



Gníomhaireacht Bainistíochta an Chisteáin Náisiúnta
National Treasury Management Agency

Ciste Infheistíochta Straitéisí d'Éirinn
Ireland Strategic Investment Fund

IRELAND STRATEGIC INVESTMENT FUND

ECONOMIC IMPACT REPORT AS AT 30 JUNE 2015

21 DECEMBER 2015

Summary Metrics – Irish Portfolio

	31.12.2014 (12 months)	30.06.2015 (6 months)		
Discretionary Portfolio (Global ¹⁺ Irish Portfolio)	€7,171m	€7,637m	+€466m ²	✓
ISIF – Capital Committed	€1,424m	€1,474m	+€50m/+3.5%	✓
Project Size in Ireland/Co-investor Multiple	€3,135m/2.2x	€3,788m/2.6x	+€653m/+20.8%	✓
Market Value of Capital Invested	€726m	€848m	+€122m ³	✓
Employment	12,005 jobs	12,190 jobs	+185/+1.5%	✓
ISIF Capital Deployed by Region	44% Dublin/56% ex-Dublin	50% Dublin/50% ex-Dublin	N/A	
Turnover ⁴	€711m	€645m		✓
Exports (as a % of Turnover)	28%	35%		✓
Irish Based Wage Bill ⁴	€432m	€218m		✓
GVA (Profit + Depreciation + Wage Bill) ⁴	€447m	€276m		✓
			Positive run rate on all metrics	✓

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

²Performance of the Discretionary Portfolio to 30.06.2015 of +3.0% with the additional increase in capital due to capital inflows from the Directed Portfolio.

³The movement in the market value of capital invested between 31.12.2014 and 30.06.2015 is largely due to the additional deployment of capital with the balance of the increase attributable to valuation gains.

⁴Metrics are not directly comparable given 2014 is a 12 month period and H1 2015 is a 6 month period.

