



Gníomhaireacht Bainistíochta an Chisteáin Náisiúnta
National Treasury Management Agency

Ciste Infheistíochta Straitéisí d'Éirinn
Ireland Strategic Investment Fund

Economic Impact Report FY 2016



Highlights 2016

Committed **€2.6bn** to Irish investments (total **€7.5bn** including third party capital).

€1.4bn of capital deployed to date from the **€2.6bn** commitment (increased impact through third party capital deployed alongside this).

Employment supported by ISIF increased c.**4,000** to almost **22,000 jobs**. The majority of these new jobs from the SME and Real Estate sector with the **regional split of employment 51% Dublin/49% ex-Dublin**.

Gross Value Added (GVA), at **€721 million** is running **34%** above the 2015 rate. This figure represents the fund's **economic impact** on the Irish economy.

Strong pipeline of transactions for 2017, all made with strong commercial foundation.

ISIF investing across three Strategic Drivers

ISIF's **€2.6bn**
has unlocked
third party capital
leading to a total
commitment of
€7.5bn to Ireland

1. Enabling Ireland
*Future-proofing and
strengthening the economy*



€361m
Infrastructure



€450m
Water



€79m
Energy



€502m
Real Estate

2. Growing Ireland
*Supporting engines of
growth*



€385m
SME



€100m
Food & Agri



€109m
Direct Equity

3. Leading Edge Ireland
*Positioning key sectors to
lead, innovate and
compete on a global level*



€504m
Venture



€12m
Innovation

€142m
Other

Summary Metrics – Irish Portfolio



		31 st Dec 2015 12 months	31 st Dec 2016 12 months	
Capital	Discretionary Portfolio (Global ¹ + Irish Portfolio)	€7,859m	€8,084m	+3%
	ISIF – Capital Committed	€2,165m	€2,644m	+23%
	Project Size in Ireland/Co-investor Multiple	€5,364m/2.5x	€7,463m/2.8x	+39%
	Market Value of Capital Invested	€1,028m	€1,432m	+39%
	ISIF Capital Deployed by Region	54% Dublin/46% ex-Dublin	57% Dublin/43% ex-Dublin	
Jobs	Employment	17,940 jobs	21,930 jobs	+22%
	Wage Bill	€505m	€688m	+36%
	Employment by Region	40% Dublin/60% ex-Dublin	51% Dublin/49% ex-Dublin	
Economic Activity	GVA (Profit + Depreciation + Wage Bill)	€538m	€721m	+34%
	Exports	€356m	€311m	-13%

Good progress across all metrics, continuing to deliver on “double bottom line” mandate and proactively support Irish projects and businesses

¹ Global Portfolio will be transitioned to investments in Ireland over a number of years

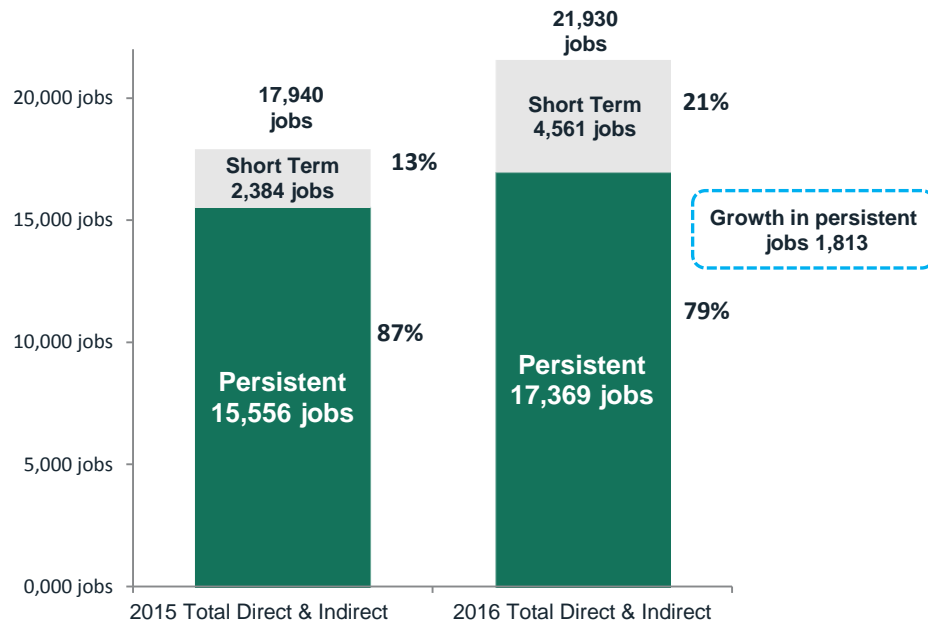
Continued progress in 2016

- **ISIF committed €522m to new investments in 2016, with a total of €2.0bn including third party capital.** This is well diversified across the portfolio with **22** transactions in the **€1m - €55m** range.
- The **market value** of the ISIF's Irish portfolio rose by net **€404m** or **+39%** vs. December 31st 2015. This was due to new drawdowns (+€410m), distributions (-€83m) and valuation gains (+€77m) across the portfolio.

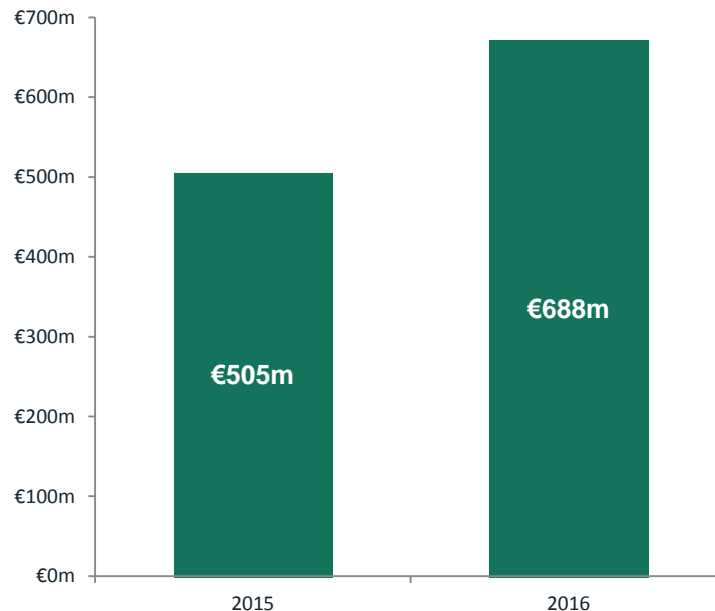
 €35m	 €35m	 €25m	 €15m	 €45m	 €30m	 €16m	 €44m	 €19m	 €12m	 €50m
 €22m	 €25m	 €2m	 €15m	 €55m	Agri-Receivables Purchases Facility Programme €2m	 €20m	 €15m	 €15m	 €24m	 €1m

