach in this context. Rather than having focus on certain geographic areas, focus should be in the areas where fund management teams are strong e.g. small cap technology companies or in certain industries. From FII perspective, the key requirement is to ensure and promote competitive combinations of know-how and funding.

The higher quality of investment cases and accumulation of know-how among venture funds would address the underlying problems (e.g. poor historical returns and low attractiveness for institutional investors) and contribute to the long-term goal of working venture capital ecosystem without need for permanent public participation.

Initiative #3: Attract international capital and new active LP's to eliminate FII gatekeeper-role

Public participation in the private equity markets in Finland is among the highest in the world and the market lacks private funding as a whole, therefore increasing share and aggregate volume of private funding in the market should be a key priority for FII.

FII should assume more active role in attracting foreign capital and new investors to Finnish market. Finland has a major potential untapped source of private funding internationally for Finnish companies. Although early-stage funding is typically local, the Finnish venture capital market is even more local than in the peer countries. Finnish institutional investor segment is highly concentrated and lacks counterparties as well as active anchor investors. As a result, new alternative local sources and international investors are essentially the key alternative for the increasing public participation to provide growth companies with a continuous flow of funding. Finland is small and lacks major financial hub, and therefore Finland is not a priority market for international capital. At best Finland can be regarded as a part of Nordic private equity allocations from international perspective. Both in private equity and venture capital funds in Finland are small and operating only locally with no established international investor base, thereby reducing market attractiveness even further. Therefore capital needs to be actively attracted to invest in the Finnish venture capital ecosystem and this initiative would greatly benefit from combined and coordinated effort by FII, Team Finland, Invest in Finland and other more focused public initiatives.

FII should also actively seek to secure continuity of historical high share in EU level public venture funding (e.g. EIF investment programs) and explore new sources (e.g. Athena Investment Fund or AIF and other Cosmo and Horizon 2020 initiatives)

in the venture and growth financing. Therefore FII's continued active participation in EVCA, EVFIN and other international forums is critical. Similarly according to FII's new role in industry policy investments new potential sources may emerge in certain investment types (e.g. in infrastructure financing).

Finland has a relatively limited number of LPs and majority of them prefers not to invest in small poorly performing venture capital segment. Accordingly the LPs have only limited or no in-house resources to make such investments. As a result FII has been forced into a too large role as a gatekeeper to new funds. Although it might be beneficial in the short term, a working private sector market in the long-term requires more active LPs to create diversity in the Finnish venture capital fundraising sources. FII should consider a dual approach for new FoF Growth, which is currently managed solely by FII. FII could strive for developing a new fund-of-fund operator through issuing a side mandate for either a new or an existing service provider to compete with FII's own operations and to increase number of counter-parties in the venture segment.

FII should actively seek to activate new investor types to the venture capital market. The competition approach should not be limited to funds and FII should also venture actively for new market approaches and investment models to increase the competition and competitiveness of the system. FII should continue direct co-investments with private non-fund investors (e.g. family offices, corporations and large business angels). This could be done by for example taking responsibility of the EIF European Angels Fund coordination. Additionally FII could cooperate with SHOK's to create industry-focused investment entities with large corporation involvement. FII should also actively seek to respond to institutional investors' needs for more efficient fee structures and actively venture new term and fee structures with private investors.

Initiative #4: Activate the exit market to release funds for new investments

Finnish exit markets are relatively low liquidity compared to international peers, which has partially contributed to the ballooning total commitments. It has also led into growing stock of companies that are bought and sold between private equity investors. These transactions are effectively an alternative for new investments and thereby limit the capacity to make new investments.

Due to the active role of public sector in private equity, public sector should consider measures to increase IPO activity and liquidity of stock markets, especially for smaller companies. The current functioning First North model in Sweden could be considered as an alternative also for Finnish companies. Public participation is needed to encourage companies for stock market listing at earlier stage and to develop stock market regulation and taxation to be a competitive alternative to other exit paths. A working stock market and higher IPO activity would release funds for new investments and accelerate the capital turnover in the portfolios. Furthermore, a

working small and mid-capitalization stock market would reduce the need for public participation in the later-stage venture and growth-stage financing. The activation of IPO market may require regulatory and taxation legislation changes, promotion of evaluation of IPO as an exit path alternative, or even establishing a separate fund for pre-IPO companies.

Active development of the corporate venturing and industrial M&A as an exit path should be evaluated alongside development of the IPO market. The participation of large industrial corporations would also contribute to the qualitative development of the target companies and potentially contribute to the alleviation of the lack of LP's and investments in Finland in the long term. For example FII could activate marketing of the portfolio companies (also beyond own portfolio) to potential corporate buyers directly or through higher corporate participation in industry forums.

Recommendation A: Improve Finnish venture capital ecosystem

1. Foster and fund open VC ecosystem development by increasing entrepreneurial, growth and internationalization know-how and by bringing international funds to Finland
2. Improve quality and critical mass through competition, FII as anchor investor in new funds
3. Attract international capital and new active LP's to eliminate FII gatekeeper-role
4. Activate the exit market to release funds for new investments

6.2 Increase liquidity in later-stage venture capital and re-focus FII's direct investments to larger initiatives and industry policy investments

In the changing environment FII needs to adjust the scope of the investment activities. In the future more capital should be allocated to the later-stage venture capital segment and potentially also to industry policy-driven intervention initiatives. Simultaneously FII should provide continuity for the market especially in the growth-stage. The more active role for FII in the future and tighter public funding also calls for higher utilization of existing capital resources.

Initiative #5: Increase liquidity in the later stage venture capital by 250 M€ (100 M€ from FII)

Finnish public support system and industries are traditionally highly innovation- and technology-focused. Several interview comments call for better balance and shift

from innovation-centric system towards commercialization focus. With the current system, Finland is building a growing inventory of innovation and ranks among the best in innovation but among the worst on the commercialization. The working venture capital market along corporate venturing is a basic requirement for higher level of commercialization success. Compared to the peer countries, the funding gap is widest in the later-stage venture segment, which with good quality cases has potential to deliver strong growth and internationalization impact from MEE policy perspective. Finnish venture capital investments have delivered constantly negative returns and lack established funds with track record. Therefore the lack of private funding in this segment is imminent.

In the seed/start-up and growth stage Finland has a fair volume of investments, but has small venture capital investment volumes compared to peer countries. Compared to best peers Finland appears to be lacking 250 M€ in the venture stage investment volumes over 5 year period (also a proxy for new commitments required). In order to reach the target approximately 100 M€ (assumed 40%) public funding is needed to catalyze private money. The funding and investment volume gap is the widest in the later stage venture capital stage, and the new public capital should be allocated mainly to this stage to support larger investments and increase in the average fund size. This is essential if pursuing to support disruptive VC companies to grow large and international. Thus, if aspired to make Finnish markets as the top performer in Europe, more emphasis should be put to later-stage VC market development. The proposed revised would also significantly balance the innovation commercialization pipeline.

In addition to increased allocations to the later stage venture market FII should seek to provide continuity in the growth and buyout stages. Especially in the growth stage Finland has been able exceed the peers in investment volumes mainly due to higher than average public participation. In this segment the current investment volumes should be retained but in the medium term FII should seek to lower the share public funding required.

In the buyout stages continuity in financing is needed and FII should continue making new commitments to alleviate the apparent need for LPs. The required share of public financing in these stages should be significantly lower than in the earlier stages (5-10% compared to 30-50% in the growth and venture stages). The main objective in this segment should be attracting more private capital and thus growth in investment volumes to excel the peers also in this stage. Compared to peers the Finnish market could be doubled also in the buyout stage. In the buyout stage FII should actively focus effort on submarket bottlenecks alongside overall market liquidity provision.