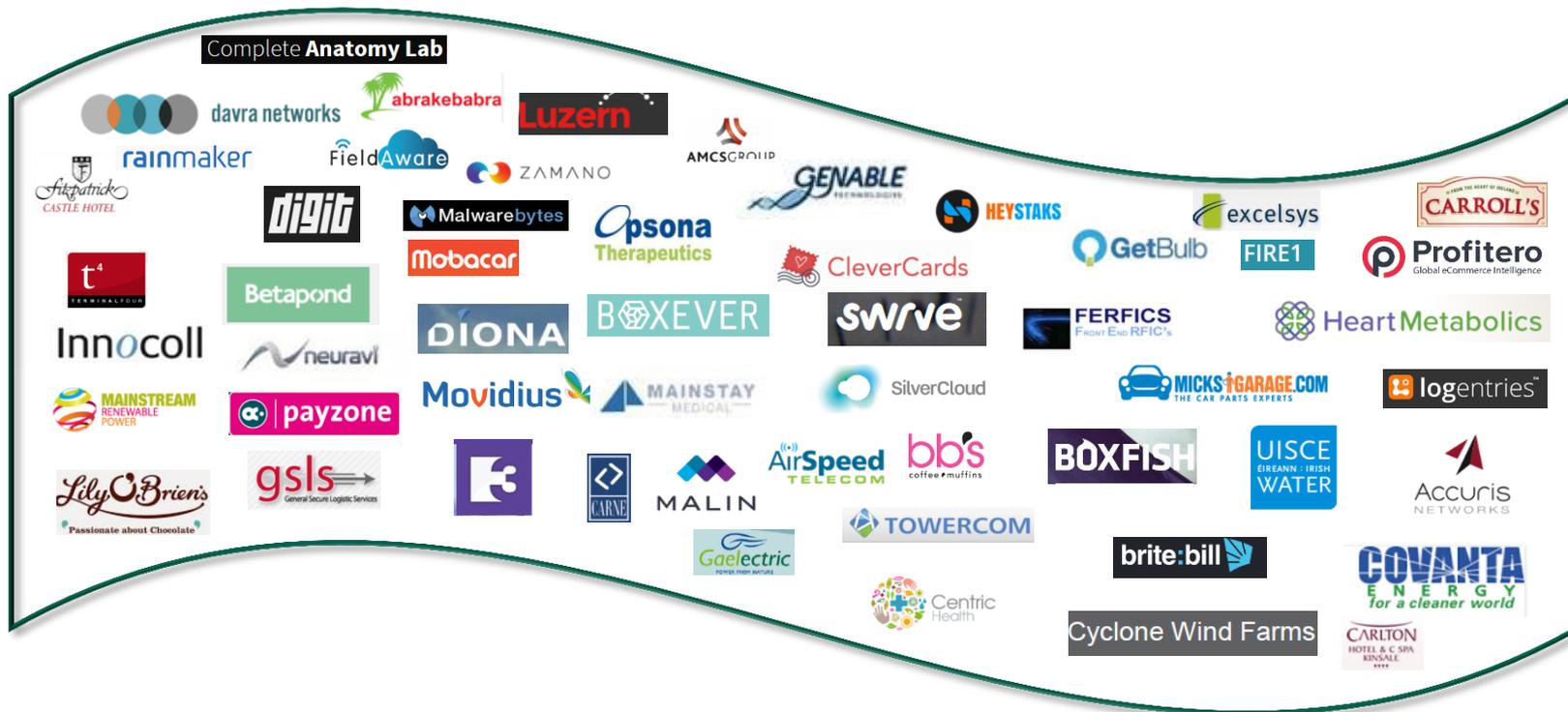
Executive Summary

- **The NTMA collected data on 85 underlying investees.** While economic impact data is somewhat complicated, the NTMA has adopted a structured approach to the collection and analysis of the data (comprehensive set of assumptions, methodology and disclaimer outlined in Appendix 1).
- **ISIF committed €1,474m to Irish investments as at 30 June 2015, with a total of €3,788m capital committed to Ireland** including third party capital – the ISIF has an co-investor multiple of 2.6x across the portfolio (slide 5).
- An internal assessment of the high or low economic impact of commitments is carried out based on the persistence of the economic impact. **As at 30 June 2015 the high/low split is 73% high and 27% low**, but following the execution of lower economic impact transactions in H2 2015 the high/low split is closer to the target for end 2015 of 60% high and 40% low (slide 6).
- While the ISIF is not required to target regional investment opportunities, the **economic impact is regionally balanced with >50% of jobs supported outside of Dublin and 50% of capital invested outside of Dublin** – this is consistent with data on regional GVA within Ireland produced by the CSO (slide 7).
- **Gross Value Add (GVA) of €276m for H1 2015 – SMEs are the biggest contributors of GVA within the Fund** (slide 8).
- **Permanent/persistent jobs account for 87% of total jobs** with the remaining 13% of jobs generated from fixed term investments that are typically project-based. While these employees may move onto other projects, ISIF only accounts for the jobs for the period of its investment (slide 9).
- **Persistent employment increased by 869 jobs, due to a steady increase in employment across the majority of the underlying investees**, whereas short term jobs decreased by 684, due to the completion of PPP projects. The ISIF Unit expects employment to vary with the life of projects. This will be particularly pronounced where companies or projects are completing a capital expenditure program, which can see employment peak and then reduce over time.
- Turnover, exports and EBIT significantly increased for the 6 month period to June 2015 vs. the 12 month period to December 2014 (on an annualised basis).
- **€613m committed year to date with further transactions expected to reach financial close before year end** (slide 12).



Snapshot of Underlying Investees at 30 June 2015

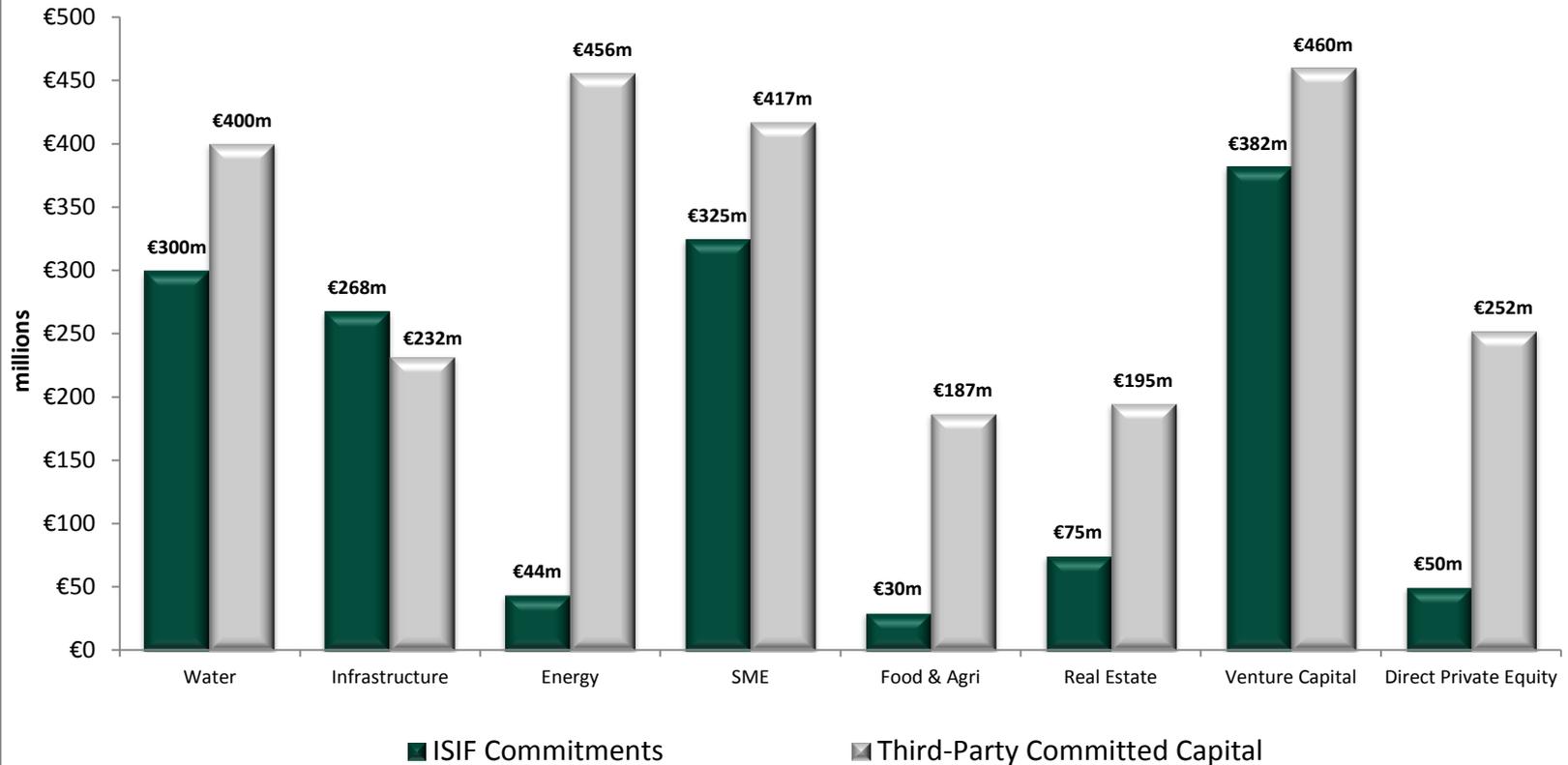
- We surveyed our investment companies and collected data from 85 entities at 30 June 2015 (see Appendix 2).
- The reported economic impact activity is generated from €848m of investments. A significant majority (71%/60 companies) of the underlying companies are invested in through venture capital funds.