Steady growth in employment figures resulting from ISIF investment

Irish Based Employment



Irish Based Wage Bill



Snapshot of Underlying Investees 2016

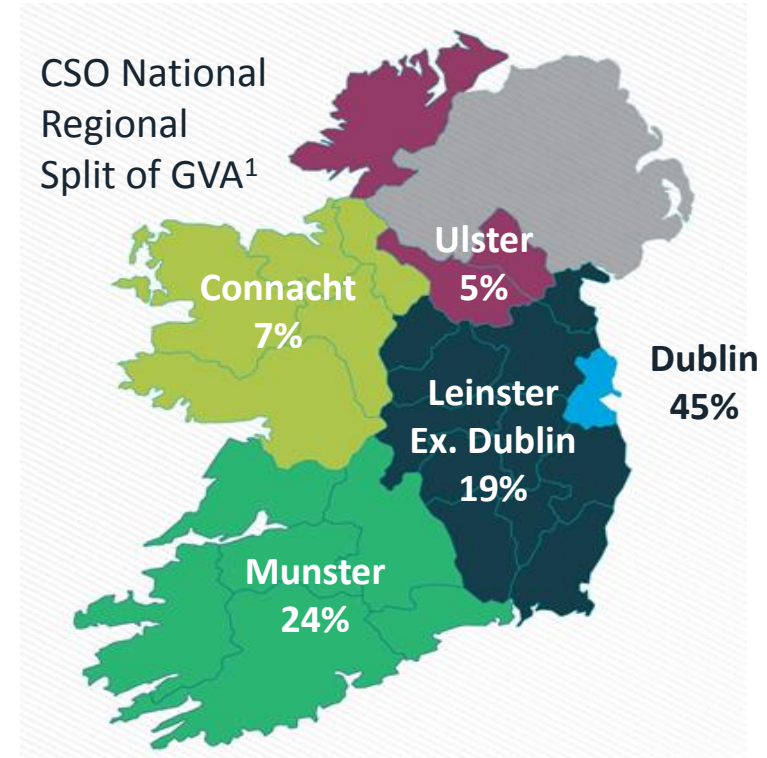
          	          	          	          	          	          
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ISIF supporting
140 Irish-based
companies/
projects
through
commercial
investments
(Appendix 3 for
full list)

Regional impact of investments in line with Irish Economy

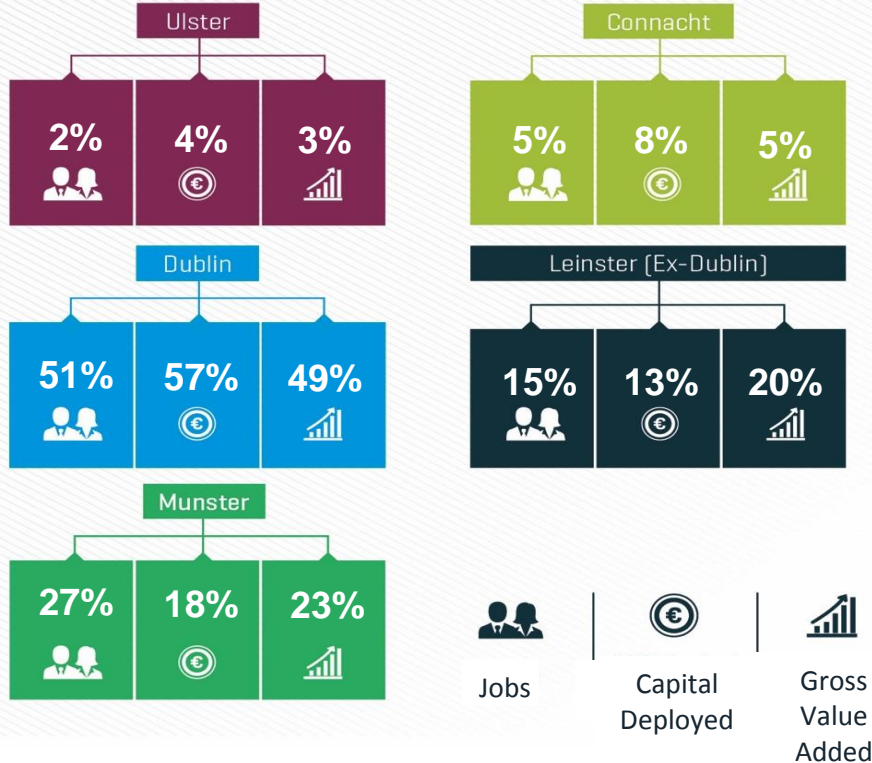
- ISIF analyses the regional economic impact of investments made across the country.
- We compare our economic impact against the national regional spread of economic activity as measured by gross value added.
- Depicted on the right is the national regional spread of economic activity as measured by gross value added.
- On the next slide we show the regional spread of jobs supported, capital deployed and gross value added against CSO gross value added.



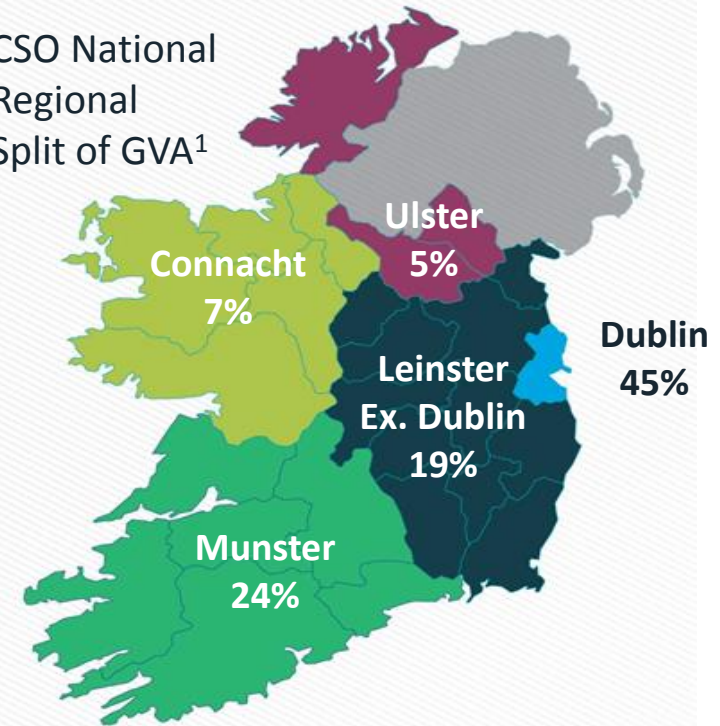
¹ Gross value added is a standard measure of economic activity with GDP comprising the aggregate of GVA at enterprise level across the economy