The sizing of the commitments should be rather based on actual investments made and required new commitments should be adjusted accordingly. Therefore the required new commitments can significantly exceed the above mentioned figures. The increase in the liquidity should be gradual and should not jeopardize the quality

of investment cases to allow for the gradual accumulation of know-how. Similarly the higher liquidity in this segment may open opportunities for new fund team entries or extensions of the best early stage venture and growth funds to have adequate coverage in this segment.

Initiative #6: Use FII capital more actively and efficiently – further liquidity with existing resources

Recent slowdown in economic activity has resulted in lower profitability and thereby lower investment capacity of the companies. These two factors have contributed to lower tax income and increasing public sector indebtedness and budget deficits. The rapid development has raised need for government intervention to alleviate short-term impacts of this structural change and made public resources scarce.

FII has high liquid funds. The liquidity has been on average 200 M€ in the last 10 years. In 2012 market value of FII's liquidity and cash stood at 211 M€. At the end of year 2012 FII's unpaid commitments were 222 M€ or 105% of the market value of liquid funds. The current capitalization level assumes that almost none of the investments in the portfolio would need to be exited for FII to meet its funding commitments. Furthermore MEE has planned further capital injections of 120 M€ in FII (half of which will be used for the eventual launch of second FoF Growth fund and the remaining half for other investment activities).

FII has strong balance sheet. However, due to recent modest performance and low exit activity, FII has relied heavily on the new capital injections from the owner and profits generated from liquidity and later-stage profit motivated investments in funding. This has resulted in rapid portfolio growth and significant growth in FII investment capacity. Full utilization of FII balance sheet and lower focus on the portfolio level performance would allow for much higher investment volumes in the FII core operating areas. Lower liquidity buffers and safety margins are feasible as FII has a significant capacity to adjust new investment volumes. Furthermore the portfolio is relatively diversified the risk of downside liquidity scenario risk should be relatively low.

FII has a major unused investment capacity based on current allocation restrictions and can absorb the proposed new commitments to the later stage venture capital segment without new capital from the owner. The unused investment capacity is 284 M€ or 45% higher than the current. The total commitment capacity of FII is therefore 917 M€ based on 150% restriction and market value adjusted equity. Based on this higher commitment level the implied restrictions for direct investment commitments would be 321 M€ (2.4x current) and for buyouts 275 M€ (2.2x current). Alternatively the FII would not breach allocation constraints with 200 M€ less equity.

MEE should consider need for further capital injections to FII carefully. In the future the potential capital injections from the owner could be based on capital loans and be more temporary, although long-term by nature. FII has a potential for higher

investment volumes needed in the later-stage venture capital segment already with the current and committed capital base. FII BoD and MEE should evaluate potential for raised investment activity to use FII capital even more efficiently. MEE and FII's BoD should evaluate alternative structures for funding of FII secure meeting financing commitments without excess liquidity e.g. partial loan financing from private sources, internal contingency planning for retaining investments levels, and government guarantees for uncovered commitments. FII has not paid dividends in 11 years. Last 1.4 million € dividend was paid in 2002. Evaluation team proposes that MEE should consider imposing FII a dividend yield requirement based on government cost of funding to increase visibility of the cost of capital and to enhance efficient use of capital in FII.

Initiative #7: Re-focus direct investments to larger initiatives and industry policy driven PPP-investments

FII direct investment activities should have a dual role. Firstly, direct investments should be used as a market based industry policy PPP-tool when needed. Secondly, FII should refocus direct investment activities to selectively promote the development of later-stage venture and growth stage markets especially in the cases with a non-fund anchor investor (e.g. large corporations, family offices, or large business angel/entrepreneur driven initiatives). FII's direct investments could thereby potentially greatly contribute to the market diversity and emergence of new anchor investors.

With direct investment capacity, FII can significantly contribute to variety of investors in this segment as a co-investor and contribute to investor ability to absorb the higher risks associated and target company ability to reach critical mass. FII should continue as a passive investor with respect to company future direction. All investments should be made with a strong and active private sector anchor investor. Local pension funds, similarly to FII, assume a passive role as an owner. In the absence of strong private anchor investors, funds appear as the preferred alternative. Therefore a clear majority of investments should be made through funds. Directs should be as of a second priority to fund investments only to areas where clear market bottleneck exists. Simultaneously public sector can enforce good governance and promote best practices (e.g. attracting adequate growth and internationalization talent). The objective of FII should be the accumulation of know-how and experience in the fund management teams and in other co-investor organizations

FII should continue streamlining the portfolio through target level exits. The small investments in direct investment portfolio have relatively low impact and weak historical performance. FII should evaluate opportunities to simplify the current portfolio structure also through discontinuation of Start Fund as a separate program. The smaller number of larger portfolio companies would increase focus, simplify the operations and release resources. Similarly FII should gradually seek to exit the stabilization investments as listed market seem to start function normally and FII

investments can be replaced with private capital in the target companies. Although FII currently has capital and capacity for higher investment activity, the stabilization investment exits would greatly contribute to FII new investment capacity in the medium term due to relatively large size of individual investments.

With higher investment capacity and released funds from prior investments, FII should seek to accelerate development in the areas where private funding is limited. The focus should be on fewer but larger initiatives with high economic impact both from growth and internationalization perspective.

Last but not least, FII should safeguard necessary direct investment capabilities for potential use in industry policy -driven direct interventions. The investment capabilities should include necessary liquidity to fund the initiatives and a committed flexible team with top-level know-how to address any and all critical investment needs as they arise. These typically industry policy situations would however require a strong input from the owner and be highly selective by nature.

Recommendation B: Increase liquidity in later-stage venture capital and re-focus FII's direct investments to larger initiatives and industry policy investments

5. Increase liquidity in the later stage venture capital by 250 M€ (100 M€ from FII)
6. Use FII capital more actively and efficiently – further liquidity with existing resources
7. Re-focus direct investments to larger initiatives and industry policy driven PPP-investments

6.3 Renew FII actively and focus on temporary interventions

The accelerated development of the Finnish private equity markets calls for more active approach from FII and major adjustments to the changing priorities. In the future FII should address key market bottlenecks with active corrective measures and therefore be organized and resourced accordingly.

Initiative #8: Focus on temporary interventions on market bottlenecks

A specific justification is needed for public participation in the private equity markets. The guiding principle for all public participation should be temporary intervention specifically focused on correcting market bottlenecks (e.g. later-stage VC or temporarily alleviating liquidity needs as done in the stabilization program). The ultimate objective in all initiatives should be to eliminate barriers and to activate private funding. The intervention should be based on total impact from government

perspective and address the market bottlenecks in wide front, instead of alleviating the symptoms with mere liquidity. The temporary nature of intervention would require clear objectives on the aspired outcome and pre-planned exit measures already at the launch-stage. The objectives and duration of the intervention must be communicated openly and clearly, as long-term nature of the PE investments requires predictability and if not communicated early the exit itself could cause a market disruption. MEE and FII should not only focus on identifying and prioritizing the market failures and bottlenecks but also to build a more systematic approach on allocation of new targeted temporary initiatives to intervene in these areas. The market failure corrective approach would require a clear justification for potential deviation from the pure financial return criteria on the initiative/portfolio level, although all investments should be market based.

The evaluation team recommends that FII's core mission also in the future should be the development of well-functioning private equity markets in Finland. Essentially FII brings together local institutional funding, active anchor investors, international investors and public participation to accelerate growth of viable entrepreneurial companies in Finland. This role requires continuation of the current required return policy on investment case level, FII as a co-investor. Similarly from the temporary intervention perspective FII should accept higher risks than private investors and potential associated losses to make the markets work.

