



IVCA

*The Economic
Impact of
Venture Capital
in Ireland - 2005*

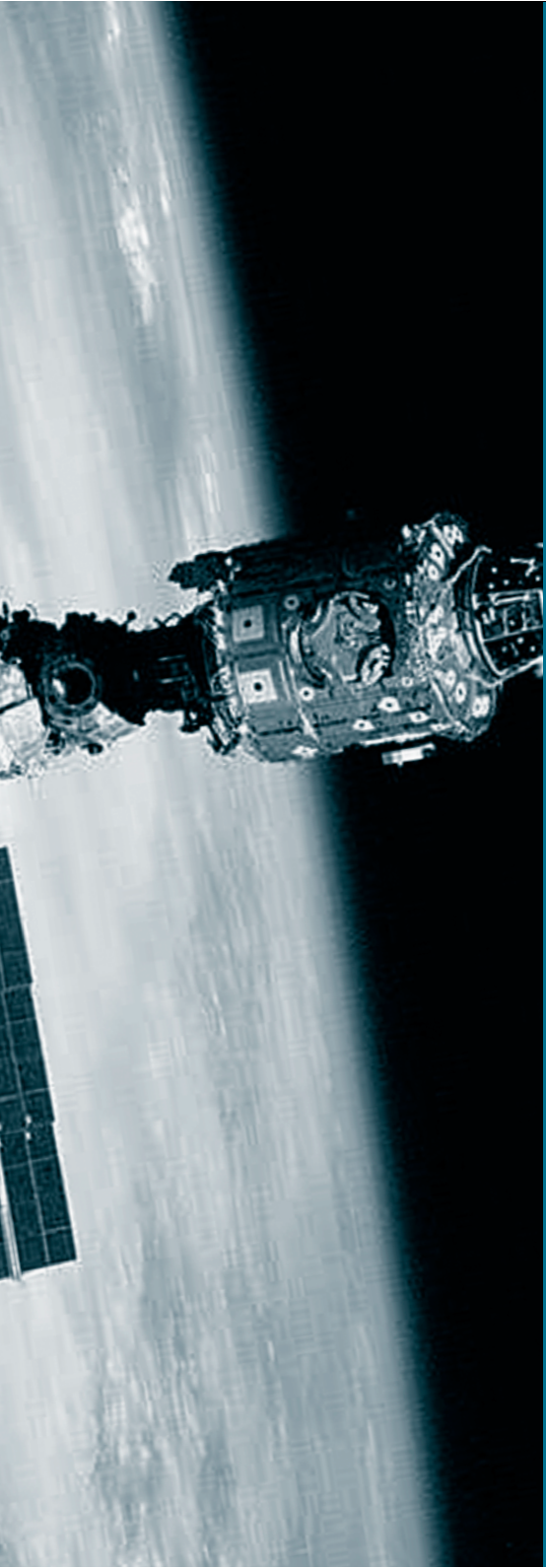




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Foreword

The Irish Venture Capital Association, established in 1985, represents Irish based venture capital firms which account for 95% of the €1.2bn invested by Irish VCs in Ireland since the year 2000. The Association has nineteen full members and thirty five associate members.

The story of the Irish venture capital industry has been one of growth and success and one where venture capital companies have encouraged entrepreneurship and provided support and assistance to innovative companies, mainly in the high technology sector of the economy.

This is the second in depth study of the economic impact of venture capital on the Irish economy. The study, conducted by the Centre of Entrepreneurial Studies in UCD, was carried out between January and September 2006. The study is unique in that it is a census of VC backed companies in Ireland and, as such, it provides very useful data for policymakers, investors and industry practitioners. Indeed the results of the first study were used by the Association and other bodies to promote the effectiveness of Venture Capital investment in Ireland and by policy decision makers to promote the continuation of Government funding of the Seed and Venture Capital Programme 2006/2010.

The 2005 study shows that the VC industry continues to be a major driving force in the development of a knowledge-based economy in Ireland.

It is clear that this study is of sufficient importance to justify its continuation on an annual basis. It has become an authoritative source of information about our industry and its social and economic impact. Its value will deepen as the age trend analysis expands from its start date in 2003.

