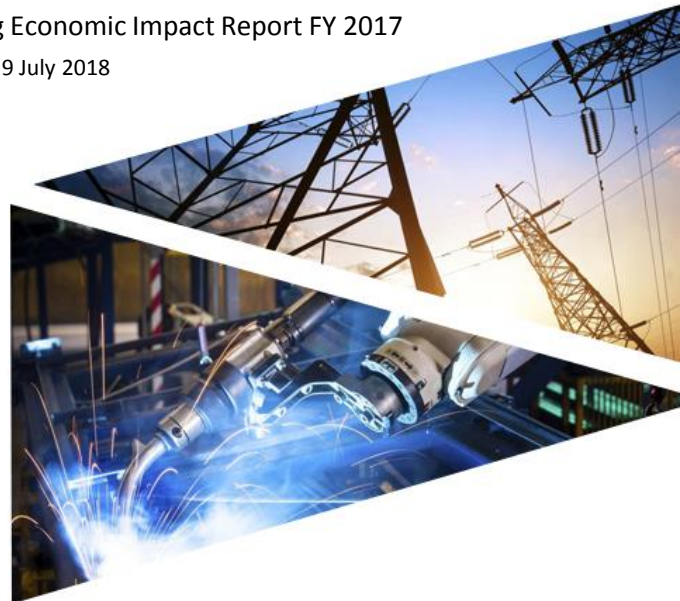


Ireland Strategic Investment Fund

H1 2018 UPDATE

Including Economic Impact Report FY 2017

Published 9 July 2018



Gníomhaireacht Bainistíochta an Chisteáin Náisiúnta
National Treasury Management Agency

Ciste Infheistíochta Straitéisí d'Éirinn
Ireland Strategic Investment Fund



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Delivering on Double Bottom Line

Performance H1 2018¹ & 2017 Economic Impact results

Highlights

Supporting
30,786 jobs



€3.8bn
Committed
By ISIF



€10.4bn
Committed in Ireland
ISIF + Co-investors



Responding to the
Housing crisis
€726m
Committed to residential
housing projects



Supporting 9
SME investment platforms
diversifying the Irish SME
financing landscape



Delivering on
dual mandate
commercial return, economic
impact and employment



Regionally
diversified



ISIF is delivering on double bottom line mandate to invest on a commercial basis in a manner designed to support economic activity and employment in the State