On aggregate level the public participation in the private equity market is on right level in terms of volume, but may need stronger focus. Due to the long-term nature of funds and low exit activity, we perceive current public participation in the market more of permanent by nature. Without release of funds from prior initiatives, the State is bound to escalating total commitments and new capital injections in correcting emerging market bottlenecks. The share of public participation in selected market areas is already too high and actions should be focused in attracting private investments to these segments. Even higher level of public investment activity could create a major and permanent market distortion through inflated valuations and reduced quality of investor portfolios. Thus the development of the market should not be limited to provision of liquidity. The State can and should also catalyze accumulation of network contacts and local know-how through indirect supportive measures.

The key problems in FII's role relate to the allocation of resources and the permanent nature of public participation. Finnish private equity and innovation market should be evaluated from a system perspective as a whole rather than optimization of parts. Even though abovementioned bottlenecks are at the time of evaluation perceived as most critical ones, new bottlenecks are likely to emerge. Therefore a continuous follow-up and dialogue with market participants is needed the most efficient allocation of resources. Many of the interviewed experts call for higher mobility of public sector support measures. In prioritization of the criticality of bottlenecks, MEE should evaluate required resources and associated risks against

aspired total impact - not merely focus on financial performance of the investments made. The total impact should include indirect effects such as share and volume of international investments to PE funds, number of new funds, taxes & employment as key criteria alongside the return for the investors. Furthermore a monitoring of the results would allow a continued re-allocation of resources to areas with best impact on portfolio level.

Initiative #9: Renew and align FII structure, skill-set and offering actively to new focus areas

The proposed changes in the policy approach and revisions in the FII investment focus have major implications in essentially all aspects of FII operations. MEE should seek to activate FII BoD and management as drivers for these changes to ensure realization of aspired results.

FII BoD should address need for team renewal and availability of best possible skill set for the tasks ahead. In the future the BoD and FII management team selection should be team expertise and required skill set based. Although the FII operations are long term by nature, the new approach based on temporary interventions on market bottlenecks may result in need for new expertise. Specifically the competence profile of the successor to the current CEO should be in line with the new operating model and market focus as well as to have the necessary change in leadership capabilities. To secure continued renewal in the long term FII BoD could also consider fixed-term tenure for the CEO in line with the current MEE practices and guidelines. Simultaneously, with potentially higher rate of key people turnover in the future and due to the discontinuity caused by the retirement of the current long term CEO, FII BoD and MEE should emphasize the institutionalization of the accumulated know-how to ensure continuity for the market. Similarly, FII BoD composition should genuinely reflect the objectives, which in some cases may be in conflict with current representation based approach.

Depending on the future focus of FII, a potential need for reorganization of operations or need for new reporting structures may arise. For instance, FII could consider a structure with a separate direct investments portfolio under fund commitments that is to be reported as a fund commitment. The evaluation team believes that this structure would simplify the current multidimensional reporting structure. Current FII reporting on portfolio level is necessary but gives neither a clear picture of sub-portfolio performance, activities nor impact. FII, as a public entity, should also adopt more open communication policy regarding sub-portfolios to provide a more fact based reports for political discussions. FII should also consider adopting fair value based reporting, potentially even adoption of IFRS accounting standards. Alternatively fair value based management reporting could also be used as a basis for third party and BoD decision-making.

New planned and enlarged role in the overall development of the private equity markets and venture capital ecosystem may have direct impact on the FII strategic planning approach and resourcing to optimally support BoD in its more active role. For example a more active and continuous interfacing may be needed with private sector market participants and industry organizations. Similarly, increased level of collaboration with other MEE entities in planning, coordination and follow-up of the results is needed. Finally and most importantly, FII should also actively seek to venture new approaches and collaborating models in the investment cases alongside internal renewal.

Recommendation C: Renew FII actively and focus on temporary interventions

8. Focus on temporary interventions on market bottlenecks
9. Renew and align of FII structure, skill-set and offering actively to new focus areas

6.4 Focus governance on strategic guidance and remove all obstacles for an efficient ecosystem

In the future MEE should further clarify governance roles between MEE's own organization and third party BoD's of key MEE entities. The evaluation team recommends that MEE should delegate more authority to BoD's and involve them more closely in MEE strategic planning. MEE also faces a critical challenge to coordinate the roles and increasing need for higher level of collaboration between relatively independent key MEE entities.

Initiative #10: Delegate authority and involve BoD more strategically in MEE planning

Recent changes to increase private sector participation in FII BoD, and therefore FII independence, have created a challenge for MEE to adjust old governance procedures to best leverage the private sector know-how and to provide FII adequate freedom to make the market function. With a long-standing management with a solid track record, FII operates with a high level of strategic and financial freedom. However, potential succession issues in the future may drive need for the stronger governance of FII, especially during future transition period. FII and other MEE entity governance would also benefit from more frequent independent evaluations as a supporting tool for governance dialogue.

MEE governance process should be based on stronger BoD chairman in FII, but also in other MEE key entities. All future guidance should flow via Chairman and the Chairmen of key MEE entities should be assimilated to MEE Group strategy

work more closely. This extended role would require high participation from the chairman and therefore it should be resourced accordingly. Furthermore chairmen of the key entities should be more tightly integrated to MEE strategic planning and the dialogue between all key parties should be continuous and frequent by nature and focus on coverage of new areas rather than mere optimization of existing operational overlaps.

Initiative #11: Focus governance on strategic guidance & measure strategic objectives (not annual result)

The evaluation team considers MEE target setting on FII relatively complex and multi-dimensional. Partially overlapping levels of MEE strategic target setting add to the confusion. FII role and focus are basically relatively clear but the apparent specificity of the guidance may affect FII's strategic priorities. MEE should consider delegation of responsibility even further to FII and require FII to provide proposal of priorities to correct the key bottlenecks in the Finnish private equity markets.

Based on interviews, decision-making on FII investments should be simplified with refined investment criteria that would be adjusted by the operating initiative or area depending on the aspired impact. The evaluation team recommends that after the definition of the initiatives with aspired impact targets, FII BoD should undertake an effort to prepare investment criteria for each of the activities separately. The criteria should be based on measurable impact targets. Similarly FII BoD and MEE work should be focused on the correct allocation of FII resources and capital rather than on individual investment cases. The clarified investment criteria would contribute towards this objective.

The State should consider a wider holistic view on the allocation of resources and coordination of ownership steering and industry policy initiatives. Currently the system is highly fragmented and lacking coordination. For example the State should consider development of a long term public ownership guidelines and framework based on model used in Norway. These guidelines should provide clear guidance on the use of public ownership to support reaching the industrial policy objectives and clarification on the allocation principles. Even a single point of coordination or concentration of selected activities under same governance could be considered as an option. At minimum this forum would require support and participation from MEE, MoF and PMO Ownership Steering units. Furthermore the governing body should have full political support on the principles level to be able to operate effectively. Closer coordination would harmonize the operating principles across these activities and facilitate re-allocation of resources based on common and pre-agreed criteria (e.g. total economic impact).

Building a well-functioning market and accumulation of know-how takes a long time to realize and government should develop a longer horizon and target setting for the market development and priority setting. The evaluation team proposes that

FII BoD and MEE should focus more on strategic planning and measures needed to correct the market failures (including both investments and other required actions), rather than short-term allocation target setting. Longer-term target setting would provide continuity for the market and help avoiding vintage gaps in allocations. Further capitalization of FII is based on government budget and therefore the longer-term plans should be indicative only and subject to availability of funds.