Regional impact of investments in line with Irish Economy

Regional Spread: ISIF Economic Impact

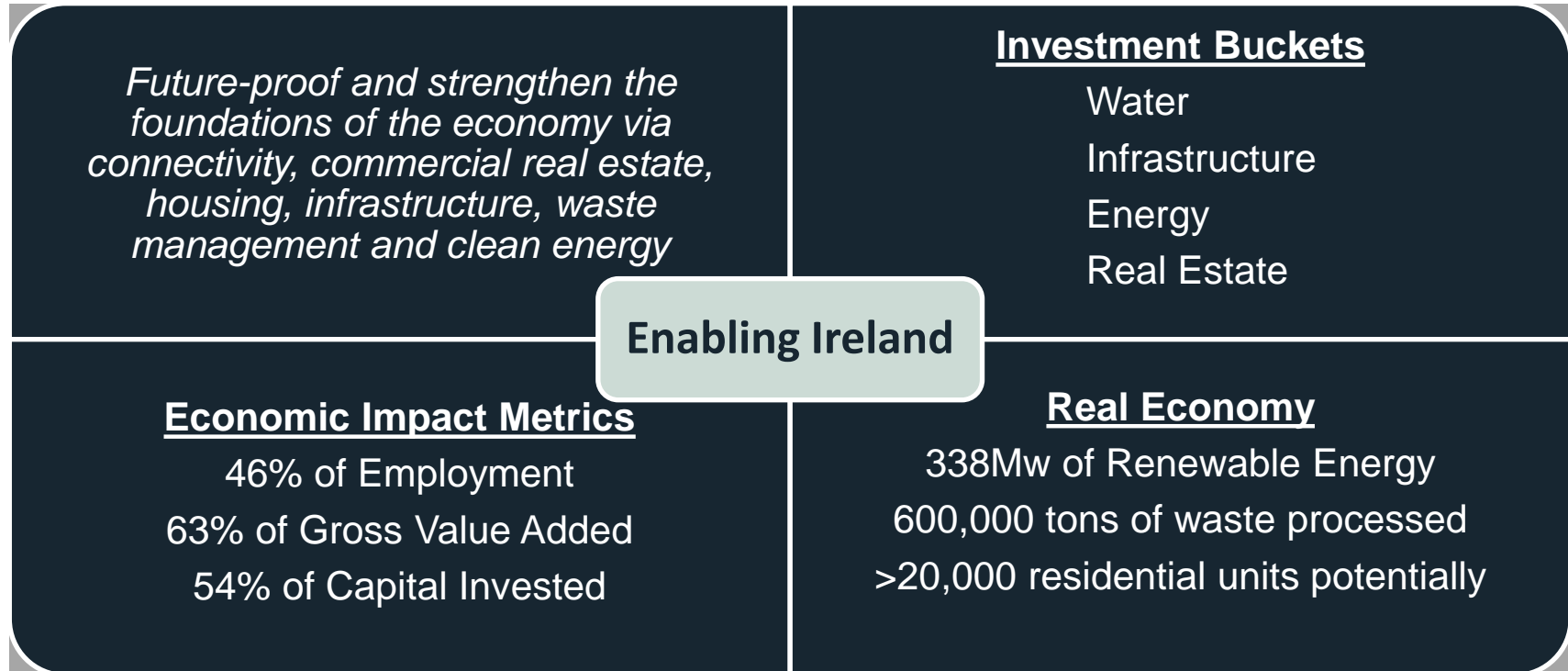


CSO National Regional Split of GVA¹



¹ Gross value added is a standard measure of economic activity with GDP comprising the aggregate of GVA at enterprise level across the economy

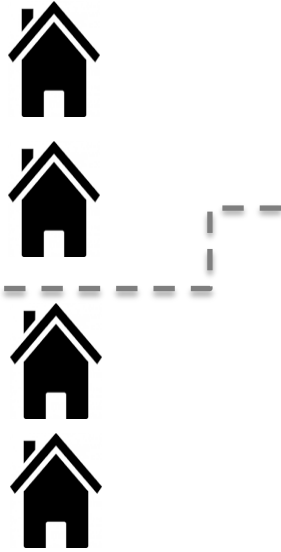
1. Enabling Ireland



1. Enabling Ireland – Housing and accommodation

Activate Capital has to date provided funding for approximately 1,900 new residential units in the Dublin area and has an advanced pipeline of 1,600 units. Activate has the capacity to support the construction of up to 11,000 new units.

The Ardstone Fund has to-date acquired sites with the potential to deliver up to 2,500 new housing units which will be delivered over a 5-7 years' time frame and it is targeting a total delivery of up to 3,750 new units.



ISIF's €54m investment in the DCU student accommodation business has helped enable DCU's overall €230m campus development plan.

This plan has the potential to ultimately deliver 3,200 student accommodation units.

More student accommodation opportunities in pipeline, at similar scale



In the area of financing **infrastructure which enables residential development**, ISIF is seeking to structure solutions for a number of opportunities with a focus on sites of scale and strategic importance. Potential to enable 6,000 housing units. ISIF is seeking to work alongside other sources of funding including LIHAF, Local Authority resources and commercial investment.

1. Enabling Ireland – Real Estate



- ISIF is involved in providing finance for retail, office, light industrial and construction development projects in Ireland
- Opportunities to provide **financing for Urban Renewal projects** in towns and cities across Ireland, directly and through commercial real estate finance facilities. This includes a joint venture agreed with Kilkenny County Council.
- WLR Cardinal Fund is the only long-term, fully capitalised provider of **real estate mezzanine** finance in Ireland
- Accelerating the delivery of prime **Grade-A office space** – required for foreign direct investment opportunities – with Quadrant

1. Enabling Ireland – Infrastructure

The Fund has made commitments of **almost €900m** in infrastructure, energy and water.

The Fund has made a €250m commitment to the **Irish Infrastructure Fund (IIF)** with four investments completed including most recently a Primary Care Centre business.

Dublin Waste to Energy substantially completed with designed capacity to process up to **600,000 tonnes of waste**.
The facility will generate **clean renewable energy** for **80,000 homes**.



Supported Irish Water alongside other financiers in its first operations, which involved essential repairs and new capital investments nationwide

ISIF has invested in funds and businesses which own and manage 338Mw of renewable energy, including Cyclone Wind Farm (through the IIF) and NTR



1. Enabling Ireland – Connectivity Fund

€335m Connectivity Fund with the aim of enabling and enhancing Ireland's **physical, virtual and energy connectivity**.
Three investments have been completed to date.



Strategic investor in €400m bond issuance facilitating the **delivery of a new runway** at Dublin Airport with a **€35m** commitment.