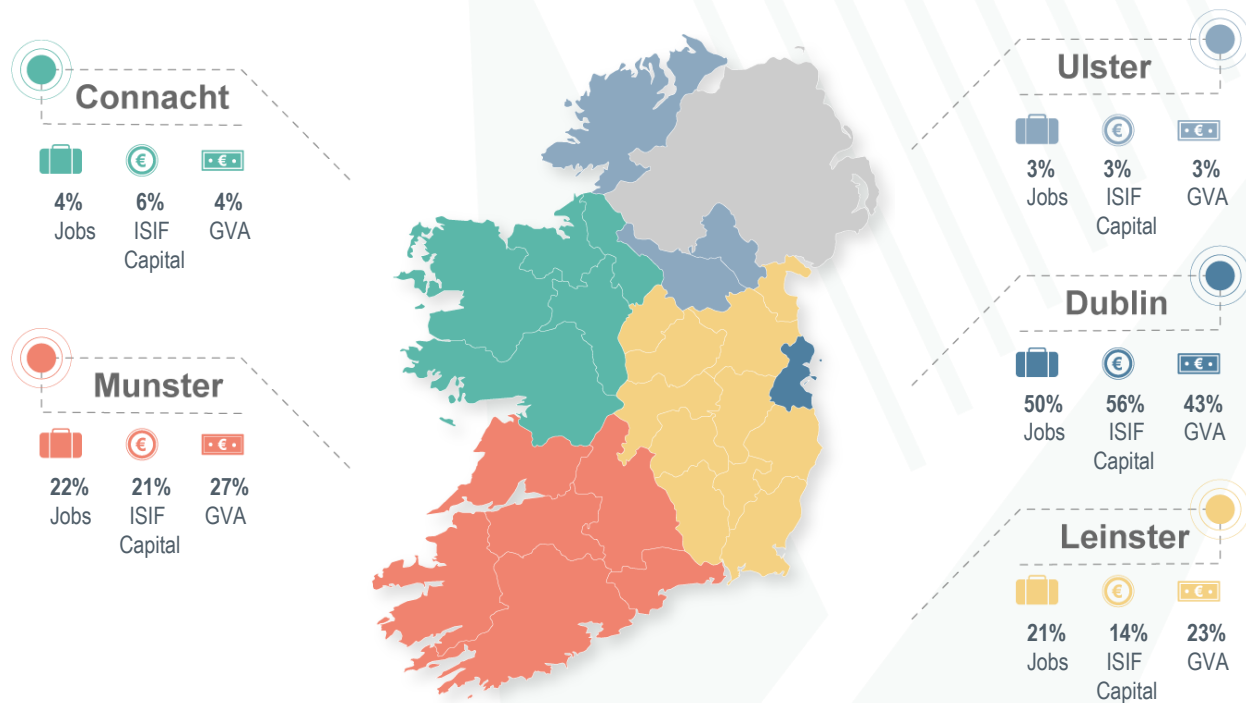
Key milestone in maximising ISIF's capital – ISIF's €3.8bn commitments have unlocked >€10bn of capital committed for projects and businesses in Ireland



ISIF is focused on investments that make a difference

- Flexibility
- Long term timeframe
- Sovereign partner to businesses and co-investors

ISIF investments are regionally balanced - 50% of jobs supported are outside Dublin