MEE and other related public entities (mainly MoF and PMO ownership steering related activities) could consider adopting a more active and intervention initiative based approach to better coordinate industry policy and public ownership. The potential benefit of such an approach would yield better allocation of resources to reach best economic impact and improved agility in addressing emerging market bottlenecks. If a closer coordination is decided to be evaluated it should happen on activity level and may result on partial reallocation of roles between MEE entities. From know-how perspective relating to investment activities the benefits would be clear but a new approach would require strong MEE input on the industrial policy objectives. Even separation of ownership and industrial policy setting roles could be considered as a governing principle in these activities.

Initiative #12: MEE Group to show leadership in collaboration to build a powerful ecosystem

The State should address all reasons hindering or delaying entrepreneurship, risk taking and development of the private equity industry. Typically aspired outcome can be reached using wide range of instruments in the public sector arsenal and may include a combination of funding and other development actions. The development actions may include e.g. funding for development initiatives, networking, or tax incentives. This approach would require a far-reaching cross-ministry and cross-organizational planning beyond MEE core entities. After initial decision to address a market failure or bottleneck the actual implementation should be a responsibility of organizations involved but coordinated by one entity to ensure accountability. This would facilitate cross-organizational initiatives and improve focus on reaching specific targets to each initiative. For examples the evaluation team considers Invest in Finland initiative to be critical for attracting foreign investments but under resourced for such a task. Similarly MEE should consider revisions on taxation to ensure tax-neutrality from foreign investors' perspective in the funds that are domiciled in Finland.

The operational overlaps and linkages between FII and other organizations are relatively modest. As a passive investor FII's "customers" are mainly co-investors and fund teams even in direct investments whereas other MEE organizations operations are principally focused on serving the companies. Additionally FII has a much smaller number of customers than for example Finnvera or Tekes. As market need for FII activities clearly exist and operational linkages are relatively

weak, the evaluation team recommends that FII operations should be continued in as a separate independent entity. In order to increase efficiency and to address new market bottlenecks MEE & FII should, however, consider higher degree of co-operation to leverage the most apparent synergy opportunities.

FII as the core concentration of private equity know-how could greatly contribute to the development of new Tekes venture capital activities, as Tekes has no prior track record in this field. However, even potential co-operation in back-office functions to support Tekes' new Seed Finland early-stage fund investments should be carefully evaluated not to deviate FII's focus from the core mission. Although the collaboration should be extensive the roles between different MEE entities should be clear.

The evaluation team regards FII to have an important role after Tekes activities in the very early-stage. Most importantly FII should adopt even more active role in the market development also through other measures than mere provision of liquidity, as emphasized above. In the future Tekes should adopt the role as the key source of public seed and early-stage venture capital in Finland. FII should focus on the bigger size later-stage venture investments and other industry policy activities as needs arise. The evaluation team supports Tekes' new role in early-stage venture capital. The new division of roles is likely to clarify FII priorities. The interface between FII & Tekes and the transition from public support based to market-based financing as is a potential pitfall in the future unless it is well-coordinated.

According to the recent MEE policy guideline decision, Tekes will be the sole source of "soft money" in the future. Tekes is planning to use asymmetry measures in the future fund investments to attract private funding for the seed and early-stage venture capital phases. In Europe EIF is reported to be planning the use of asymmetry measures, but there is limited evidence of working asymmetry initiatives in the later-stages of venture capital markets. FVCA has proposed that MEE could consider leveraging Tekes by extending its asymmetry measures for funds up to 10 M€ in capital. Furthermore, the use of dedicated seed-pockets in bigger size range targeted funds would allow for wider participation and attract more professional investors to the small scale early-stage.

In the potential extension of asymmetry measures, different levels of asymmetry can be considered. Gradually declining asymmetry would alleviate the transition from public grant and partial subsidization -based start-ups to market-based financing. Asymmetry as a policy measure does not fully protect investors, and investors only make adequate returns with successes. However all asymmetry should be temporary by nature and be solely focused on correction of market failures. Also poor performance can and could be temporarily considered as a market failure. Potential extension of asymmetry could potentially create high level of unnecessary bureaucracy in FII, and therefore using Tekes status for all public asymmetry measures would make sense. Longer term the FII's and market ability to generate sufficient returns at venture capital segment will dictate whether private capital will be available to replace current high public funding. MEE should carefully consider

potential longer term implications of using even temporary asymmetry measures to attract private capital to early-stage investments.

The internationalization of the Finnish market requires active measures and would benefit of a broad and focused effort. The success would require best talent locally available and significant resources accordingly. The more active approach would require a review of Invest in Finland approach and FII collaboration with (the new) Finpro. FII, Team Finland and Invest in Finland initiative should have higher international visibility and active role in this respect. FII and MEE could even consider extending a portion of FoF Growth investments to selected foreign funds with ambitions to launch Finnish local presence and to activate investments in Finnish target companies.

Interview comments indicate a clear need for more open communication between FII, MEE and third parties. This would also increase FII's agility and flexibility to allocate resources for emerging new areas as well as collaboration within MEE and with third parties. Similarly more open communication would benefit FII with raised awareness of FII focus and rationale for chosen operating model and path of actions.

Recommendation D: Focus governance on strategic guidance and remove all obstacles for an efficient ecosystem

- 10.** Delegate authority and involve BoD more strategically in MEE planning
- 11.** Focus governance on strategic guidance & measure strategic objectives (not annual result)
- 12.** MEE Group to show leadership in collaboration to build a powerful ecosystem

Appendix A

Terms of reference

11.3.2013

Palvelukuvaus

Tällä kilpailutuksella työ- ja elinkeinoministeriö pyytää tarjoustaan hankkeesta Suomen Teollisuussijoitus Oy arviointi (myöhemmin Tesi). Tarjouksen tulee sisältää kansainvälinen näkökulma.

Arvioinnin tavoitteena on tuottaa näkemys siitä, minkälainen Tesin rooli tulisi olla kansallisessa ja kansainvälisessä toimintaympäristössä yhtenä TEM-konsernin toimijana, näkökulmana vuosi 2020:

Muodostaa käsitys Tesistä tulevaisuuden rahoitusmarkkinoiden ja elinkeinopolitiikan toimijana

- arvioida Tesin toiminnan vaikuttavuutta pääomasijoitusmarkkinoilla esiintyvien puutteiden korjaajana, pääomasijoitusmarkkinoiden kehittäjänä ja TEM:n elinkeino- ja innovaatiopoliittisten tavoitteiden toteuttajana
- muodostaa riippumaton ja kansainväliseen asiantuntemukseen perustuva näkemys keskeisimmistä muutoshaasteista Tesin strategiselle toiminnalle ottaen huomioon rahoitusmarkkinoiden muuttunut ja muuttuva tilanne sekä löytää keinoja, joiden avulla Tesi voi reagoida tehokkaasti ja vaikuttavasti muutoksiin.
- muodostaa riippumaton, kansainväliseen asiantuntemukseen perustuva näkemys Tesin roolista tulevaisuuden elinkeinopolitiikan ja rahoitusmarkkinoiden kehittämisen toimijana
- arvioida valtion roolia pääomasijoitustoimijana ja määritellä Tesin ydintehtävä
- arvioida Tesin roolia ja merkitystä suomalaisten kasvuyritysten kannalta
- arvioida miten Tesin toimien kohdentumista tulisi suunnata tulevaisuudessa kuten kohdentuminen uusien kasvuyritysten luomiseen tai toimiminen suhdannepoliittisena instrumenttina
- tiivis katsaus kansainvälisen toimintakentän organisoitumisesta: Englanti, Hollanti, Saksa, Pohjoismaat, mahd. USA, EU:n politiikan muotoutuminen pääomasijoituskentässä

Arvioida Tesin aikaansaamaa elinkeino- ja innovaatiopoliittisten tavoitteiden jalanjälkeä

- arvioida Tesille asetettujen elinkeinopoliittisten tavoitteiden vaikuttavuutta; miten toteutunut (mm. yritysten liikevaihdon kasvu, työllisyys) ja miten tavoitteet olisi tehokkainta toteuttaa (mm. pääomasijoitusmarkkinan

kansainvälistäminen, rahastosijoitukset Venture Capital rahastoihin ja muihin rahastoihin, suorat sijoitukset, erilaiset kohdennetut ohjelmat kuten vakautus-rahoitusohjelma, kaivosohjelma, siemenrahoitus start-up-fund, cleantech, KRR I). Valikoitumisen onnistuneisuutta voidaan arvioida casejen avulla.