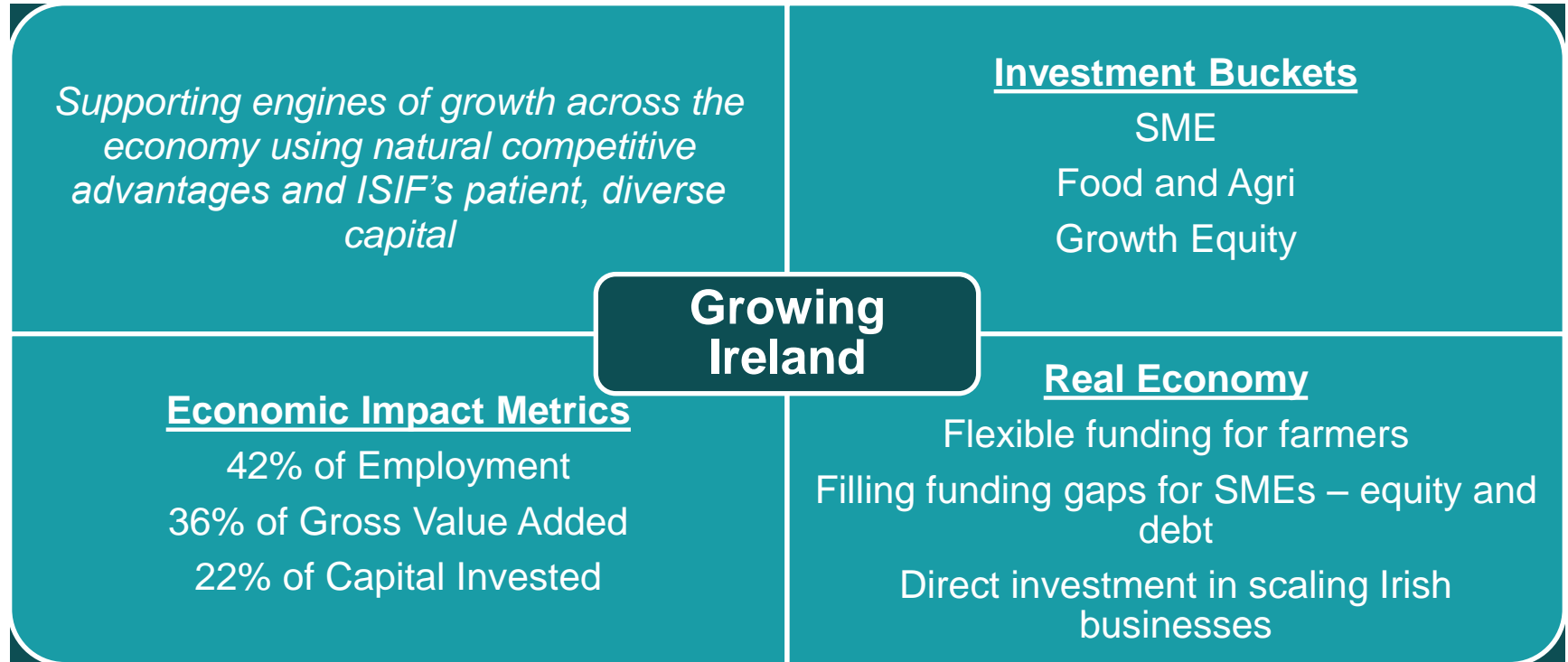


In April 2017, the fund committed **€14m** to support the **upgrade of the existing runway**, a core element of Shannon Airport's capital investment program.



Developer and operator of newly completed and modern **subsea fibre-optic network** interconnecting New York, Dublin and London with an equity investment of **€22m**.

2. Growing Ireland



2. Growing Ireland – Scaling Irish Companies

← **€455m of ISIF commitments supporting almost 1200 SMEs across the capital structure** →

Finance Ireland SME Asset Backed Finance	BMS Venture debt €0.5m - €5m	Bluebay Flexible Debt €5m-€45m	Causeway Capital Equity €2.5m-€10m	Carlyle Cardinal Equity €5m-€50m	Silicon Valley Bank Growth Equity
Asset Backed Finance for SMEs/ the Agri sector including leasing, vendor finance, vehicle leasing and contract hire. Commercial property loans also provided to SMEs.	Venture debt to Irish SMEs who are at or approaching profitability. Funding growth capital, acquisition finance and refinancing, MBO funding to growth companies.	Direct lending vehicle to support the borrowing requirements of SMEs in Ireland by offering a flexible approach to debt financing solutions – target borrowers requiring debt financing €5m-€45m	Investing equity of €2.5m - €10m with an exclusive focus on SMEs across a range of sectors Funding growth capital, acquisitions, buy-outs, refinancing and liquidity.	Buyout and growth equity investments in mid-sized companies across a variety of sectors in Ireland.	Bank for innovative businesses and their investors, supports the technology economy in Ireland through lending In 2016 ISIF and SVB committed a further \$100m to Ireland following original 2012 collaboration

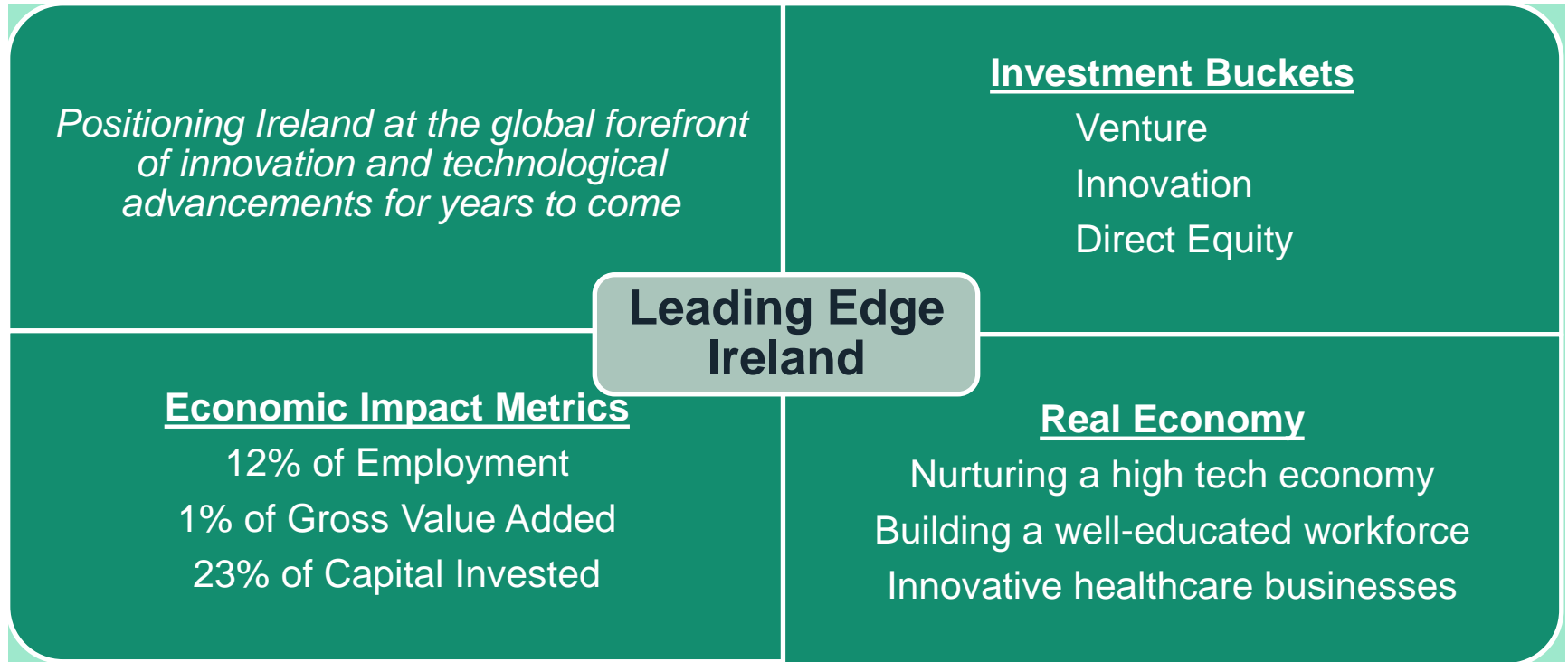
2. Growing Ireland – Agriculture and Food



ISIF followed up its investment in the First Forestry Fund with a commitment of €55m to the €112m Dasos Timberland Fund II to potentially deliver **2,800 hectares of afforestation in Ireland**