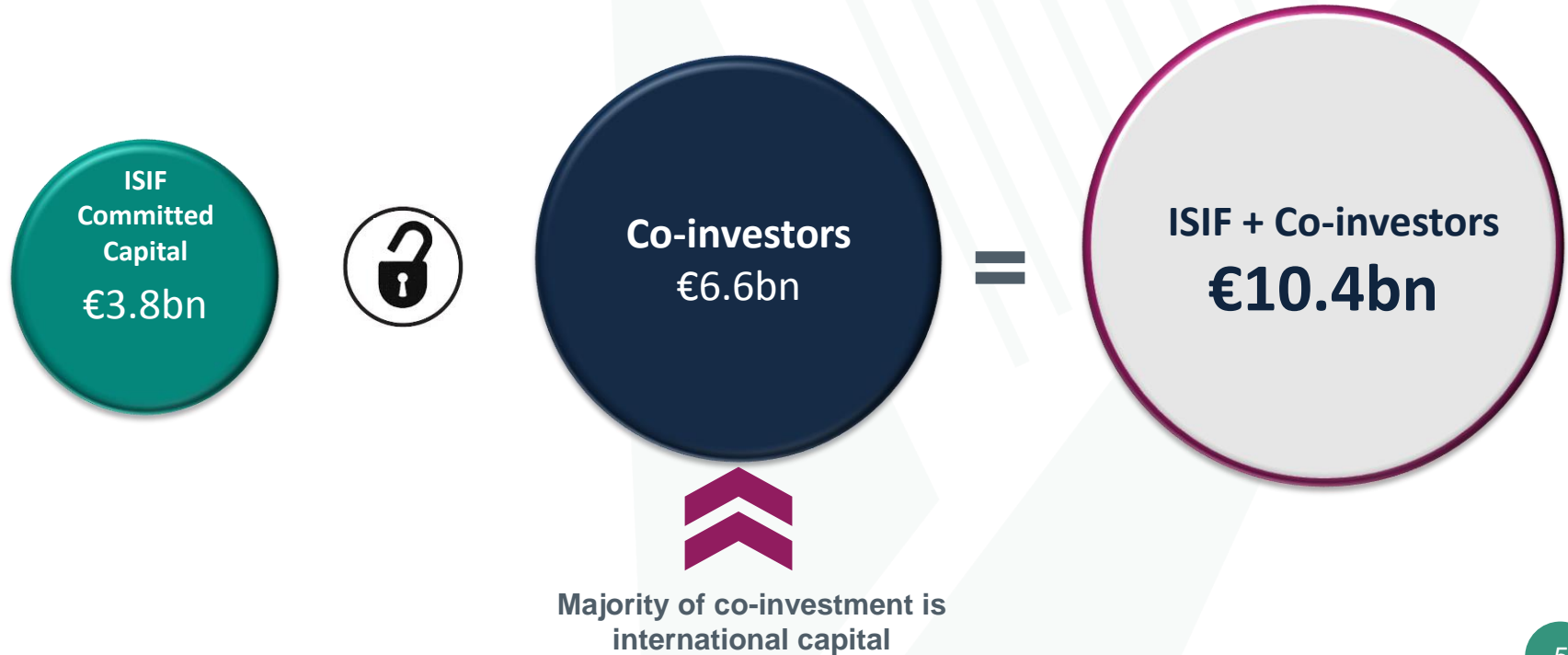


**CSO Regional Split of Irish Gross Value Added*

Dublin 45%	Leinster 19%
Munster 24%	Connacht 7%
Ulster 5%	

ISIFs capital unlocks a further €6.6bn of capital at end-June 2018

Leveraging capital for maximum Economic Impact from ISIF resources



ISIF delivering on the Double Bottom Line

Economic Impact



Commercial Return¹

Dec
2017



30,786
jobs
supported

DEC
2016



21,930
jobs
supported

DEC
2015



17,940
jobs
supported

DEC
2014



12,000
jobs
supported



ISIF adding **€648 million** of value since
December 2014
-0.3% in H1 2018, **+2.3% p.a. since inception**

Comprising of



Global Portfolio adding
€356 million

-1.3% in H1 2018, **+1.6% p.a. since inception**



Early positive returns from the Irish Portfolio
€292 million

+2.7% in H1 2018, **+6.6% p.a. since inception**

¹ Preliminary and unaudited data

ISIF Double Bottom Line Mandate

Delivering on Double Bottom Line mandate through 3 strategic drivers

Investment
Returns



Economic
Impact

ENABLING IRELAND

Enabling competitiveness of the economy

Real Estate



Energy



Infrastructure



Water



GROWING IRELAND

Supporting engines of economic growth

SME



Direct Equity



Food & Agri



LEADING EDGE IRELAND

Positioning key sectors to lead, innovate and compete on a global level

Venture



Innovation



Other



H1 2018 Transaction Highlights - €490m committed to 10 investments

ISIF committed €490 million to 10 investments in H1 2018, with a total of €1.3 billion invested including third party capital (see slide 16 for full list)

Enabling Ireland €235m



Responding to Housing Crisis
15,000 units by 2021

In H1 2018 ISIF backed a new residential rental platform managed by Avestus Capital Partners and made a follow-on investment to Activate Capital



Driving a resilient & focused energy landscape
518MW which is expected to generate clean
**renewable electricity for over
230,000 homes**

€35m investment in Encavis which will target the deployment of 4x ISIF investment into Irish
solar energy projects

Growing Ireland €180m



Further **€110m** investment into **SME credit platforms** to address gaps in the SME finance market in Ireland and to support Irish SMEs seeking growth capital to scale their businesses



Irish Whiskey Growth Fund, the first fund established exclusively to lend to whiskey producers across Ireland, enabling the production of **9m bottles of Irish Whiskey for export**

Leading Edge Ireland €75m



€75m investment from ISIF to the €150m **China Ireland Technology Growth Capital Fund II** to focus on investing in high-growth Irish technology firms with an ambition to access the Chinese market as well as expanding Chinese technology companies that will use Ireland as a base for European operations