- arvioida suorien sijoitusten roolia/suhdetta/merkitystä rahastosijoituksiin
- arvioida Tesin tuottoperiaatteella tehtyjen sijoitusten merkitys kuten kuinka paljon tuotto-vaatimus ohjaa toimintaa, mitkä ovat niiden hyödyt ja haitat
- Tesin merkitys rahoituskierrosten toteutumisessa (kysely muille osallistujille), mitä lisäarvoa julkisella rahoituksella aikaansaadaan (kanssasijoittajat, kontaktiverkosto)
- arvioida Tesin ulkomaisella sijoitustoiminnalla aikaansaatuja vaikutuksia Suomen pääomasijoitusmarkkinoihin

Muodostaa käsitys onko Tesi kyennyt toiminnallaan poistamaan pääomasijoitusmarkkinoiden tarjonnassa esiintyviä puutteita

- arvioida markkinapuutteen määrittely muuttuneessa tilanteessa ja tehokkain tapa vaikuttaa siihen (asiakasryhmittäin)

Arvioida Tesin roolia TEM-konsernin osana

- arvioida Tesin toimintaa TEM-konsernistrategian toteuttajana ja elinkeino- ja innovaatio-osaston vaikuttavuustavoitteiden toteuttajana sekä TEM:n asiakkuusstrategian näkökulmasta
- arvioida Tesin ja muiden toimijoiden synergiaetuja sekä työnjaon selkeyttä suhteessa TEM- konsernin muihin toimijoihin, erityisesti Tekesiin (aloittavien yritysten pääomamarkkinoiden kehittäminen), Finnveraan (tytäryhtiöiden aloittavien yritysten pääomasijoitustoiminta) ja Finprohon (ulkomaisten investointien edistäminen Suomeen), tavoitteena etsiä uusia keinoja lisätä yhtiön tuottavuutta
- tunnistaa Tesin keskeiset rakenteelliset ja hallinnolliset kehittämistarpeet (toiminnon organisointi) osana TEM-konsernia sekä työ- ja elinkeinoministeriön ohjausjärjestelmän kehittämistarpeet.

Esittää suositukset

- tehdä johtopäätöksiä ja suosituksia Tesin strategian, toiminnan, rakenteiden sekä tehtävien uudistamistarpeista. Arvioijalta odotetaan tulevaisuuteen tähtääviä suosituksia. Näkökulma ulottuu vuoteen 2020.

Viitekehys

Seuraavan viitekehysten tarkoituksena on tuoda esiin tilaajan kannalta keskeiseksi katsottuja arvioinnin näkökulmia. Viitekehys ja siinä esitetyt näkökulmat ja kysymykset ovat lähinnä suuntaa-antavia ja tarjoajan tuleekin esittää tarjouksessaan alustava oma näkemys arvioinnin viitekehyksestä ja näkökulmista.

Arvioinnin taustamateriaalia: ks. liite 1b

Arviointihankkeen yhteydessä selvitettävät kaksi keskeistä asiakokonaisuutta ovat:

A. Tesin strateginen toiminta rahoitusmarkkinoilla

Tesi on Suomen valtion omistama erityisrahoitusyhtiö, jonka tarkoituksena on edistää erityisesti suomalaisen pienen ja keskisuuren yritystoiminnan kasvua ja kansainvälistymistä tekemällä sijoituksia ensisijaisesti pääomarahastoihin. Yhtiö voi tehdä pääomasijoituksia kohdeyrityksiin erityisesti pitkäaikaista riskinottoa edellyttävissä yrityshankkeissa. Tesi tekee sijoituksia sekä pääomasijoitusrahastoihin että suoraan kohdeyrityksiin. Tesin tarkoituksena on täydentää pääomasijoitustoimialan rahoituksen tarjonnassa esiintyviä puutteita. Tesi voi tehdä vastaavia sijoituksia ulkomaisiin rahastoihin ja kohdeyrityksiin edellyttäen, että niiden toiminta edistää taloudellista kehitystä Suomessa.

Finanssimarkkinoiden ja palveluntarjoajien lisääntynyt sääntely EU:ssa on lisännyt pankkien oman pääoman tarvetta ja varainhankinnan kustannuksia. Tämä on suoraan vaikuttanut kasvuyritysten pankkiluottojen hintaan ja tiukentanut vakuusvaatimuksia. Henki- ja vahinkovakuutusyhtiöt joutuvat sijoitustoiminnassaan ottaamaan huomioon Solvenssi II-direktiivin tuomat pääomavaatimukset. Henki- ja vahinkovakuutusyhtiöt ovat perinteisesti olleet merkittäviä pääomarahastosijoittajia. Epätietoisuus uusista pääomavaatimuksista on merkittävästi vähentänyt henki- ja vahinkovakuutusyhtiöiden sijoituksia pääomarahastoihin. Lisäksi jotkin sijoittajat kuten useat eläkesäätiöt, jotka on ostettu suurten eläkeyhtiöiden toimesta, ovat poistuneet markkinoilta.

Arvioinnin tarkoituksena on selvittää, miten onnistuneesti lainsäädäntö ml Valtioneuvoston periaatepäätös määrittää Tesin tehtävät ja miten onnistuneesti se on täyttänyt ne. Erityisesti arvioinnissa tulisi kiinnittää huomiota siihen, mikä on se rahoituksen tarjonnassa esiintyvä puute, jonka täyttämiseen Tesin toiminta kohdistuu ja onko odotettavissa tulevaisuudessa esimerkiksi rahoitusmarkkinoiden muutoksen vuoksi, että rahoituksessa esiintyvä puute ja sitä kautta Tesin tehtävät muuttavat seuraavien vuosien aikana.

Samoin tulisi arvioida Tesin toiminnan vaikuttavuutta sekä kotimaisen sijoitustoiminnan että ulkomaisen sijoitustoiminnan osalta. Arviointi tulee toteuttaa vertailuna vastaaviin kansainvälisiin toimijoihin. Toisaalta arvioinnissa tulisi vastata kysymykseen siitä, aiheuttaako Tesin toiminta vääristymiä elinkeino- ja/tai rahoitustoiminnassa, estääkö sen toiminta välttämätöntä luonnollista uudistumista yrityskentässä tai vaikuttaako se rahoitusmarkkinoihin epätoivotulla tavalla. Arvioinnin tulisi kattaa sekä lyhyen aikavälin rahoitusmarkkinoiden palvelutarjonta että pitkän aikavälin rahoituspalvelujen markkinaehtoisen kehityksen mahdollisuudet.