ISIF supporting Irish-based companies through commercial investments.

€3.8bn Capital Committed to Ireland – ISIF & Co-investors

€3,788m Total Committed Capital to Ireland – 2.6x multiple as at 30 June 2015

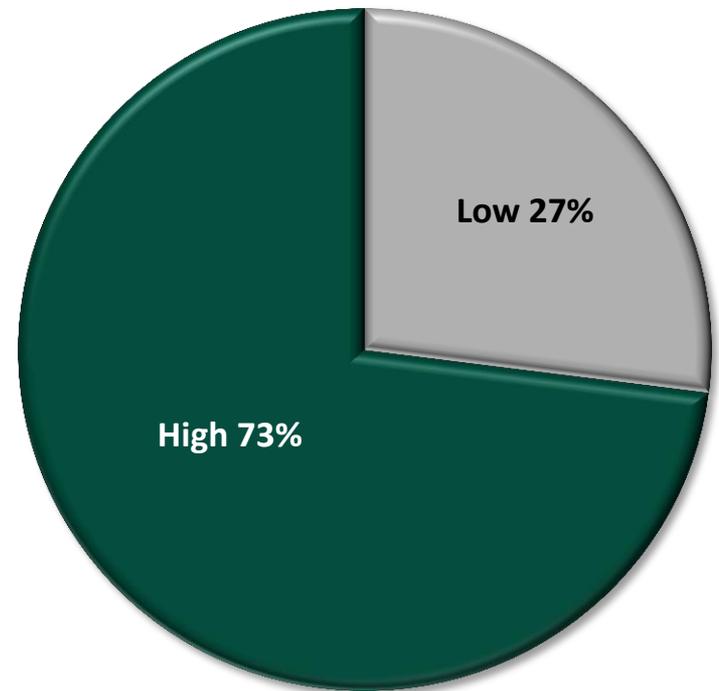


€1,474m ISIF committed capital with €848m invested at 30 June 2015 across a range of sectors.
(Appendix 3 for individual investments)

High and Low Economic Impact

- The ISIF Unit seeks to allocate the majority of its capital to priority sectors and investments where the highest economic impacts are likely, while also ensuring that all investments satisfy the Fund's commercial return objectives.
- The ISIF will target approximately 80% of the ISIF's capital towards investments where the highest and most sustainable economic impacts are likely with the remaining portion available for investments which will provide short term gains, act as an accelerator of market activity or address instances of market dysfunction.
- This 80:20 split is a long-term target, with 60:40 identified as the initial guideline for year end 2015.
- 73% of the committed capital as of 30 June 2015 is in high economic impact transactions, with 27% in lower economic impact transactions. Following the execution of lower economic impact transactions in H2 2015, the high/low split is now closer to the 60%:40% 2015 target.

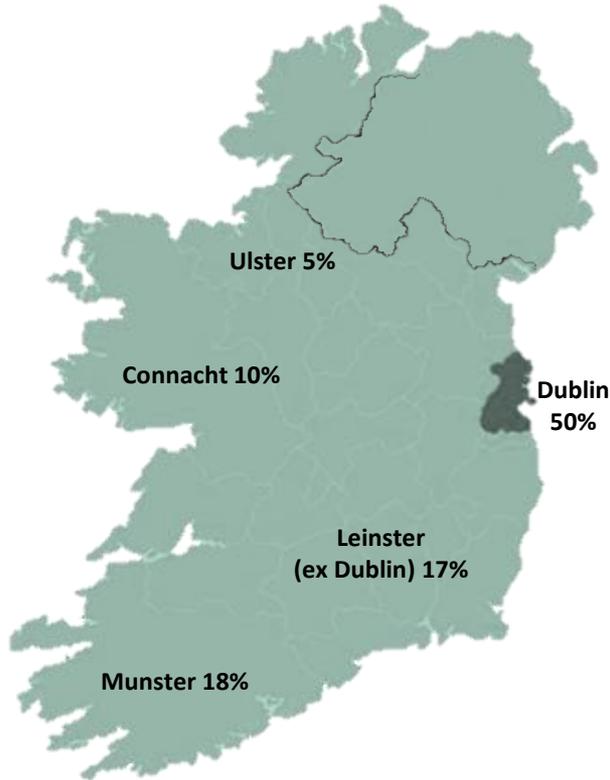
Committed Capital Economic Impact as at 30/06