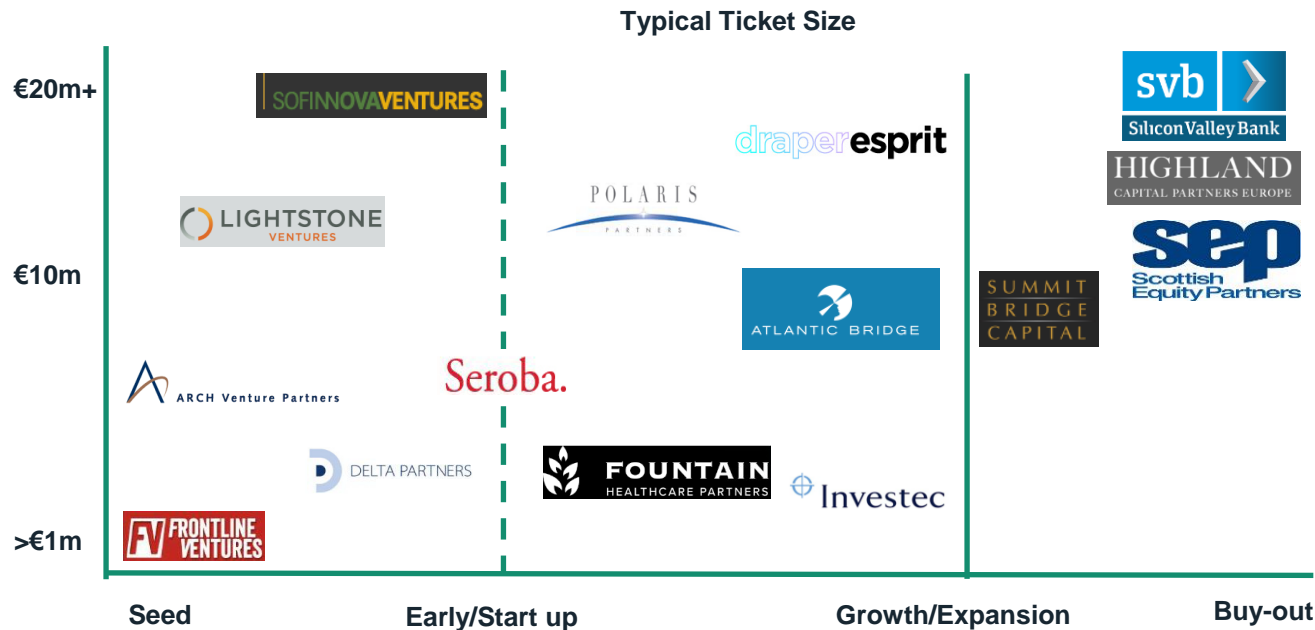
3. Leading Edge Ireland



3. Leading Edge Ireland - Venture Capital

ISIF has invested in over 26 Venture Capital Funds

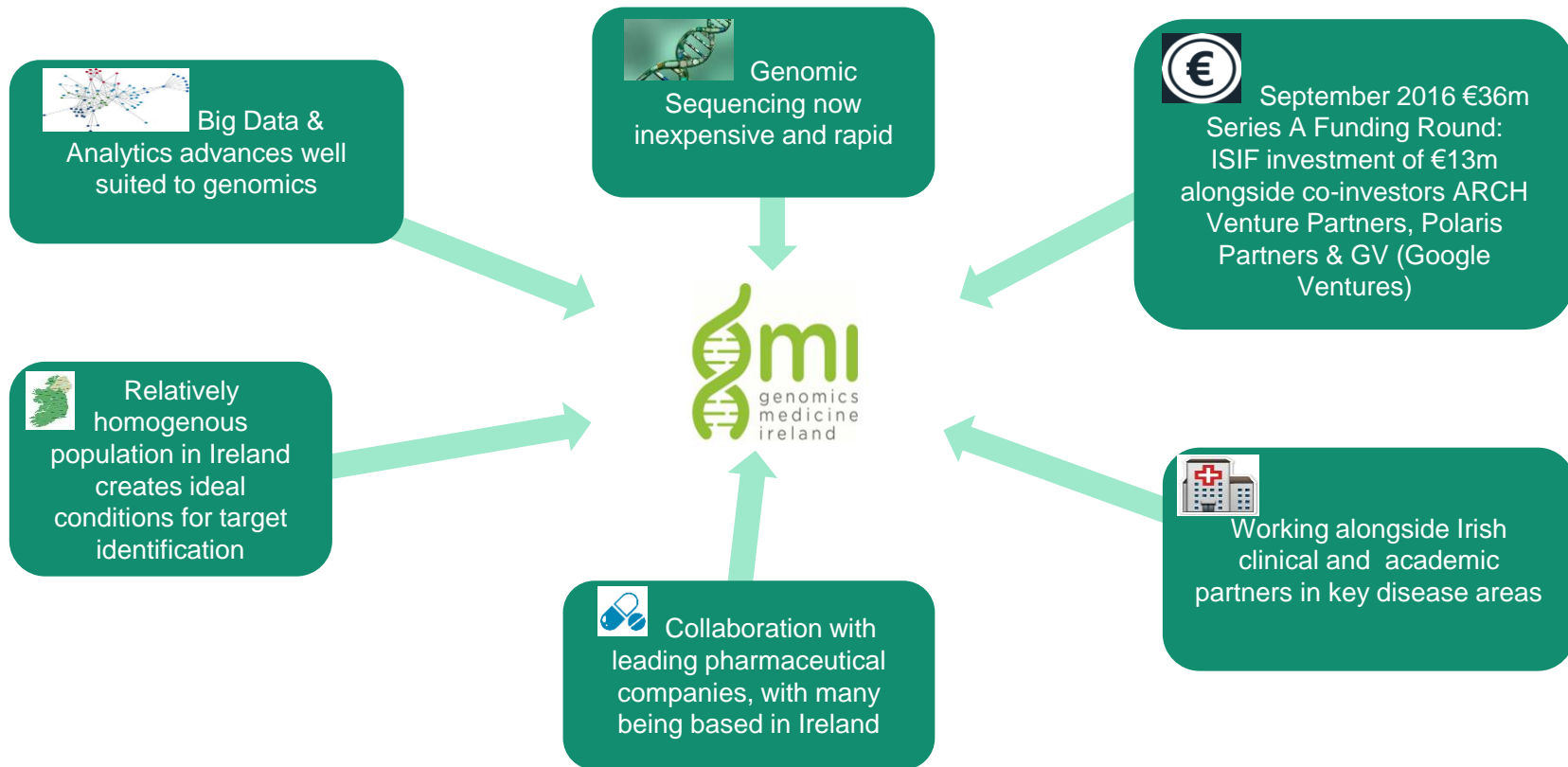
The Fund has committed over **€150m** to **seven** new venture capital funds in 2016 including Scottish Equity Partners who are new to Ireland