ISIF financing Irish businesses & projects through 3 channels to maximise our reach

Equity

Equity partnerships to grow Irish businesses



Debt

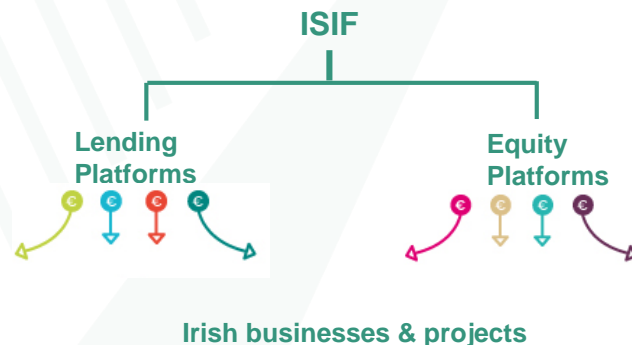
Direct lending to Irish business & projects



Average term 13 years

Platforms

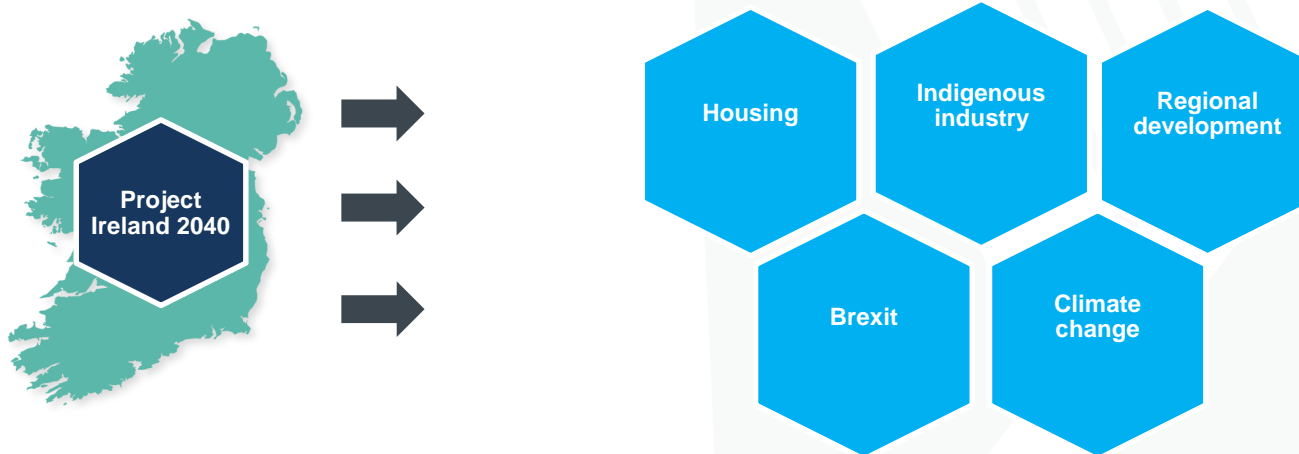
Financing debt & equity platforms



ISIF will invest **across the risk spectrum from** debt to equity and can fill capital gaps where traditional investors and financiers are not participating

Looking Forward: ISIF Investment Strategy Review (July 2018)

- ISIF welcomes finalisation of the Investment Strategy Review which enables the ISIF to continue to support businesses and projects throughout Ireland
- ISIF's double bottom line mandate of commercial return and economic impact is unchanged
- ISIF's 2015 Investment Strategy was wide ranging given the prevalence of capital gaps throughout the system, however in light of the current strong economic conditions ISIF will now focus on priorities to support Project Ireland 2040 including the following key themes:



- In the coming months ISIF will develop a refocused strategy to reflect these priorities, building on investments completed to date in these areas



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Full Year 2017 Economic Impact Highlights

Reflects detailed survey data as at 31 December 2017. Given the quantum of surveys of investees and underlying investees of indirect investments and the comprehensive analysis completed, finalisation and publication of this economic impact data lags 6 months behind.