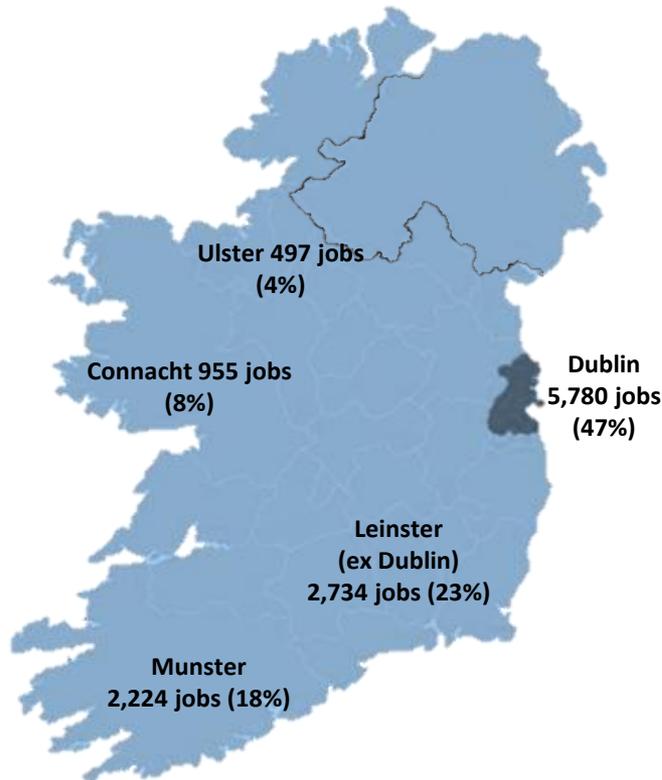
73% high economic impact with 27% in lower economic impact transactions as at 30 June 2015.

Regional Analysis

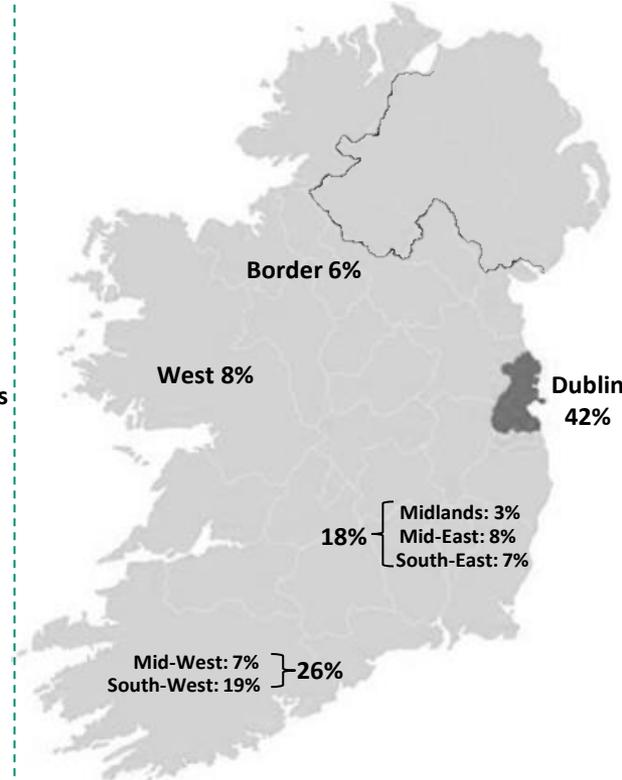
ISIF Capital Deployed by Region¹



Employment by Region



CSO Gross Value Added per Region (2012)²



¹Companies regionally apportioned according to turnover or population where turnover split not available and weighted based on capital deployed.

²Regions based on Eurostat/CSO methodology. Gross Value Added (GVA) is a measurement of economic activity in an area. Source: CSO

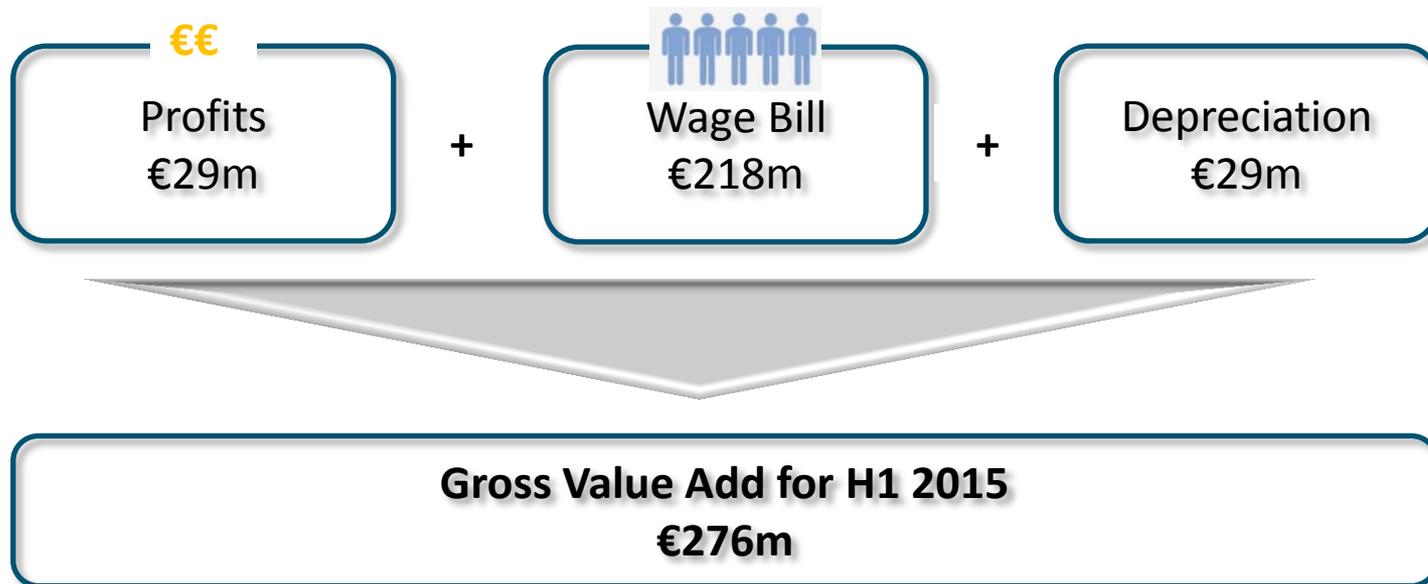
**ISIF is not required to target regional investment opportunities.
Amounts invested to date and employment are broadly consistent with regional GVA data.**