ISIF's broad involvement supports the VC ecosystem in Ireland

3. Leading Edge Ireland – GMI Case Study

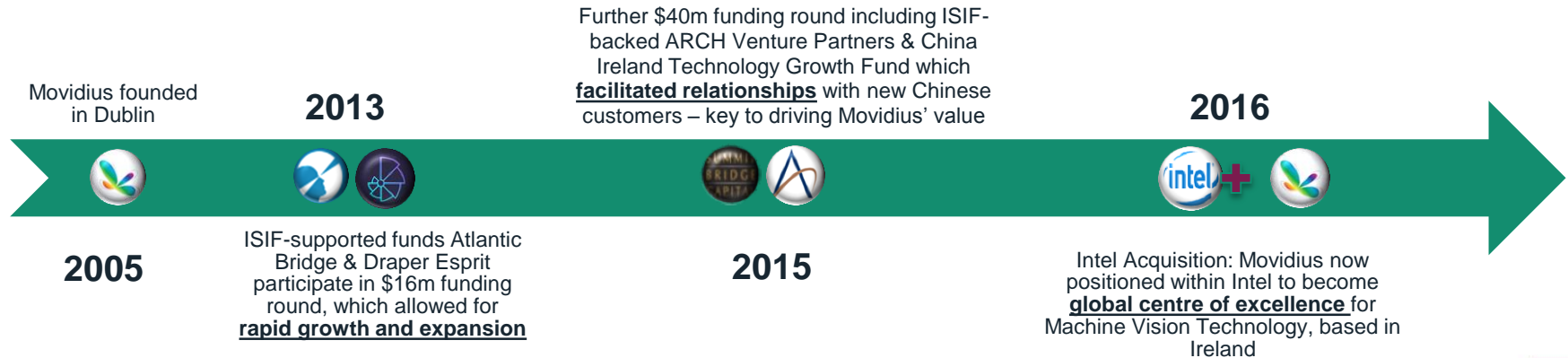
GMI to build rich genomic database reflective of Irish population to drive development of novel therapeutic drugs and diagnostics, in collaboration with leading pharmaceutical companies and Irish Healthcare System



3. Leading Edge Ireland – Movidius Case Study

ISIF-backed technology company Movidius is Ireland's biggest success story in recent years

- Irish start-up which has become a global leader in **Machine Vision Technology** – technology that allows a computer to “see”
- Applications in Virtual/Augmented Reality, Drones, the Internet of Things and Security Markets
- Customers include Google, DJI & numerous other high profile firms
- ISIF has supported Movidius at various stages along its maturation through 4 of its venture fund investments
- In September 2016 Intel bought Movidius, with the aim of establishing it as a **global centre of excellence** for machine-vision technology, based in Ireland



3. Leading Edge Ireland – Neuravi Case Study

Acquisition by J&J in April 2017 reported to be the largest European medtech exit in a decade

Fig 1 - Strokes are the second most common cause of death for those over 60 years old with estimated societal cost of \$33bn



Fig 2 - Neuravi's EmboTrap targets blood clots, capturing them within the device and allowing for immediate restoration of blood flow while also cleaning up any particles disturbed.



- Parkmore Business Park West, Galway
- Neuravi develops and globally markets innovative medical devices for neurointerventional therapy that are based upon extensive research into the clot and occlusions that cause stroke.
- Neuravi supports collaboration between engineers, clinicians and researchers to deepen the understanding of clot and occlusion dynamics, in order to improve patient outcomes in stroke.
- Strong founding team previously founded Mednova (acquired by Abbott for \$100m+ in 2005):
 - Co-founder and CEO Eamon Brady 25 years in endovascular industry. Previously with Abbott Vascular, he has developed and commercialised many devices over his career and holds over 150 patents.
 - Co-founder and CTO David Vale has 25 years of R&D experience. Previously he was Director of Advanced Research & Technology at Abbott Vascular following Mednova acquisition, holds 130 patents.
- ISIF has supported Neuravi through multiple stages along its maturation through 2 of its venture fund investments: Fountain Healthcare I and Delta Partners III. Other major shareholders included Enterprise Ireland, Western Development Commission and Abbott.
- In April 2017 J&J acquired Neuravi for an undisclosed consideration, signalling its intention to develop further the technology and team in Galway for widescale commercialisation.

Appendices

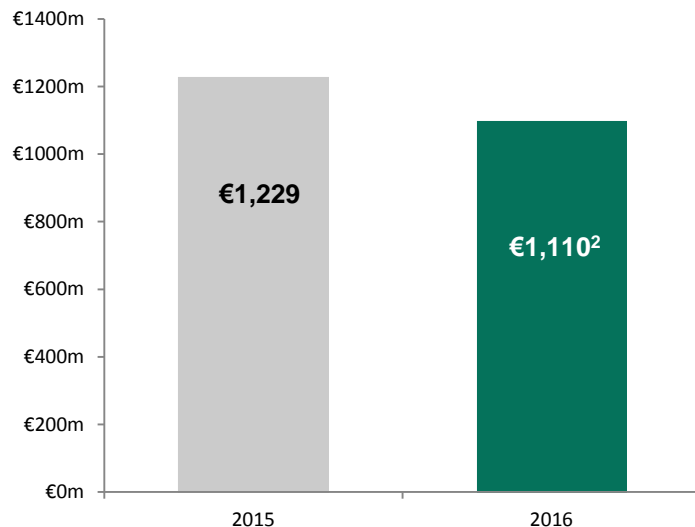


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Appendix 1 - Underlying Data (Turnover and Exports)

Underlying Investee Turnover Analysis¹



¹Turnover generated from underlying investees that contribute no economic impact in Ireland is excluded (e.g. foreign businesses). Additionally, turnover does not necessarily capture all of the economic impact benefits associated with an investment – many of the early stage companies in the ISIF portfolio are at pre-revenue stage.

²Turnover is €1,097m on an annualised basis – this is down on 2015 due to lower revenues in Irish Water, which we exclude from our figures.

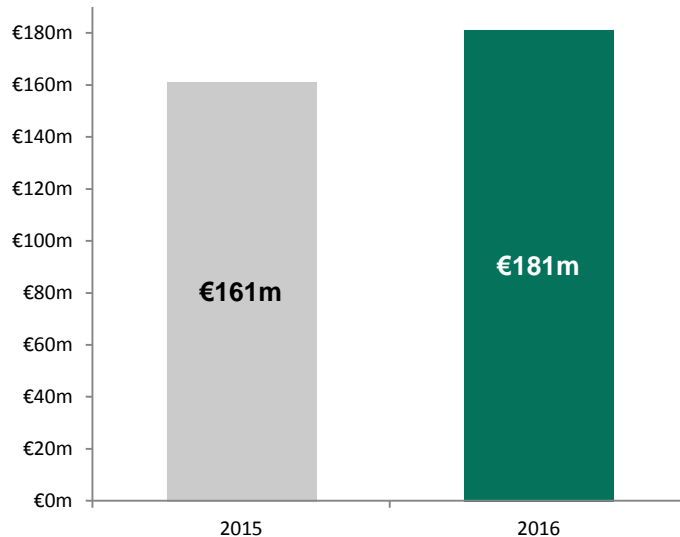
Exports 2016



Significant turnover generated from underlying investees despite the number of early stage companies, with a significant portion of turnover from exports (28%)