I would like to take this opportunity to thank the venture capital companies for providing the necessary data and Professor Frank Roche of the Centre of Entrepreneurial Studies in UCD for conducting the study.

Niall Carroll
IVCA Chairman
February 2007



Expenditure on R&D by IVCA backed high technology companies represents 23% of total Irish indigenous spend on BERD.

Executive Summary

Venture capital backed companies continue to provide a substantial impetus to the ongoing development of a knowledge-based economy in Ireland and to the achievement of public policy objectives in this regard. This is the key finding of this study of the economic impact of venture capital companies in 2005.

Expenditure on R&D by IVCA backed high technology companies represents 23% of total Irish indigenous spend on BERD. In 2005 IVCA backed high technology companies spent €89m on research and development, an increase of 34% on 2004. This compares with an increase in BERD from indigenous companies of 11%.

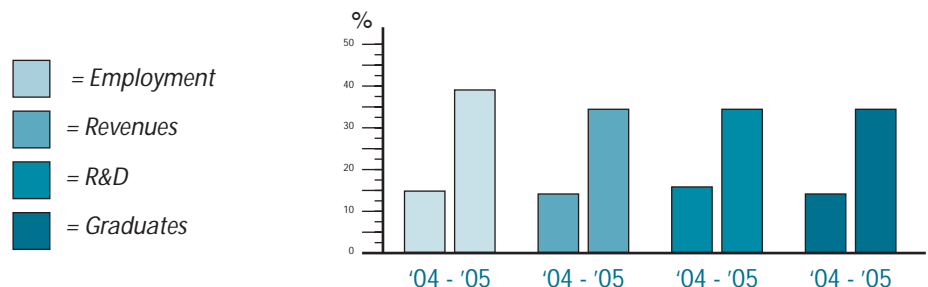
Graduates represent 74% of the workforce. In 2005 IVCA backed high technology companies employed 2,687 graduates, an increase of 25% on 2004.

In 2005 IVCA backed high technology companies increased revenues in the Republic of Ireland by 81.6%. This increase reflects a very strong domestic economy.

In 2005 IVCA backed high technology companies generated exports of €239m, an increase of 6% on 2004. **This represented export intensity of 63% of revenues compared to an intensity of 33% within the UK software and computer services sector.**

In 2005 IVCA members backed twenty-three new companies, **96% of which were in the early stage high tech sector.**

Momentum in growth rates is escalating on a year on year basis:



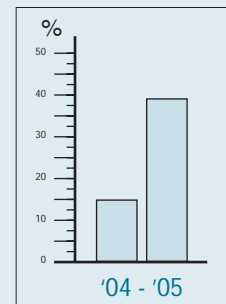


Venture capital boosts the Irish economy

Employment

Venture backed companies increased employment in 2005 by 39.1%. This increase, compared to that reported in 2004 of 14.6%, indicates that momentum is escalating on a year on year basis.

This 2005 increase compares to an overall increase in employment of 5.1% and to an increase of 8.5% in the Financial and Business Sector. The level of employment at 17,226 may be considered low in terms of overall employment in the economy. However it is growing fast and now represents 6.7% of employment levels in the Financial and Business Sector having increased from a level of 6.1% in 2004 and from 5.6% in 2003.

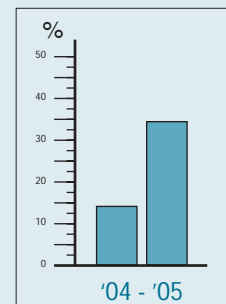


Revenues

Venture-backed companies increased revenues in 2005 by 34.1% to €1.95bn. This increase, compared to that reported in 2004 of 13.7%, indicates that momentum is escalating on a year on year basis.

This 2005 increase compares well with annualised growth rates of 20% from venture-backed companies in the UK.

Revenues in high technology companies are growing even faster, showing an increase of 40.4%.



Investment

Venture-backed companies raised €211m in 2005 compared to €242m in 2004. This lower figure reflects the fact that the venture capital industry is coming to the end of the current investment cycle.