Gross Value Add

Gross Value Add (GVA) is a standard measure of economic activity, employment is a subset of GVA – GDP comprises the aggregate of GVA at enterprise level across the economy.

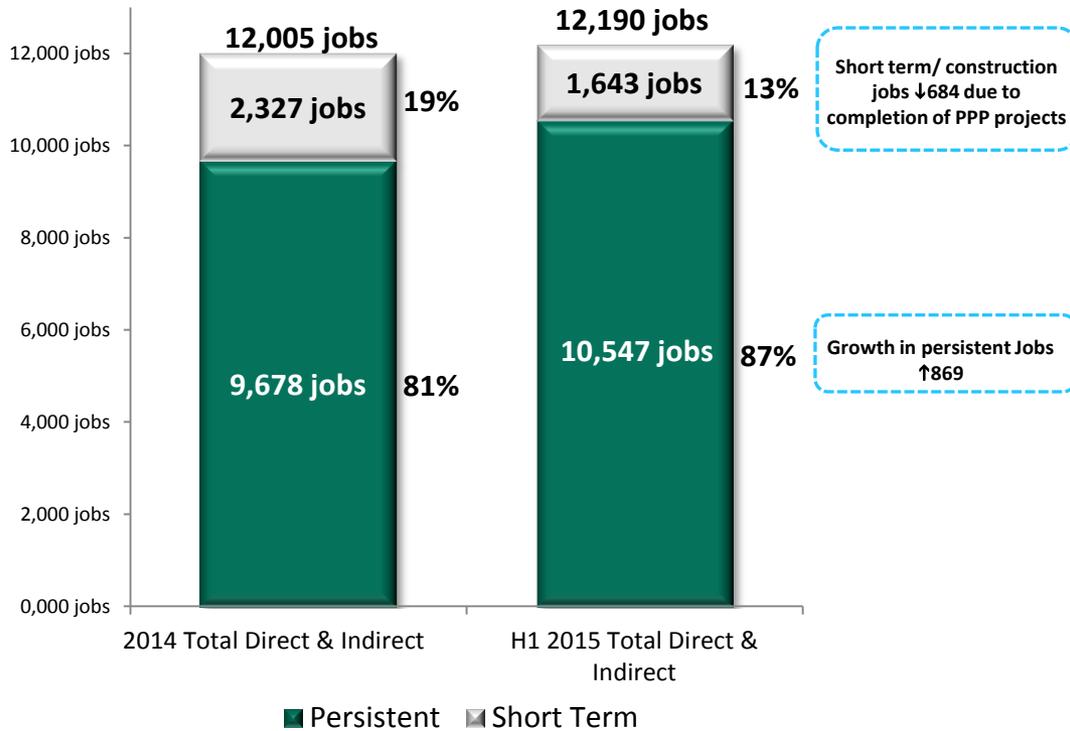
Some investments will contribute significantly to employment whereas some projects will contain lower levels of employment but higher levels of profitability. Both contribute to the GVA and therefore GDP of the State and the calculation of GVA is indifferent as to whether it comes from profits or wage bills.

Based on €848m invested as at 30 June 2015 and the H1 2015 GVA annualised (€276m x 2) – Economic Impact/GVA Payback is a little over 18 months.