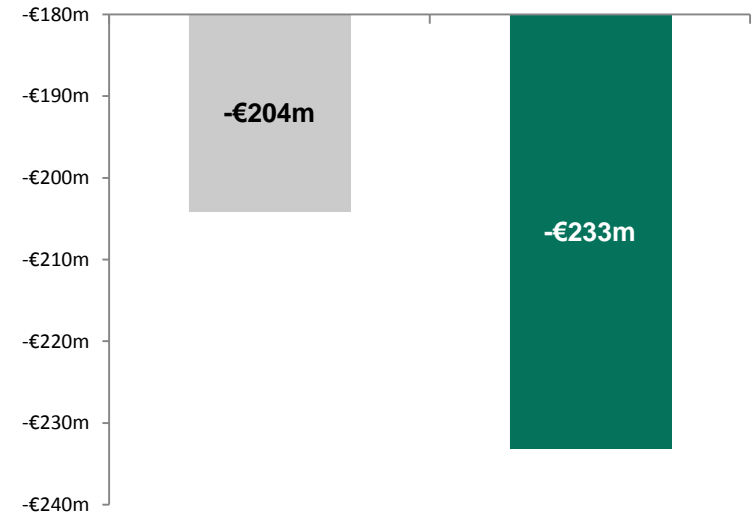
Appendix 1 - Underlying Data (Profitability Analysis)

Underlying Investees Earnings (Profitable¹)



¹The profitable category accounts for profits but also includes mature companies which have made a loss.

Underlying Investees Earnings (Pre-Profit²)



²The pre-profit category is for early stage businesses.

Early stage investees/projects in construction (69% of investees) initially generate low levels of economic activity but should improve as businesses transition from the start-up stage to the growth/expansion stage.

Appendix 2 – Assumptions, Methodology and Disclaimer

Assumptions and Methodology

1. The NTMA collected data on 140 underlying investees. While economic impact data is somewhat complicated, the NTMA has adopted a structured approach to the collection and analysis of the data.
2. Underlying investees are either direct or indirect (i.e. through Funds), the economic impact data is gathered through a semi-annual survey process of the direct and indirect underlying investees. The economic impact of an underlying investee is only included once i.e. where the ISIF has more than one indirect investment in an underlying investee the duplicate economic impact is removed from the analysis.
3. There is some time lag between the achievement of economic impact and the commitment to an investment. Typically, economic impact is generated when there is a draw down on committed capital and this can be months/years after a commitment to an investment.
4. The NTMA completes a check of all survey data for reasonableness. However, the NTMA is reliant on the underlying investees to provide accurate data and is not in a position to verify the data submitted.
5. Surveys provided in USD were converted to EUR, income statement metrics were converted to EUR using a 12 month average FX rate sourced from Bloomberg.
6. The regional distribution of capital deployed (slide 9) is weighted based on the capital deployed as at 31st December 2016 and data provided by the underlying investees detailing the location/regional activities of the underlying investee/project. Where underlying investees operate on a nationwide basis, the capital deployed is weighted by population, this population data is sourced from the Central Statistics Office.
7. The regional distribution of underlying investees employment and gross value added (slide 9) is based on data provided by the underlying investees detailing the number of jobs and earnings generated regionally. Where underlying investees operate on a nationwide basis and a reliable regional employment split is unavailable, the total jobs and gross value added is weighted by population.
8. The majority of underlying investees (126 out of 140 underlying investees) provided the number of jobs and wages paid as at 31st December 2016 directly. There are some exceptional cases where the data was unavailable and the following assumptions were applied:
 - i. In the case of construction projects where reliable headcount was not available, we evaluated the drawn capital of the project over the 12 month period to 31st December 2016 and applied a Construction Industry Federation multiplier to the capital expenditure to estimate the number of employees. All of these employees are accounted for in the short term employment numbers (slide 6).
 - ii. In the case of construction projects where third party/contracted headcount was provided but a wage bill was not available, an average wage was applied to the third party/contracted headcount. The average wage by sector was sourced from the CSO.
 - iii. In a small number of cases where survey data was unable to be completed for an underlying investee, a pro-rata figure based on 2015 figures was taken.
9. In line with industry standards, an indirect employment multiplier is applied to direct jobs. The NTMA calculation of employment multipliers is based on CSO methodology and verified by CSO (slide 6).
10. Exports are weighted based on turnover and an estimate provided by the underlying investee of the percentage of turnover generated from exports (slide 24).
11. The underlying investee profitability analysis (i.e. the earnings before interest and tax) is split between early stage companies, which have not yet made a profit, and more mature companies, which can either be profitable or loss-making (slide 25).

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Appendix 3 – Summary of Underlying Investments (1/5)

Fund/Company/Project	Company/Project	Principal Product/Service
ACT	Silvercloud	Online health and eTherapy platform provider
Activate	Activate (One project as of 30/06/16)	Residential Development Finance
AMCS	AMCS	Supplier of smart resource software and vehicle technology solutions for the waste, recycling and resource industry
Aquacomms	Aquacomms	Specialist sub-sea cable connecting New York and Ireland with onward connections to London
Arch	Carrick Therapeutics	Drug development targeting cancer resistance
	Genomics Medicine Ireland	Products and services derived from advanced genomic research, analysis & global partnerships
	Movidiu	A fabless semiconductor company in computer visioning sector
Ardstone	Ardstone	Residential Development Finance
Atlantic Bridge	Accuris Networks	WiFi off-load and roaming technologies
	Boxfish	Second screen big data analytics
	Civic Connect	Internet of things
	Fieldaware	Mobile field service management
	Hypergrid	Private cloud and security software
	Swrve	Mobile marketing automation
	Novaerus	Plasma generating technology
Bluebay (BICC 1)	Abrahebabra Investments	Leading fast food franchise owner and operator in Ireland with five trading businesses
	BB Muffins	Chain of coffee and muffin retail stores across the UK and Ireland
	Carne Global Financial Services	Provider of governance and oversight solutions within the asset management industry
	Centric Health	Healthcare services business providing (i) diagnostic imaging; (ii) primary care and (iii) medical recruitment services
	Excelsys	Designer and manufacturer of high power density high efficiency power supplies
	Irishrelo Group (Onomah)	Employee relocation support
	Kardomagh Holdings	Sale and hire of fast track building solutions
	Kenmare Bay	Hotel accommodation, Food & Beverage, Leisure Centre, Self-Catering
	Knockfargal Ltd	4* hotel in Kinsale, Co. Cork
	Mainstream Renewable Power	Leading player in the global renewable energy development market focusing on wind (onshore and offshore) and solar power
	Magnet	Irish telecommunications company providing data, voice and IP services to business and residential customers .
	Mater Private	Provision of healthcare services
	Rye River	Irish Craft Beer brewer and agent distributor
	Sigma Communications	Seller of professional communications systems

Appendix 3 – Summary of Underlying Investments (2/5)