Arvioinnissa tulisi tunnistaa Tesin riskinottoon liittyvä problematiikka ottaen huomioon Tesille asetettu kannattavuusvaatimus, jonka mukaan toiminnan tulee

olla liiketaloudellisesti kannattavaa pitkällä aikavälillä. Vastaavasti tulisi arvioida Tesin kykyä tunnistaa sellaiset riskipitoiset suorat sijoitukset ja osallistua niihin, joissa julkinen rahoitus on välttämätöntä/toivottavaa. Tässä yhteydessä tulisi myös arvioida organisaation kyky joustaa ja olla ketterä muuttuvassa toimintaympäristössä sekä se, antaako voimassa oleva säännöstö mahdollisuuksia vaadittavalle joustavuudelle.

Erityisesti ulkomaisen sijoitustoiminnan osalta arviointi on välttämätöntä tehdä vertaamalla vastaavia kansainvälisiä toimijoita ja arvioida Tesin rahoituksen vaikutavuutta suhteessa näihin pääomasijoitustoimialan toimintaympäristössä.

Toistaiseksi Tesi ei ole hyödyntänyt EU-rahoitusta vaan se toimii täysin markkinaehtoisesti. Arvioinnissa tulee selvittää Tesin suhde syksyllä 2013 EU komission antamaan ehdotukseen pääomasijoitustoiminnan suuntaviivoista.

Arvioinnissa tulee selvittää casejen kautta, onko yhtiö sijoittanut riskipitoisiin yrityksiin.

Arvioinnissa tulee selvittää Tesin toimien vaikutukset pääomasijoitusmarkkinoiden kehittymiseen.

Arvioitaessa Tesin strategista toimintaa tulisi samalla tunnistaa myös Tesin toimintaympäristön asettamat rajoitteet (lainsäädäntö, sitoumukset, budjetti, pääomitus) sekä tehdä kehittämisehdotuksia tarvittaessa myös näiltä osin.

B. Tesi osana TEM-konsernia ja Tesin ohjaus

TEM:n konsernistrategia määrittää koko konsernin keskeiset painopisteet ja linjat, jotka pohjautuvat hallitusohjelman kirjauksiin. Ne konkretisoituvat substanssistrategioiden kautta. Yhteisten toimintamallien periaatteet kiteytyvät konsernintavassa toimia kuten asiakkuusstrategiassa. Sen mukaan TEM-konserni palvelee asiakkaitaan tasapainottaen asiakaslähtöisyyden, yhteiskunnallisen vaikuttavuuden ja kustannustehokkuuden.

Konsernistrategia

Arvioinnin tarkoituksena on selvittää, miten hyvin Tesi toteuttaa TEM konsernistrategiaa ja sen tavoitelinjauksia sekä elinkeino- ja innovaatio-osaston vaikuttavuustavoitteita. Konserninäkökulmaa painottaen tulisi selvittää Tesin suhde TEM-konsernin muihin toimijoihin ja miten tuloksellista tämä yhteistoiminta on. Erityisesti tulisi arvioida työnjakoa Finnvera Oyj:n ja Tekesin kanssa pääomasijoitustoiminnassa, Finpron kanssa ulkomaisten investointien houkuttelussa Suomeen.

Arvioinnissa tulee selvittää, onko Tesin ja edellä mainittujen toimijoiden palvelutarjoama selkeä vai onko toiminnoissa olemassa päällekkäisyyksiä tai toisaalta vaikuttavuuden kannalta tunnistettavia selkeitä aukkoja. Samalla tulisi selvittää onko rahoitukseen liittyvä osaaminen keskitetty optimaalisesti eri toimijoiden kesken TEM-konsernissa. Arvioinnissa tulisi myös tunnistaa Tesin rakenteelliset ja

hallinnolliset kehittämistarpeet nimenomaan osana TEM-konsernia sekä tehdä tulevaisuuden kehittämis ehdotukset.

Yritysassiakuusstrategia

Arvioinnin tarkoituksena on selvittää, miten Tesin TEM-konsernin asiakuusstrategiaa toteuttaessaan edistää yritysten uudistumista ja kasvua ja kansainvälistymistä. Tarkastelu tulee ulottaa siihen, miten palvelut tavoittavat erityyppiset nykyiset ja uudet potentiaaliset asiakkaat ja tukevat niiden kautta Suomen yrityskannan jatkuvaa uudistumista ja sen kilpailukyvyyn kehitystä.

Ohjaus

Tesin toimintaa ohjataan monella TEM:n konserniohjausmallin keinolla. Arvioinnissa tulee erikseen Tesin osalta tarkastella sitä, onko ohjaus (säädös-, omistaja- ja informaatio-ohjaus, kehitystoiminnan ohjaus ja hallitustyön ohjaus) oikein mitoitettua ja laadukasta ja auttaako se Tesiä saavuttamaan sille asetetut tavoitteet. Ohjauksen arvioinnissa tulee erityisesti huomioida muiden nk. toimijaryhmä I organisaatioiden ohjauksen mahdolliset synergiat.

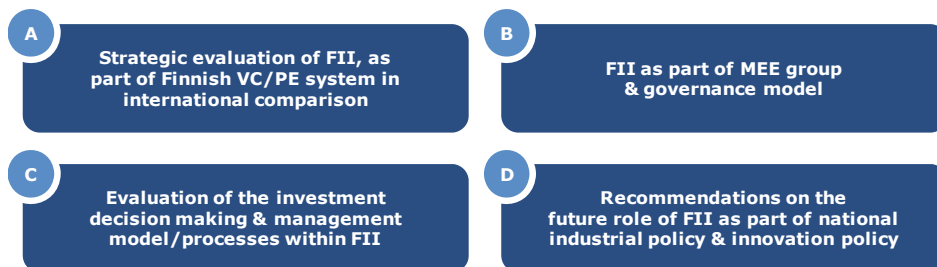
Methodology, participants & data sources

Under the current government, Ministry of Employment and the Economy (MEE) has commissioned a wide range of evaluations relating to entrepreneurship, innovation system and key organizations involved. A large third party performed evaluation of National Innovations Systems (NIS) in 2008. This evaluation assignment focuses on Finnish Industry Investment Ltd (FII) and is part of series of evaluations of the key organizations within the Ministry of Employment and the Economy (MEE). In 2012 MEE performed evaluations on Tekes and Finnvera Plc among others.

Project scope and objectives

In this challenging assignment we have evaluated an extensive analysis of FII operations and international benchmarking, as well as collected views and ideas of large group of key stakeholders on what role the State should have in the later-stage innovation financing and in the private equity markets and how MEE should govern these activities.

Figure 33. The scope of the evaluation



In the summer 2013 MEE commissioned an independent evaluation of FII through a public tender process. The evaluation was performed in the fall 2013. The key objectives of the project were to evaluate (a) FII as a part of the Finnish private equity markets in international perspective, (b) FII activities and investment making processes, (c) Governance of FII in MEE Group, and to (d) develop recommendations for FII future role in the National Innovation System.

Project team and third party experts

The project team has extensive experience and insight into Finnish private equity markets and growth entrepreneurship both in Finland and internationally. FII evaluation team (in alphabetical order):

- Antti Halonen
- Hervé Lebreton
- Matti Saarikoski
- John Sulin
- Pekka Roine
- Juha Ruohonen

The work was supported by MEE Steering Group consisting of key MEE personnel;

- Sakari Immonen, chairman
- Janne Känkänen
- Anne Rothovius, secretary to the Sounding Board

The sounding board consisting of third party experts bringing a valuable insight to this evaluation;

- Erko Autio (Imperial College)
- Tapio Heikkilä (FiBAN)
- Mirja Kaarlela (Tekes)
- Juha Peltola (FVCA)
- Pentti Pikkarainen (Ministry of Finance)
- Esko Torsti (Ilmarinen)
- Jarmo Väisänen (PMO, Ownership Steering Department)

Recommendations

Any and all views expressed in the report are solely those of the authors, and not necessarily those of the funding parties. The evaluation team had a challenging task of making a balanced judgment on the various perspectives and third party input to the evaluation.