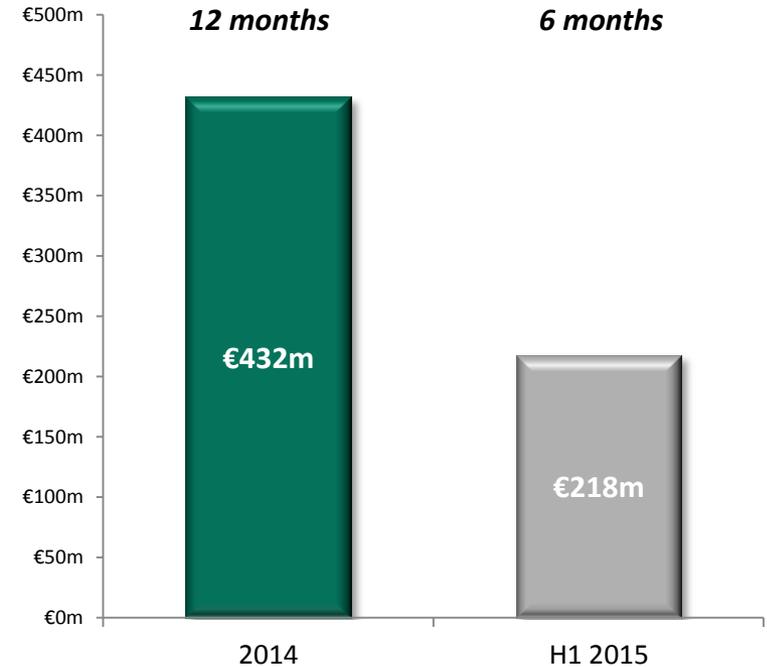


Underlying Investees Employment

Irish Based Employment



Irish Based Wage Bill



1,438 jobs for every €100m invested

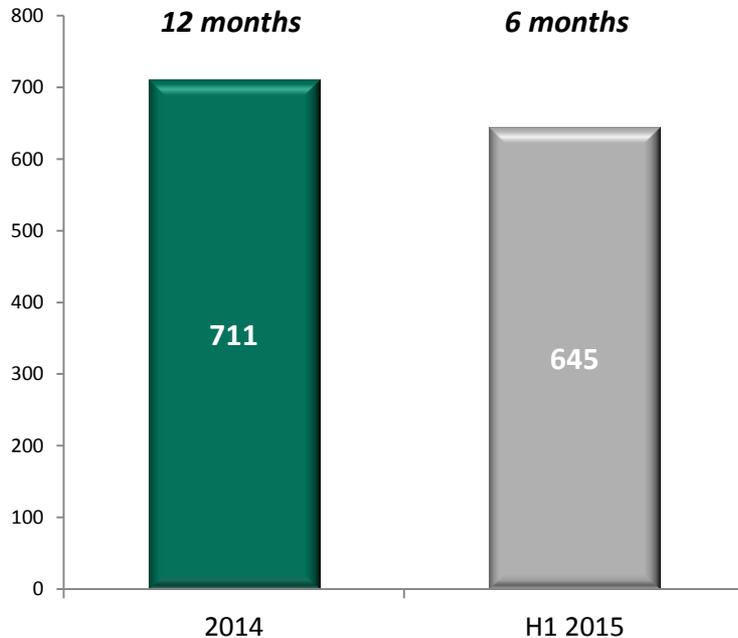


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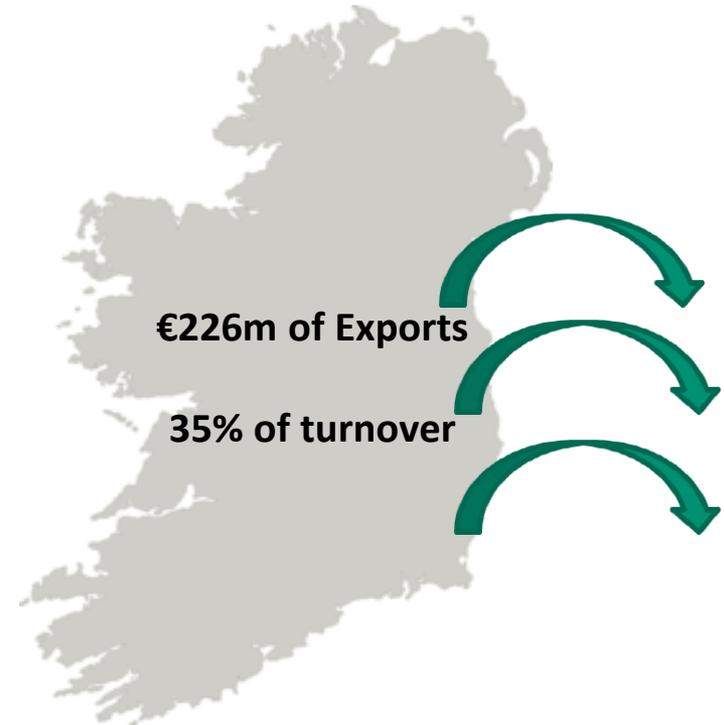
Underlying Investees Turnover

Underlying Investee Turnover Analysis¹



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

Exports H1 2015²

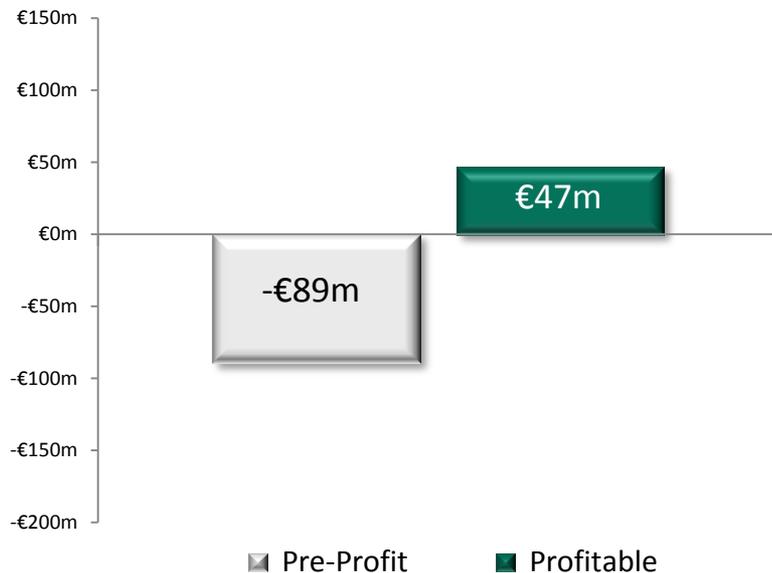


²Exports significantly impacted by one off transactions – exports for FY 2014 €197m

Significant turnover generated from the underlying investees despite the number of early stage companies, with a significant portion of turnover from exports (35%).

