

The logo for IVCA (Irish Venture Capital Association) is a dark red rectangular box with the letters 'IVCA' in white, serif, all-caps font. The background of the entire slide is a vibrant green with a pattern of faint, overlapping currency symbols (Euro, Pound, Dollar) and mathematical symbols (plus, minus, equals). A white outline map of Ireland is centered on the page, with the IVCA logo and title text overlaid on it.

IVCA

***The Economic
Impact of
Venture Capital
in Ireland - 2007***

Contents

| | |
|---|----|
| Foreword | 3 |
| Executive Summary | 5 |
| Venture capital boosts the Irish economy | 7 |
| Venture capital invests in the knowledge based economy | 8 |
| Focus on the characteristics of Entrants and Exits | 9 |
| Venture Capital in Ireland: Its role in implementing Ireland's National Innovation Strategy | 10 |
| Study Methodology | 13 |





Foreword

The Irish Venture Capital Association, established in 1985, is the representative organisation for venture capital firms in Ireland. Irish venture capital firms have invested €1.2bn in Irish SMEs since the year 2000.

The Irish venture capital industry has entered its third investment cycle. Over €500m has been raised and is available for investment. The size of the venture capital funds has increased and the skill set of Irish venture capitalists has deepened considerably. These Funds are entering a favourable investment environment. The ongoing shortage of liquidity in financial markets is resulting in lower valuations, thus offering attractive investment opportunities.

This is the third 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 March 2008 and September 2008 and covers the two years 2006 and 2007. 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.

The 2006/2007 study shows that the VC industry continues to be a major driving force in encouraging entrepreneurship, supporting innovation at the company level and developing a knowledge-based economy in Ireland.

This study has become an authoritative source of information about our industry and its social and economic impact. Its value continues to deepen as the 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.

Joe Concannon
IVCA Chairman
October 2008

A stack of coins is shown in the foreground, slightly out of focus, resting on a document with printed text. The entire image is overlaid with a teal color. The text is centered and reads:

Expenditure on R&D by IVCA backed high technology companies represents 25% 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 2007.

Expenditure on R&D by IVCA backed companies represents 25% of total Irish indigenous spend on BERD.

In 2007 IVCA backed high technology companies spent €104m on research and development, an increase of 25% on 2006. This compares with an increase in BERD from indigenous companies of 7%.

Graduates represent 76% of the workforce.

In 2007 IVCA backed high technology companies employed 2,761 graduates, an increase of 4% on 2006. In the same period PhD employment increased by 20%.

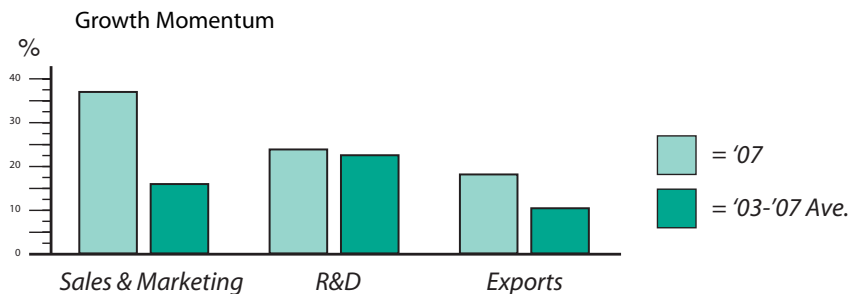
Expenditure on Sales & Marketing increased by 37%.

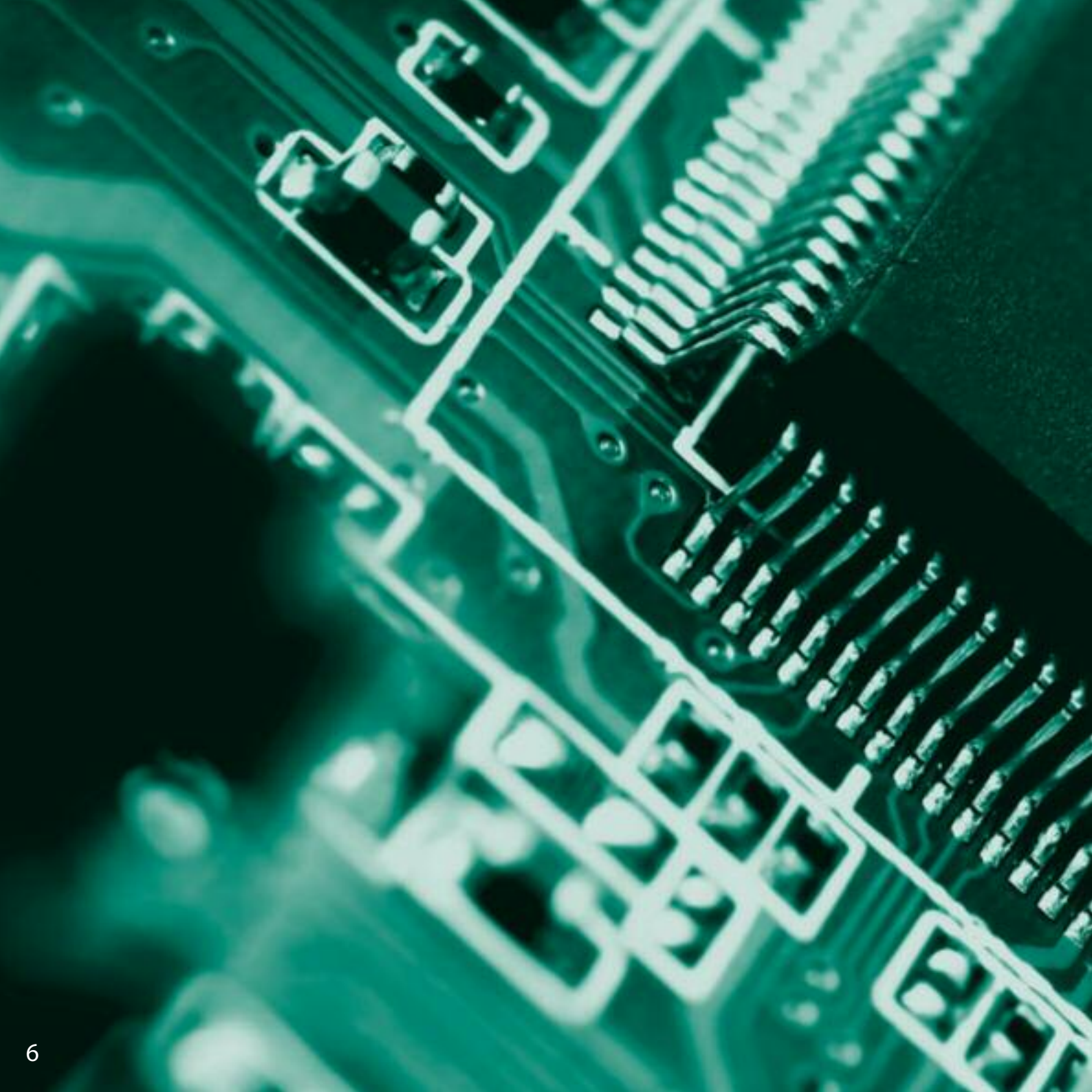
In 2007 IVCA backed high technology companies spent €65m on sales and marketing, an increase of 37% on 2006.