Analysis framework

The evaluation focused on the FII impact in the realization of MEE strategy and target setting, private equity market and economic impact of FII operations, and FII's operating model and historical financial performance. The international examples and peer analyses were performed to provide a perspective on the relative performance and to provide insights for the future development needs.

The evaluation was performed using five (2008-2012) and ten (2003-2012) year horizons. The market and FII has undergone major changes during last five years after the financial crisis. The law governing FII has undergone major revisions 2007, 2009 and 2013 and the MEE target setting has changed accordingly during this period. The Finnish market in international comparison has been analyzed based on last five year annual averages and 2012 data has been used for current status, unless otherwise stated. FII's performance during last 10 years provides a longer perspective on the development.

The forward looking statements and policy recommendations are based on the current situation and expected market development. The actual outcome of the

market development and potential realization of risks may significantly alter the landscape and the FII targets setting.

The peer countries analyzed include Nordic countries (Sweden, Norway and Denmark), largest EU markets (Germany, UK and France), other smaller European markets (Netherlands and Switzerland), as well as widely recognized international best practice examples (Israel, Singapore and United States).

No directly comparable peer organizations exist for FII due to different portfolio structures and operating models. Various public organizations have been evaluated during the course of evaluation. The Nordic peer organizations have been used as key examples of different operating models due to the similarities in the public market participation and assumed market needs. The target setting is based on the assumption that Finland should seek to outperform all European peers.

The analysis was focused on the key bottlenecks in the Finnish market. The desk-top analysis compared the performance to relevant international peer countries and interview comments and development ideas were confirmed with hard data when possible. The list and prioritization of the bottlenecks may not be exhaustive.

Stakeholder interviews

During the course of evaluation 58 external face-to-face interviews were performed. We like to thank you for all high level people, who have contributed to this evaluation. The views expressed represent the views of the individuals and may deviate from the official views of the organizations involved. We have kept interview comments anonymous.

The interviews were focused on the FII's key stakeholders. The main groups of interviews performed included; key MEE and other public stakeholder representatives, FII BoD and management team members, large institutional investors, private equity professionals and fund managers, target companies and other experts.

The issues covered in the interviews focused on the functioning of the Finnish innovation systems, views on the FII operations and market impact, functioning of the MEE governance and potential bottlenecks and development ideas. No fixed interview questionnaire was used to provide the interviewees an opportunity to make comments from various perspectives.

The evaluation team is grateful and wants to thank you the following individuals for their valuable input for this evaluation:

FII management team

Jouni Hakala, Director, Investment opportunities, Public affairs

Jussi Hattula, Director, Venture Capital, Start Fund I Ky

Marko Häikiö, CFO

Antti Kumm, Director, Buyouts, Investment programmes

Juho Marjosola, President & CEO

Anne Riekk, Director, Fund investments

FII Board of Directors (BoD)

Jukka Alho, FII BoD chairman
Urpo Hautala, MoF Financial councillor
Sari Lounasmeri, Finnish Foundation for Share Promotion President & CEO
Inka Mero, KoppiCatch Partner & Chair(wo)man
Mika Niemelä, MEE Financial director
Leena Mörttinen, EK Director
Tuomo Rönkkö, Capirec Chairman

Other public entities

Pekka Ala-Pietilä, Solidium Chairman of the Board
Pauli Heikkilä, Finnvera CEO
Eero Heliövaara , PMO Ownership Steering Director General
Leo Houtsonen, Finnvera Managing Director, Venture Capital Investments
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Kai Öistämö, Tekes Chairman of the Board

Private equity market investors, companies and fund managers

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Julianna Borsos, Bocap Chairman & Founding Partner
Tapio Heikkilä, FiBAN Board Member
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Sami Lampinen, Inventure Managing Director, Partner
Juha Lindfors, AJP-Holding Partner
Timo Linnainmaa, Cleantech Invest Partner
Timo Löyttyniemi, VER Managing Director

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Artturi Tarjanne, Nexit Ventures General Partner
Timo Tiihonen, Gorilla Ventures Co-Founder
Esko Torsti, Ilmarinen Head of Non-Listed Investments
Terhi Vapola, VV Holding CEO
Jarkko Veijalainen, 3 Step IT Chairman of the Board
Heikki Westerlund, Capman CEO, Senior Partner

Key data sources

Extensive desk review was performed alongside interviews to support and verify the findings arising from third party research and interviews. The desk review focused on identification of market bottlenecks and alternatives for public participation in the private equity markets, prior evaluations & reports on the Finnish innovation system & functioning of the risk capital markets, FII related reports and prior evaluations, MEE strategy documentation & other evaluations including recent reviews of the other MEE units, and reviews & reports on the operational models of comparison countries & relevant peer organizations

The private equity, innovation and public sector participation are subject to extensive research. The evaluation team has reviewed a large number of international and local analyses and reports during the course of evaluation. The list of data sources covered is not complete.

The evaluation was actively supported by FII personnel. During the course of the evaluation FII committed significant resources on collecting the data and participating in interviews. The evaluation team had access to FII internal confidential materials. FII management team members and BoD members were interviewed during the course of evaluation.

In addition to FII data the evaluation team has relied on third party public and proprietary data and previous analyses. The sources of the proprietary data have been mentioned in the list of data sources. For the most part the data used was updated to cover year 2012 results. For the non-Euro denominated data historical average rates have been applied for financing flows and year end exchange rates for static year-end figures respectively. The evaluation team assumes no responsibility on the potential errors in the data or in the interpretation.

The applicability of international lessons learned in the Finnish innovation and private equity market context was carefully considered by the evaluation team. The recommendations are not solely based on performance track record of the best practice examples. The team has leveraged its long experience in the private equity in Finland and interview input in making the conclusions on the possible alternatives. Independent views have been verified with a third party data where possible.

Concepts such as venture capital, growth financing and buyouts are not clearly defined and may contain cross-source and cross-country variations. The evaluation team has used sources it deems reliable, but has not made adjustments to the data provided. The variations in concepts may have affected the interpretation of the analysis findings to some degree. However, the evaluation team regards the data sufficient to support the key findings and recommendations.

FII's financial performance has been evaluated using medium term (5-year) and longer term (10-year and since inception) due to high annual variations and changes in the market conditions. The performance has been evaluated on sub-portfolio level based on FII's internal confidential reports and third party market analytics. Finnish market, European markets and international benchmarks have provided some insight to relative performance, but in the difficult market environment far reaching conclusions based on historical performance were not made relating to future performance potential.