Underlying Investees Profitability Analysis

FY 2014 Underlying Investees Earnings (12 months)



H1 2015 Underlying Investees Earnings (6 months)



The Pre-profit category is for early stage businesses. The profitable category accounts for profits but also includes mature companies which have made a loss.

Positive profit trajectory in H1 2015 vs. FY 2014

Given the current weighting of venture capital investees (71%) many of the underlying investees through the venture capital funds are early stage pre-revenue/pre-profit companies.

Year to Date 2015 Transaction Highlights



€50m

Irish company that applies capital and operational expertise to private, pre-IPO, pre-trade sale operating businesses in dynamic and fast growing segments of the life sciences industry.



€11m

Leading early stage investor in promising software companies (in big data, cloud, internet and mobile sectors) across Europe from headquarters in Dublin and presence in London.



€45m Funding Round

Investment in global leader in end-to-end, integrated software solutions for the waste and recycling industry to fuel continued global expansion

**HIGHLAND
CAPITAL PARTNERS**

€10m

Longstanding Pan-European growth equity investor in technology businesses from its offices in Geneva, London and Dublin



\$30m Funding Round

Leader in the mobile marketing engagement market backed by a high quality investor base to strengthen its R&D base in Dublin in order to continue its strong recent growth trajectory



€150m

Senior Debt to fund the capital programme.

Activate Capital

Innovative funding with capital strength

€325m

Home-building finance joint venture with leading global investment firm KKR.



€50m

Platform for financing Irish office development projects.

€613m committed year to date with further transactions expected to reach financial close before year end with continued strong pipeline



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APPENDICES

Appendix 1 – Assumptions, Methodology and Disclaimer

Assumptions & Methodology

1. 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.
2. 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.
3. The financial metrics as at 30 June 2015 (i.e. the size of the discretionary portfolio, capital committed, capital invested) are preliminary and unaudited.
4. Surveys provided in USD were converted to EUR, income statement metrics were converted to EUR using a 6 month average FX rate sourced from Bloomberg.
5. The high/low economic impact split is based on an internal NTMA assessment of the economic impact of the capital committed as at 30 June 2015. High economic impact is defined as persistent additional economic impact whereas low economic impact is defined as either short term economic impact or an accelerator investment (slide 6).
6. The regional distribution of capital deployed (slide 7) is weighted based on the capital deployed as at 30 June 2015 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 (CSO).
7. The regional distribution of underlying investees employment (slide 7) is based on data provided by the underlying investees detailing the number of jobs regionally. Where underlying investees operate on a nationwide basis and a reliable regional employment split is unavailable, the total number of jobs is weighted by population, this population data is sourced from the Central Statistics Office (CSO).
8. The majority of underlying investees (83 out of 85 underlying investees) provided the number of jobs and wages paid as at 30 June 2015 directly. There are some exceptional cases where the data was unavailable and the following assumptions were applied:
 1. In the case of construction projects where reliable headcount was not available, we evaluated the drawn capital of the project over the 6 month period to 30 June 2015 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 9).
 2. 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.
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 9).
10. Exports are weighted based on turnover and an estimate provided by the underlying investee of the percentage of turnover generated from exports (slide 10).
11. The underlying investee profitability analysis (i.e. the earnings before interest and tax/EBIT) 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 11).

Disclaimer

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Appendix 2 – Summary Description of the Underlying Investments (1/4)

Fund	Company	Principal Product/Service
Arch	Carrick Therapeutics	Drug development targeting cancer resistance
	Evolv-x	Novel electronic materials derived from a self-learning, closed-loop synthetic reactor system
	Movidius	A fabless semiconductor company in computer visioning sector
Atlantic Bridge	Boxfish	Developer of second screen television platforms
	Fieldaware	Provider of mobile, cloud-based field service solutions
	Movidius	A fabless semiconductor company in computer visioning sector
	Swrve	Mobile marketing automation software platform
Bluebay	Abrakebabra Investments	Leading fast food franchise owner and operator in Ireland with five trading businesses
	Airspeed Telecom	Irish broadband provider offering high performance internet for enterprise, public sector and SME business
	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
	Gaelectric	Irish-based developer of onshore wind farms in Ireland and the US and offshore wind farms in Ireland
	Killiney Hotels (FitzPatrick Castle Hotel)	Hotel and conference centre
	Kinsale Hotel & Spa	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
CCI	TV3	Ireland's only independent free-to-air commercial broadcasting chain
	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
China Ireland Fund	Payzone	Multi-channel payment solutions
	Accuris Networks	WiFi off-load and roaming technologies
	Fieldaware	Provider of mobile, cloud-based field service solutions
Covanta	Movidius	A fabless semiconductor company in computer visioning sector
	Dublin Waste to Energy	Thermal waste treatment and electricity production
Delta Partners	Betapond	Marketing app provider for social networks
	BriteBill	Provides bill presentment solutions to telecommunications and utility companies