30,786 Jobs Supported by ISIF Capital
Net increase in Jobs supported 6,434



Employment by Region
50% Dublin/50% ex-Dublin



Gross Value Add (GVA) €993 million



Wage Bill €948 million

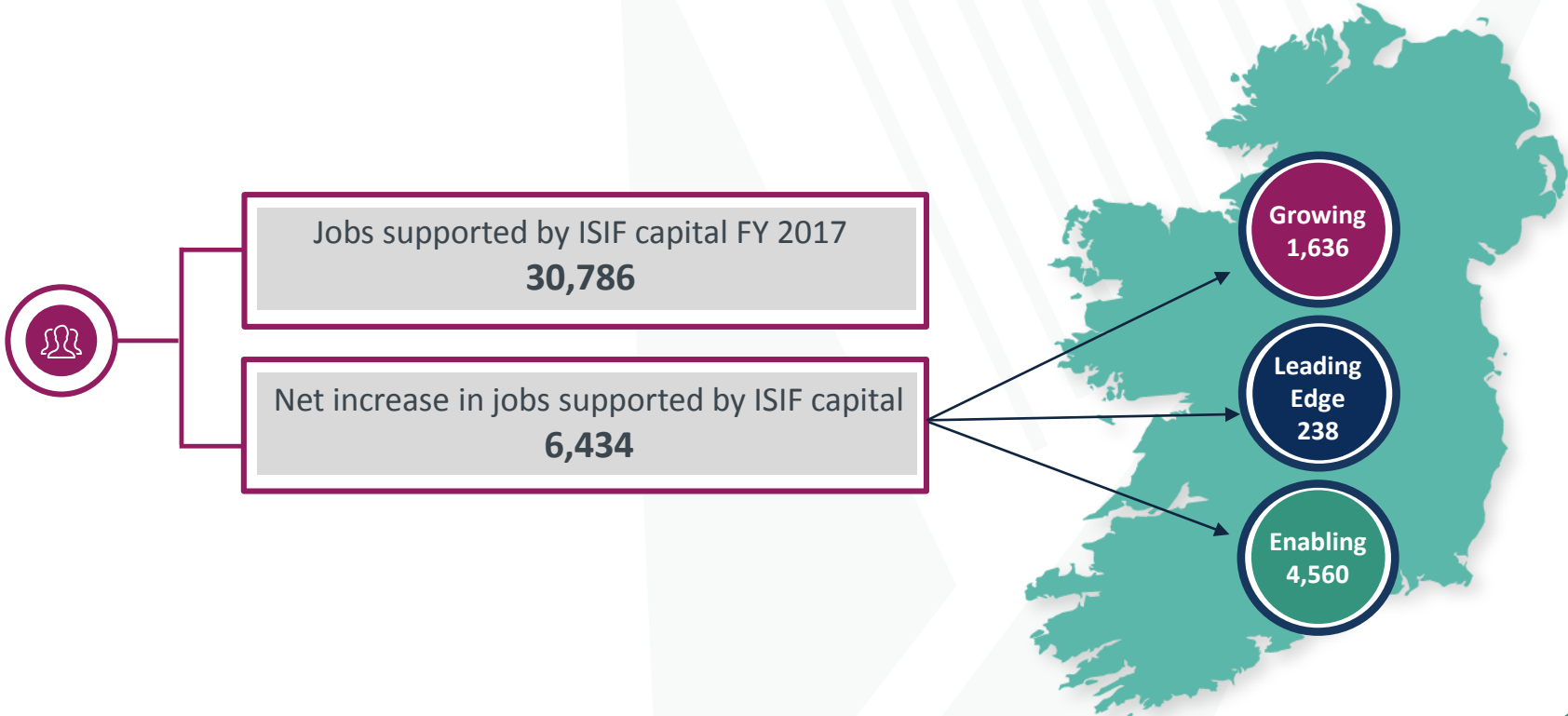


Turnover €1,924 million



Exports €531 million

Strong underlying employment growth in Full Year 2017



Snapshot of Underlying Investees 2017

FINANCE IRELAND Opsona Therapeutics sim LOCAL Qstream 	Obelisk BOXFISH 	 COVANTA iCabbi 	 DIONA 	 MilkFlex Verifly	Activate Capital Mobacar luzern BIZIMPLY Hines 	MAGNET NETWORKS FIRE1 	 Voysis WhatClinic
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ISIF supporting
1,811 Irish-based
companies/
projects through
commercial
investments

(Appendix 2 for
further detail)



01 | H1 2018 ISIF Update



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Appendix 1 – H1 2018 Transactions

Transaction	Main Activity	Amount €m
Avestus	Housing	25
Activate Capital (follow on)	Housing	175
Power Capital	Solar Energy	35
Vectra	Cyber security	10
Mainstay Medical	Medical devices	10
Dunport	SME	95
Irish Whiskey Growth Fund	Whiskey	10
China Ireland Technology Growth Fund II	Growth equity, China link	75
AMCS	Software for waste sector	40
Finance Ireland (follow on)	SME	15
Total		490

Appendix 2 – Summary of Underlying Investments at FY 2017 (1/5)

Fund/Company/Project	Company/Project	Principal Product/Service
ACT	Decawave	Ultra-wideband wireless transceiver integrated circuits and related products
	iHeed	Medical eLearning
	Internet Corp	Online backup and disaster recovery
	mADme	Mobile advertising platform
	Ocrex	Omni-channel payment gateway provider
	Scurri	Cloud based platform that provides services to make shipping simple for e-commerce
	ServisBOT	AI enhanced customer messaging platform
	Silvercloud	Online health and eTherapy platform provider
	Tandem HR	HR Software as a service for talent management