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Julkaisun nimi Titel Title			
Evaluation of Finnish Industry Investment Ltd.			
Tiivistelmä Referat Abstract			
<p>Suomen Teollisuussijoitus (Tesi) on valtio-omisteinen erityisrahoitusyhtiö, joka tekee pääomasijoituksia suoraan ja rahastojen kautta. Tesin toiminnan tarkoituksena on korjata markkinapullonkaloja alueilla, joissa on havaittu yksityisen rahoituksen puutteita sekä edistää suomalaisia innovaatioita, yrittäjyyttä ja yritysten kasvua. Tässä työssä arvioidaan Tesiä osana suomalaista pääomasijoitustoiminnan ekosysteemiä, Tesin investointipäätöksentekoa ja johtamismallia sekä sen hallinnointia osana työ- ja elinkeinoministeriö (TEM) -konsernia. Lisäksi raportissa esitetään suosituksia Tesin tulevaisuuden roolista osana kansallista elinkeino- ja innovaatiopolitiikkaa. Arviointi toteutettiin syksyllä 2013 ja se sisältää verrokkimaiden sekä organisaatioiden taloudellisen ja ekosysteemien vertailun, 58 sidosryhmä- ja pääomasijoitustoimijoiden haastattelua sekä Tesin toimittaman sisäisen materiaalin syvällisen analyysin.</p> <p>Selvityksen perusteella Suomen markkinan heikkouksia ovat riskipääomamarkkinan (Venture Capital, VC) ja -ekosysteemin puutteet sekä laadussa että investointimäärissä. Erityisesti myöhemmän vaiheen VC-rahoituksessa on aukko. Muita pullonkaloja markkinassa ovat kaupallistaminen, investointien pieni koko, julkisen sektorin suuri osuus markkinasta sekä exit-markkinan toimimattomuus. Nykyongelmat ovat osin laadullisia – pääomien lisäksi tarvitaan laaja-alainen, aktiivinen ote markkinakehitykseen.</p> <p>Tesillä on ollut pääosin positiivinen vaikutus Suomen pääomasijoitusmarkkinan kehittämisessä. Tesi sijoittaa yhdessä yksityisten toimijoiden kanssa ja sijoitukset ovat markkinaehtoisia (PPP-malli). Tesin organisaatio koetaan riittävän kokoiseksi ja ammattitaitoiseksi. Tesi on kuitenkin suhteellisen passiivinen markkinan kehittämisessä ja sen toimien vaikutusta tulisi pyrkiä lisäämään. Tesin tulisi olla aktiivisempi pääomasijoitusmarkkinan kehittäjänä, uusien rahastojen syntymisen tukijana sekä kotimaisen ja kansainvälisen yksityisen sektorin houkuttelijana. Lisäksi Tesin tulisi uudelleensuunnata suorat sijoitukset suurempiin hankkeisiin. Tesin tulisi toimia pääosin väli aikaisten, markkinapullonkaloihin kohdistettujen toimenpiteiden kautta. Toiminnan painopistettä tulisi suunnata myöhemmän vaiheen VC-rahoituksen aktivointiin. Tesiä tulisi aktiivisesti uudistaa vastaamaan markkinoiden kehittämistehtävää ja toimia keskeiseen teollisuuspolitiikan työkaluna TEMille.</p> <p>TEM:in tavoiteasetanta Tesille koetaan monimutkaiseksi ja epäselväksi, mikä hankaloittaa Tesin hallituksen roolia. TEM-tasolla tarvitaan kokonaisvaltaisempi näkökulma, jotta toiminta ja pääomat ohjataan tehokkaasti suurimman vaikuttavuuden alueille. TEMin tulisi harkita asteittaisesta siirtymistä strategia- ja suuntaviivaperustaiseen tavoiteasetantaan. Myös seurannan tulisi keskittyä halutun vaikuttavuuden sekä panostusten seurantaan osa-alueittain, tuottovaatimuksen ollessa sivuosassa.</p>			
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Utvärdering av Finlands Industriinvestering Ab			
Tiivistelmä Referat Abstract			
<p>Finlands Industriinvestering är ett statsägt specialfinansieringsbolag som gör kapitalinvesteringar direkt och via fonder. Avsikten med bolagets verksamhet är att avlägsna flaskhalsar på marknaden i områden där man har upptäckt brist på privat finansiering samt att främja finländska innovationer, företagande och företagens tillväxt. I detta arbete utvärderas Industriinvestering som en del av det finländska ekosystemet av kapitalinvesteringsverksamhet, bolagets investeringsbeslut och ledningsmodell samt administreringen av det som en del av Arbets- och näringsministeriets koncern (ANM- koncernen). Dessutom ges i rapporten rekommendationer om bolagets framtida roll som en del av den nationella närings- och innovationspolitiken. Utvärderingen genomfördes hösten 2013 och i den ingår en jämförelse av ekonomin och ekosystemen med jämlika länder och organisationer, 58 intervjuer med intressenter och kapitalinvesterare samt en djupanalys av Industriinvesteringens interna material.</p> <p>Svagheter på den finländska marknaden är enligt utredningen bristerna på marknaden och i ekosystemen för riskkapital (Venture Capital, VC) i fråga om såväl kvalitet som investeringsvolym. Speciellt i VC-finansieringen i senare fas finns en lucka. Andra flaskhalsar på marknaden är kommersialiseringen, de små investeringarna, den offentliga sektorns stora andel av marknaden samt en icke-fungerande exit-marknad. De nuvarande problemen är delvis kvalitativa – utöver kapital behövs ett övergripande aktivt grepp om marknadsutvecklingen.</p> <p>Industriinvestering har huvudsakligen haft en positiv inverkan på kapitalinvesteringsmarknadens utveckling i Finland. Bolaget investerar tillsammans med privata aktörer och investeringarna görs på marknadsvillkor (PPP-modellen). Industriinvesteringens organisation anses vara tillräckligt stor och professionell. Bolaget är dock relativt passivt när det gäller att utveckla marknaden och effekterna av dess åtgärder bör förbättras. Industriinvestering bör aktivare utveckla kapitalinvesteringsmarknaden, stödja uppkomsten av nya fonder samt locka den inhemska och internationella privata sektorn att investera. Dessutom bör bolaget omfokusera direkta investeringar till större projekt. Industriinvestering bör i huvudsak agera via temporära åtgärder som är fokuserade på flaskhalsarna på marknaden. Tyngdpunkten i verksamheten bör förläggas till att aktivera VC-finansieringen i senare fas. Industriinvestering bör aktivt reformeras för sin uppgift att utveckla marknaden och för att kunna agera som ett industripolitiskt redskap för ANM.</p> <p>ANM:s målsättning för Finlands Industriinvestering anses vara komplicerad och oklar, vilket försvårar bolagsstyrelsens roll. På ANM-nivå behövs ett mer holistiskt perspektiv, för att verksamheten och kapitalet effektivt ska styras till de områden där effekten är störst. ANM bör överväga att gradvis övergå till en strategi- och riktlinjebaserad målsättning. Också uppföljningen bör koncentreras på den önskade effekten och insatserna områdesvis, så att kravet på avkastning spelar en underordnad roll.</p>			
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Evaluation of Finnish Industry Investment Ltd.

This report includes the evaluation on Finnish Industry Investment Ltd. (FII) made by the external, independent evaluation team.

The evaluation assesses FII's activities as a part of Finnish private equity system, company's investment decision making and management model, and the governance and steering of FII as a part of the Ministry of Employment and Economy (the MEE Group). The overall target of the evaluation has been to evaluate FII's performance and impact on the development of the Finnish venture capital market.

The report presents recommendations on the future role of FII's implementation of national enterprise and innovation policies by 2020. The main recommendations is that in the future FII could adopt more proactive role in activating the market development and focus resources to indirect development measures and to attract private sector investors both from Finland and internationally. The company's future role and it's all activities should be revised towards more temporary interventions to correct the market failures and bottle necks. FII should be kept as a separate entity and focus on providing continuity in liquidity for the private equity market and continue investing in growth stage and to some extend in buyout phase as well as address the liquidity needs in the later stage of venture capital market. Higher level of collaboration between key MEE and other public entities is needed. In this respect most importantly FII should build close collaboration with Tekes, which is starting it's early stage venture capital activities in 2014.

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