High technology companies accounted for 84% of all VC investment in 2005. This is the highest technology weighting in Europe, where the average is 17% with only three countries investing greater than 50% in high technology companies. Thirty four percent (34%) of this capital was invested into start up and early stage companies compared to a European average of 23%.

Venture capital invests in the knowledge based economy

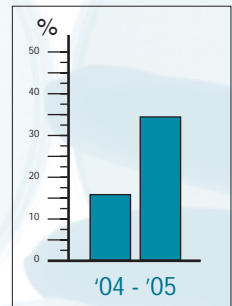
An in depth analysis of IVCA backed high technology companies shows that they are knowledge based and export led, particularly among younger companies.

Research and Development Intensity

IVCA backed high technology companies invested €89m in R&D in 2005, an increase of 33.7% on 2004. This increase, compared to that reported in 2004 of 16.6%, indicates that momentum is escalating on a year on year basis.

This 2005 increase compares to growth of 11.1% in BERD (Business Expenditure on Research and Development) by indigenous Irish businesses.

Expenditure on R&D by IVCA backed high technology companies represents 23% of total Irish indigenous spend on BERD. R&D intensity is 24% of revenues in total but in the 0 to 5 year age bracket is at 66%.



Export Intensity

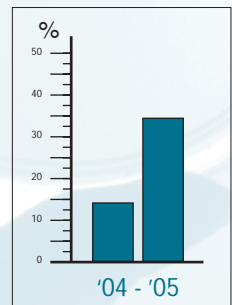
IVCA backed high technology companies grew exports in 2005 by 6.1% to €239m compared to a growth rate of 5.6% from the total Irish computer and miscellaneous business service sector. This represented export intensity of 63% of revenues compared to 33% for UK software and computer services companies. This intensity increases to 69% for companies in the 6 to 10 year age bracket.

Graduate Based Employment

In 2005 graduate employment in IVCA backed high technology companies increased by 25.2%. This increase, compared to that reported in 2004 of 15.4%, indicates that momentum is escalating on a year on year basis.

Graduates represented 74% of the workforce

This graduate % ranges from 82% in companies aged from 0 to 5 years to 63% in companies aged 10+ years.



Sales and Marketing Intensity

In 2005 IVCA-backed high technology companies invested €102m in sales and marketing, an increase of 6.2% on 2004. S&M intensity is at 27% of revenues in total but in companies in the age bracket of 6 to 10 years it rises sharply to 40%.

Focus on the characteristics of Entrants and Exits

An in depth analysis of new IVCA backed companies shows that they are knowledge based and export led.

During 2005 there were 23 new investments and 18 companies sold. A comparison of these companies highlights the fact that the [IVCA continues to invest in early stage high tech companies](#).

A detailed comparison of these companies is summarised in the table below.

As one would expect, when compared to exits, entrants were:

- Younger;
- Typically one tenth the size, both in terms of revenues and employment;
- More high tech;
- Exhibiting a higher propensity of graduate employment, exports and R&D spend.

	Exits	Entrants
Financial Characteristics		
Revenues per company	€23.5m	€2.2m
Employees per company	210	27
Export Intensity	55%	74%
Graduates as % of Employees	22%	53%
R&D as % of Revenues	4%	20%
S&M as % of Revenues	2%	13%
Sectoral Characteristics		
High Tech	78%	96%
Information Technology	61%	44%
Healthcare	11%	26%
Retail & Consumer	28%	17%
Other	0%	13%
Age Characteristics		
0 – 2 Years	0%	30%
3 – 5 Years	28%	43%
6 – 10 Years	28%	9%
10+ Years	44%	17%

Venture Capital in Ireland: Its role in implementing Ireland's National Development Plan 2007 – 2013.

National Development Plan 2007 – 2013

The NDP provides for an indicative investment of €183.7bn in the broad areas of infrastructure, enterprise, human capital and social inclusion over the Plan period. In determining the investment priorities the Government assessed the strengths and weaknesses of the economy. A key weakness identified was the relatively undeveloped Science Technology and Innovation sector, and as a consequence, a high level objective of supporting enterprise innovation and productivity was established. The programmes to achieve this objective were also designed to implement the recommendations of the 2004 report *Ahead of the Curve* by the Enterprise Strategy Group. This report highlighted the need for the continuous development of the indigenous service and manufacturing sectors to provide the engine for growth for future decades.