	VideoElephant	Syndicator of premium video content
	Worldnet	Omni-channel payment gateway provider
Activate	Activate (Thirteen sites with activity as at 31/12/17)	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
Ardstone	Ardstone	Residential Development Finance
Atlantic Bridge	Accuris Networks	WiFi off-load and roaming technologies
	AnDapt	Power management solutions
	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)	Abrakebabra Investments	Leading fast food franchise owner and operator in Ireland with four trading businesses
	BB Muffins	Chain of coffee and muffin retail stores across the UK and Ireland
	Cara Pharmacy	Pharmacy and retail products
	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

Appendix 2 – Summary of Underlying Investments at FY 2017 (2/5)

Fund/Company/Project	Company/Project	Principal Product/Service
Bluebay (BICC 1)	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
	Openmind	Consolidated messaging platform for mobile operators
	Rye River	Irish Craft Beer brewer and agent distributor
	Sigma Communications	Seller of professional communications systems
	Weston Office Solution	Flexible workspace provider
BMS	Adtower	Out of home advertising
	Anam	A2P revenue protection for mobile network operators
	Blue Tree Systems Limited	Trailer and vehicle telematics solutions
	Coolnagour T/A iCabbi	Taxi dispatch software
	Glantus	Developer and supplier of software solutions
	Obelisk	Professional engineering services
	Platform Capital	Wholesale financial services
	RAPT Touch Ltd	Touch Technology
	SME Finance and Leasing Solutions	Provider of leasing finance
	Urban Volt	Light as a service
	Welltel	Communications hardware and services
	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 (GSLs)	Cash-in-transit and money processing
	Lily O'Briens	Manufacturer and distributor of chocolate
	Payzone	Multi-channel payment solutions
	Sam McCauley	Retail Pharmacy Group