Fund/Company/Project	Company/Project	Principal Product/Service
BMS	Adtower	Out of home advertising
	Aerodocs	Document management and in-flight entertainment software for the airline industry
	Blue Tree Systems Limited	Trailer and vehicle telematics solutions
	Coolnagour T/A iCabbi	Taxi dispatch software
	RAPT Touch Ltd	Touch Technology
	Wide Eye Media	Cinema Advertising
	XS Direct	Car Insurance
Carlyle Cardinal Ireland	AA Ireland	Insurance brokers and roadside assistance providers
	Abtran	Business Process Outsourcing
	Carroll Cuisine	Production and distribution of sliced cooked ham and other food products
	General Secure Logistics Services (GSL5)	Cash-in-transit and money processing
	Lily O'Briens	Manufacturer and distributor of chocolate
	Payzone	Multi-channel payment solutions
Causeway Capital	BB Muffins	Chain of coffee and muffin retail stores across the UK and Ireland
	Bizimply	Time and attendance software
	Harkglade Limited (T/A Celtic Linen)	Commercial laundry business
Covanta	Dublin Waste to Energy Limited	Waste treatment, power and heat production
Daa	Dublin Airport	Commercial semi-state airport company
Delta Partners	Betapond	Marketing app provider for social networks
	Clavis	Reference data quality solutions
	Cleverbug (CleverCards)	Personalised greeting cards and gifts
	Davra Networks	Management system for Internet of Things devices for Cisco distributed networks
	Digit Game Studios	Online multiplayer multiplatform games
	Homestay	Accommodation portal
	Luzern Solutions	Online retailer and online store provider for new and refurbished goods
	mADme	Mobile advertising solutions
	Mobatravel (MobaCar)	Online car rental software platform
	Neuravi	Developer of clot retrieval medical devices
	Sim Travel	Local sims for international travellers
	What Clinic	Medical treatment search portal
	Zapa Technologies	Telecom expense and value management

Appendix 3 – Summary of Underlying Investments (3/5)

Fund/Company/Project	Company/Project	Principal Product/Service
Draper Esprit	Movidius	A fabless semiconductor company in computer visioning sector
Finance Ireland	Finance Ireland	Commercial and consumer lending
First Forestry Fund	First Forestry Fund	Invests directly in forestry plantations diversified across Ireland
Fountain	Inflection Biosciences Mainstay Medical Neuravi Neuromod Devices Limited Opsona Therapeutics Trino Therapeutics Vivasure Medical	Developing small molecule therapeutics for the treatment of cancer. Manufacturer of medical device for treatment of chronic lower back pain Developer of clot retrieval medical devices Medical devices Developer of drugs for the treatment of autoimmune and inflammatory diseases Drug Discovery and early drug development company that focuses on anti inflammatory therapeutics Research and Development medical device company
Frontline	AQ Metrics Boxever Ltd CurrencyFair Ltd Drop Linked Finance PageFair Ltd. Qstream Roomex	Risk/Compliance technology SaaS customer intelligence platform for airline and travel industry P2P Currency Exchange Connected kitchen products P2P SME Lending Marketplace Adblocking Software Mobile sales enabling service Hotel Booking Platform
GMI	Genomics Medicine Ireland	Creation of population database
Highland Europe	AMCS Malwarebytes	Software solutions for the waste management industry Anti-malware software
Irish Infrastructure Fund	Convention Centre Dublin Cyclone Wind Farm Portfolio Towercom Limited	Ireland's only purpose built convention centre positioned on the banks of the River Liffey in the centre of Dublin Portfolio of 10 wind farms located in both the RoI and NI, generating electricity for sale into the Single Electricity Market Largest independent telecom tower / mast owner in the Republic of Ireland and owns/controls 406 telecom tower/mast sites
Irish Water	Irish Water	National service provider of water and treatment of wastewater
Lightstone Ventures	Alexo Therapeutics FIRE1 Carrick Therapeutics Limited	Developer of novel biologics with goal of discovering new drugs to help the human immune system to eradicate cancer Developing a novel, therapeutic medical device for a major unmet medical need Developer of novel biologics with goal of discovering new drugs to help the human immune system to eradicate cancer

Appendix 3 – Summary of the Underlying Investments (4/5)

Fund/Company/Project	Company/Project	Principal Product/Service
Investec Ventures	Accuris Networks	WiFi off-load and roaming technologies
	AMCS	Software solutions for the waste management industry
	Betapond Ltd	Marketing app provider for social networks
	BlueTree	Developer of GPS fleet software, telematics and vehicle tracking solutions
	Davra Networks	Management system for Internet of Things devices for Cisco distributed networks
	Diona Technologies	Diona is addressing the demand for mobile solutions in the HHS market
	Ferfics	The company designs and develops components (radio frequency switches)
	HeyStaks Technologies	HeyStaks enables users to collaboratively search the web using search engines
	Mick's Garage	The company e-tails car parts and is Ireland's leading on-line car-parts retailer
	Rainmaker Business Technologies	Provider of business intelligence and performance software to the airline sector
	RAPT Touch	Develops multi-touch screen technologies for incorporation into large screens
	SilverCloud Health	SilverCloud Health Limited provides online therapeutic solutions via tailored clinical programs
Malin	Terminal Four Solutions	Developer of enterprise web content management software for the higher education market globally
	Vearsa	Helps traditional publishers distribute electronic copies of their books ("eBooks")
	Zamano	Zamano is a mobile marketing and mobile products company
	Altan	Develops, manufactures and markets generic injectable drugs
	AN2H Discovery	Designs novel small molecule therapeutics
	Emba Medical	Develops vascular embolisation devices
	Emba Neuro	Develops embolisation devices for application in neurovascular field
MilkFlex	NeuVT Limited	Develops vascular devices
	Seranus	Specialises in in-licensing, registering and commercialising certain approved therapeutics to address unmet needs in the African market
	3D4 Medical	Develops medical, educational and health fitness apps
NTR Small Wind	MilkFlex	Dairy loan repayment fund
	2 Ro Projects	Wind Energy
Polaris Partners	Boxever	SaaS customer intelligence platform for airline and travel industry
	Novaerus	Manufacturer of wall mounted airborne pathogen control devices
	Profitero	Competitive pricing, intelligence and e-commerce insights for brand manufacturers and retailers
	GMI	Human genomic sequencing
	Voysis	Voice AI platform

Appendix 3 – Summary of Underlying Investments (5/5)

Fund/Company/Project	Company/Project	Principal Product/Service
Quadrant	QREA Financing	Financing office development
Seroba Kernel	Heart Metabolics	Biopharmaceutical development company focusing on clinical development of a therapy for hypertrophic cardiomyopathy
	Novate Medical	Convertible vena cava filter for prevention of pulmonary embolism
	Opsona Therapeutics	Developer of drugs for the treatment of autoimmune and inflammatory diseases
	PQ Bypass	Medical devices required to perform a percutaneous femoro-popliteal bypass procedure
	Veryan Holdings	Development of stents with a unique 3D geometry, for treatment of vascular disease
Silicon Valley Bank*	Three underlying investees – bank confidentiality	precludes disclosure of borrower names
Sofinnova	Innocoll	Collagen based drug delivery platform
Swrve	Swrve	Mobile marketing automation software platform
WLR Cardinal*	Investment 1	Apartment development
	Investment 2	Commercial real estate
	Investment 3	Commercial real estate
	Investment 4	Commercial real estate
	Investment 5	Commercial real estate
	Investment 6	Commercial real estate
	Investment 7	Commercial real estate

**Note: this appendix does not include a small number of investees where confidentiality precludes disclosure of investee names.*

Note: this appendix excludes investments where capital is committed but not invested as at 31st December 2016

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