Investment under the Enterprise, Science and Innovation Priority is estimated at €20bn with €9.4bn spread over the two programmes Science Technology and Innovation and Enterprise Development.

• Science Technology and Innovation (STI) Programme: €6.1bn

The STI programme recognises that Ireland's performance in R&D is behind that of the leading countries. In 2005 the US spend on GERD (gross expenditure on research and development) was 2.7% of GDP, the corresponding European average was 1.95% and in Ireland the spend was 1.21% of GDP. Accordingly it is seen as essential that real competitive strength is developed in this area and a key objective is to increase GERD to 3% of GDP by 2013.

Some €3.5bn is provided to underpin the contribution of the higher education sector. The goal is to place world-class research and world-class people at the centre of the national system of innovation. Science Foundation Ireland (SFI) is central to Ireland's goal of becoming a global knowledge based economy. Through strategic investments under this programme, SFI will help build research of globally recognised excellence and nationally significant importance, particularly in the areas of Biotechnology and Information and Communication Technologies.

The STI plan has set a target to double the number of PhD graduates over its lifespan. *IVCA-backed high technology companies increased their graduate employment in 2005 by 25%. If this annual rate of increase is maintained up to 2013 it will represent a tripling of the graduate employment, indicating that this sector will play a major role in meeting this STI target.* A further €1.3bn will be invested in promoting the maximum development and optimal use of STI in Irish enterprise. The objective is to get more firms involved in doing R&D, to increase the amount of R&D that existing performers are doing, and to raise the quality of the R&D they perform. This programme will primarily be delivered by Enterprise Ireland and IDA Ireland in support of industry relevant R&D and commercialisation during the course of the plan.

Within this context, the STI plan has set a target to increase BERD (business expenditure on research and development, a subset of GERD) to 1.7% of GDP from its current level of 0.8% i.e. to €2.5bn and to increase BERD in indigenous companies to €825m by 2013. Spending on BERD in Ireland needs to double by 2013 (grow by 16% pa) if this target is to be met. **IVCA-backed high technology companies increased their research and development expenditure in 2005 by 34%. If this annual rate of increase is maintained up to 2013, it will represent a quadrupling of the R&D spend, indicating that this sector will play a major role in meeting this STI target.**

- **Enterprise Development Programme: €3.3bn**

Ireland's export and FDI competitiveness has weakened during the last five years. Irish economic success is becoming more dependent on the growth of indigenous companies. This programme recognises that Irish companies need to be able to compete on the international stage and to take advantage of the upside to globalisation by using high value, knowledge intensive activities to support sustainable jobs and relatively high wage rates.

Enterprise Ireland (EI) has identified significant challenges that indigenous companies face in this new economy, namely, a lack of scale, a need for improved management skills, a need to develop international marketing and sales capabilities, a need to exploit state-of-the-art technology and business processes and a need to forge strategic alliances and partnerships. Enterprise Ireland will oversee the investment of €1.7bn to address these issues.

A crucial element to the success and growth of start-ups and growing firms is access to early stage and development capital. In Ireland the principal support for this sector comes from the venture capital industry and in recognition of this, an essential component of EI's strategy is to support the continuing development of the venture capital sector.

Over €1.2bn has been invested by the Irish venture capital industry since the year 2000. In 2005 84% of all venture capital investment was in high technology companies and 34% of the total was into start up and early stage companies. Sixty percent (60%) of IVCA member investment was into information technology and 15% was into healthcare.

Study Methodology

This is the second in depth study of the economic impact of venture capital on the Irish economy. The study, conducted by the Centre of Entrepreneurial Studies in UCD, gathered and analysed the following statistics:

For every company in the portfolios of IVCA members at the end of 2004 and at the end of 2005;

- revenues,
- employment,
- capital raised,
- spend on research and development,
- graduate employment,
- export performance,
- spend on sales and marketing.

For every company supported by non-IVCA venture capital companies active in Ireland at the end of 2004 and at the end of 2005;

- revenues,
- employment,
- capital raised.

The database was adjusted to reflect exits and new entrants during the year.



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