Appendix 2 – Summary Description of the Underlying Investments (2/4)

Fund	Company	Principal Product/Service
Delta Partners	Clavis	Reference data quality solutions
	Cleverbug (CleverCards)	Personalised greeting cards and gifts
	Cloudium	Thin Client software and hardware solutions
	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	
Draper Esprit	Datahug	SaaS relationship intelligence management/CRM platform
	GetBulb	Data visualisation software
	Mobile Travel Technologies	Develops mobile apps, mobile web and mobile technology products for airlines and travel management companies
	Movidius	A fabless semiconductor company in computer visioning sector
Forestry	First Forestry Fund	Invests directly in forestry plantations diversified across Ireland
Fountain	Genable Technologies	A development stage gene therapy company for the treatment of inherited diseases
	Innocoll	Collagen based drug delivery platform
	Mainstay Medical	Manufacturer of medical device for treatment of chronic lower back pain
	Neuravi	Developer of clot retrieval medical devices.
	Opsona Therapeutics	Developer of drugs for the treatment of autoimmune and inflammatory diseases
	Trino Therapeutics	Drug Discovery and early drug development company that focuses on anti inflammatory therapeutics
Vivasure Medical	Research and Development medical device company	
Highland Europe	AMCS	Software solutions for the waste management industry
	Malwarebytes	Anti-malware software

Appendix 2 – Summary Description of the Underlying Investments (3/4)

Fund	Company	Principal Product/Service
Investec Ventures	Accuris Networks	WiFi off-load and roaming technologies
	AMCS	Software solutions for the waste management industry
	Betapond	Marketing app provider for social networks
	BlueTree	Developer of GPS fleet software, telematics and vehicle tracking solutions
	BriteBill	Provides bill presentment solutions to telecommunications and utility companies
	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
	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	
Irish Infrastructure Fund	Cyclone Wind Farm Portfolio	Portfolio of 10 wind farms located in both the ROI and NI, generating electricity for sale into the Single Electricity Market
	Towercom Limited	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	FIRE1	Developing a novel, therapeutic medical device for a major unmet medical need.
	Alexo Therapeutics	Developer of cancer immunotherapy products and services
Malin	AN2H Discovery	Designs novel small molecule therapeutics
	Emba Medical	Develops vascular embolisation devices
	Emba Neuro	Develops embolisation devices for application in neurovascular field
	BD4 Medical	Develops medical, educational and health fitness apps.

Appendix 2 – Summary Description of the Underlying Investments (4/4)

Fund	Company	Principal Product/Service
Polaris Partners	Boxever	SaaS customer intelligence platform for airline and travel industry
	Logentries	Developer of web-based log management services
	Novaerus	Manufacturer of wall mounted airborne pathogen control devices
	Profitero	Competitive pricing, intelligence and e-commerce insights for brand manufacturers and retailers
PPPs	N11 Arklow Rathnew PPP	Construction and O&M of roads
Seroba Kernel	Apica Cardiovascular	Manufacturer of cardiovascular devices
	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-politeal bypass procedure
	Veryan Holdings	Development of stents with a unique 3D geometry, for treatment of vascular disease.
Silicon Valley Bank	Fifteen underlying investees – bank confidentiality precludes disclosure of borrower names.	
Sofinnova	Innocoll	Collagen based drug delivery platform
WLR Cardinal	Investment 1	Apartment development
	Investment 2	Commercial real estate

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



Appendix 3 - Investment Overview 30 June 2015

Project/Fund	Commitment Year	Commitment €m	
Irish Water	2013/14	300	
Water Total		300	
PPP N11	2013	18	
PPP Total		18	
Irish Infrastructure Fund	2011	250	
Infrastructure Total		250	
Covanta Poolbeg Project	2014	44	
Energy Total		44	
Carlyle Cardinal	2013	125	
Bluebay Notes	2013	200	
SME Total		325	
Forestry	pre 2011	30	
Food & Agri Total		30	
WLR Cardinal CRE Mezzanine Fund	2014	75	
Real Estate Total		75	
Malin	2015	50	
Direct Private Equity Total		50	
Atlantic Bridge Fund II	pre 2011	10	
Delta III	pre 2011	23	
DFJ Esprit III	pre 2011	20	
DFJ X	pre 2011	10	
Fountain I	pre 2011	15	
Investec Partners	pre 2011	18	
Polaris VI	pre 2011	36	
Seroba Kernel II	pre 2011	15	
Sofinnova Venture Partners VIII	2011	9	
Highland Technology Europe	2012	10	
SVB Capital Strategic Investors Fund V	2012	20	
China Ireland Growth Technology Fund	2013	36	
Lightstone Ventures I	2013	10	
Strategic Investors Fund VI	2013	19	
WestSummit Global Technology Fund	2013	36	
Fountain II	2014	15	
Arch VIII	2014	20	
Atlantic Bridge Fund III	2014	20	
Polaris VII	2014	40	
Venture Capital Total		382	
Total Live Commitments as at 31 Dec	Expired	1,474	
Expired Commitments			
PPP Schools Bundle 3	2012	2015	14
Better Capital	2013	2014	50
Total Expired Commitments		64	
Total Live & Expired Commitments		1,538	