Appendix 2 – Summary of Underlying Investments at FY 2017 (3/5)

Fund/Company/Project	Company/Project	Principal Product/Service
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
Cherrywood	Cherrywood	Enabling infrastructure works to unlock residential development housing
Cubic	Cubic	Connectivity/software company
Daa	Dublin Airport	Commercial semi-state airport company
DAD Property	DAD Property	Pilot project to deliver a sustainable solution to social and affordable housing requirements
Dasos	Dasos	Invests directly in forestry plantations diversified across Ireland
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
	Sim Local	Local sims for international travellers
Draper Esprit	What Clinic	Medical treatment search portal
	Zapa Technologies	Telecom expense and value management
Finance Ireland*	Clavis	Reference data quality solutions
	CurrencyFair Ltd	P2P Currency Exchange
First Forestry Fund	1,600 companies supported	
Fountain	First Forestry Fund	Invests directly in forestry plantations diversified across Ireland
	Inflection Biosciences	Developing small molecule therapeutics for the treatment of cancer.
	Inflazome	Inhibitors of the NLRP3 inflammasome
	Mainstay Medical	Manufacturer of medical device for treatment of chronic lower back pain
	Neuromod Devices Limited	Medical devices
	Opsona Therapeutics	Developer of drugs for the treatment of autoimmune and inflammatory diseases
	Vivasure Medical	Research and Development medical device company
Frontline	AQ Metrics	Risk/Compliance technology
	Boxever Ltd	SaaS customer intelligence platform for airline and travel industry
	Boxfish	Second screen big data analytics
	Brightflag	Business intelligence for legal spend management
	BuildingEye	Planning permission technology
	CurrencyFair Ltd	P2P Currency Exchange

Appendix 2 – Summary of Underlying Investments at FY 2017 (4/5)

Fund/Company/Project	Company/Project	Principal Product/Service
Frontline	Drop GoLately Linked Finance PageFair Pointy Ostream Roomex Siren Tandem HR Verifly	Connected kitchen products Child car seat P2P SME lending marketplace Adblocking software Putting shops online automatically Mobile sales enabling service Hotel Booking Platform Business intelligence HR Software as a service for talent management Drone technology
GMI	Genomics Medicine Ireland	Creation of population database
Greencoat Renewable	Greencoat Renewable	Renewable energy infrastructure company
Highland Europe	AMCS Malwarebytes Jampp	Software solutions for the waste management industry Anti-malware software Data-driven mobile app marketing platform
InsideSales	InsideSales	Sales acceleration software
Irish Infrastructure Fund	Convention Centre Dublin Cyclone Wind Farm Portfolio Enet Towercom Limited Valley Healthcare	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 Managed bandwidth and infrastructure access telecom services Largest independent telecom tower / mast owner in the Republic of Ireland and owns/controls 406 telecom tower/mast sites Primary care centres
Irish Water	Irish Water	National service provider of water and treatment of wastewater
Investec Ventures	Accuris Networks AMCS Betapond Ltd BlueTree Davra Networks Diona Technologies Ferfics HeyStaks Technologies Hypergrid Mick's Garage Rainmaker Business Technologies RAPT Touch SilverCloud Health Terminal Four Solutions Vearsa Zamano	WiFi off-load and roaming technologies Software solutions for the waste management industry Marketing app provider for social networks Developer of GPS fleet software, telematics and vehicle tracking solutions Management system for Internet of Things devices for Cisco distributed networks Diona is addressing the demand for mobile solutions in the HHS market The company designs and develops components (radio frequency switches) HeyStaks enables users to collaboratively search the web using search engines Private cloud and security software The company e-tails car parts and is Ireland's leading on-line car-parts retailer Provider of business intelligence and performance software to the airline sector Develops multi-touch screen technologies for incorporation into large screens SilverCloud Health Limited provides online therapeutic solutions via tailored clinical programs Developer of enterprise web content management software for the higher education market globally Helps traditional publishers distribute electronic copies of their books ("eBooks") Zamano is a mobile marketing and mobile products company
Kaseya	Kaseya	IT solutions to support the IT industry
Kilkenny Regeneration	Kilkenny Regeneration	Urban regeneration project

Appendix 2 – Summary of Underlying Investments at FY 2017 (5/5)

Fund/Company/Project	Company/Project	Principal Product/Service
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
Man Aalto	3 sites	Residential development fund
Malin	AN2H Discovery NeuVT Limited Seranus 3D4 Medical	Designs novel small molecule therapeutics Develops vascular devices Specialises in in-licensing, registering and commercialising certain approved therapeutics to address unmet needs in the African market Develops medical, educational and health fitness apps
MilkFlex	MilkFlex	Dairy loan repayment fund
NTR Wind 1	2 Rol Projects	Wind Energy
Polaris Partners	Boxever Novaerus InsideSales Profitero GMI Voysis	SaaS customer intelligence platform for airline and travel industry Manufacturer of wall mounted airborne pathogen control devices Sales acceleration software Competitive pricing, intelligence and e-commerce insights for brand manufacturers and retailers Human genomic sequencing Voice AI platform
Quadrant	QREA Financing	Financing office development
RPFP	RPFP	Pilot receivables purchase facility
Seroba Kernel	Atlantic Therapeutics Novate Medical Opsona Therapeutics Veryan Holdings	Manufacture of Devices for treatment on Incontinence Convertible vena cava filter for prevention of pulmonary embolism Developer of drugs for the treatment of autoimmune and inflammatory diseases Development of stents with a unique 3D geometry, for treatment of vascular disease
Silicon Valley Bank*	15 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	WLR Cardinal	Financing of commercial real estate
Quadrant	QREA Financing	Financing office development
RPFP	RPFP	Pilot receivables purchase facility
Seroba Kernel	Atlantic Therapeutics Novate Medical Opsona Therapeutics Veryan Holdings	Manufacture of Devices for treatment on Incontinence Convertible vena cava filter for prevention of pulmonary embolism Developer of drugs for the treatment of autoimmune and inflammatory diseases Development of stents with a unique 3D geometry, for treatment of vascular disease
Sofinnova	Innocoll	Collagen based drug delivery platform
Swrve	Swrve	Mobile marketing automation software platform
WLR Cardinal	WLR Cardinal	Financing of commercial real estate

*Note: this appendix does not include a small number of investees where confidentiality precludes disclosure of investee names.
This appendix excludes investments where capital is committed but not invested as at 31st December 2017

Appendix 3 – Assumptions, Methodology and Disclaimer

The NTMA adopts a **conservative approach** to all data and in many cases excludes data where ISIF does have an impact but it is difficult to quantify.

Assumptions and Methodology

1. The NTMA collected data on 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. In cases where ISIF finances a specific project in a large entity, the NTMA only captures the economic impact for the project and not any benefits it may bring to the wider corporate entity.
4. The Fund does not capture the economic impact from investments the ISIF has exited which could be significant.
5. There is some time lag between the achievement of economic impact and the commitment to a 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.
6. 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.
7. 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.
8. The regional distribution of capital deployed is weighted based on the capital deployed as at 31st December 2017 and based on 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.
9. The regional distribution of underlying investees employment and gross value added 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.
10. The majority of underlying investees provided the number of jobs and wages paid as at 31st December 2017 directly. There are some exceptional cases where the data was unavailable and the following assumptions were applied:
 - i. In a very small number of construction projects (3) where reliable headcount was not available, we evaluated the drawn capital of the project over the 12 month period to 31st December 2017 and applied a Construction Industry Federation multiplier to the capital expenditure to estimate the number of employees.
 - 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.
11. 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.
12. Exports are weighted based on turnover and an estimate provided by the underlying investee of the percentage of turnover generated from exports.

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