In 2007 IVCA backed high technology companies generated exports of €266m, an increase of 18% on 2006. This represented export intensity of 79% of revenues up from 63% in 2005.

Since 2004 IVCA members have backed fifty eight new companies, 86% of which were in the early stage high tech sector.

Momentum in growth rates continues to escalate on a year on year basis:



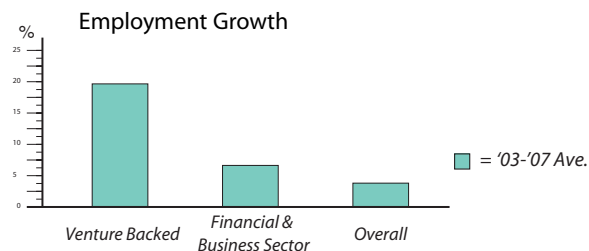


Venture capital boosts the Irish economy

Employment

Venture backed companies increased employment in 2007 by 4.9%. This compares to an overall increase in employment of .3% and to an increase of 3.6% in the Financial and Business Sector.

Whilst employment growth is moderating the performance of venture back companies has been significantly better than in the economy generally. The annual average increase in employment since 2003 was 19.9%. This compares with an annual average increase in the same period of 3.7% in overall employment and of 6.4% in employment in the Financial and Business Sector.



Revenues

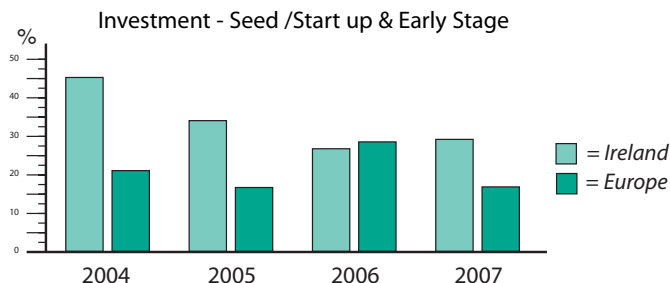
Venture-backed companies increased revenues in 2007 by 17.5% and in 2006 by 21%. The average annual growth rate since 2003 was 21.6%. This compares exceptionally well with annualised growth rates of 11% from venture-backed companies in the UK.

In 2007 revenues in high technology companies are growing even faster, showing an increase of 18.2%.

Investment

Venture-backed companies raised €226m in 2007 compared to €193m in 2006. This is the highest level of funds raised since 2002.

High technology companies accounted for 88% of all VC investment in both 2006 and 2007. This is the highest technology weighting in Europe, where the average is 18% with only four countries investing greater than 50% in high technology companies.



In 2007 29% of this capital was invested into seed/start up and early stage companies compared to a European average of 17%. Since 2004 this early stage concentration has fallen from 45% in Ireland and from 21% in Europe.

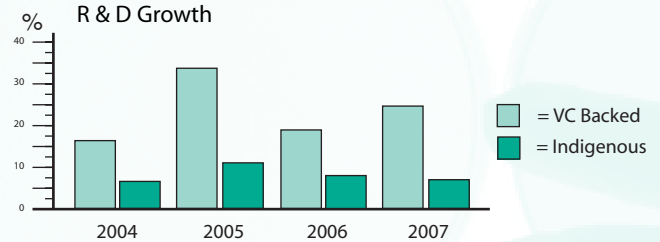
Venture capital invests in the knowledge based economy

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

IVCA backed high technology companies invested €104m in R&D in 2007, an increase of 24.8% on 2006. This increase compares to growth of 7% in BERD (Business Expenditure on Research and Development) by indigenous Irish businesses.

The chart highlights the consistently higher rate of R&D spend in venture capital backed companies.



Expenditure on R&D by IVCA backed companies represents 25% of total Irish indigenous spend on BERD. R&D intensity has increased from 24% of revenues in 2005 to 31% in 2007.

Export Intensity

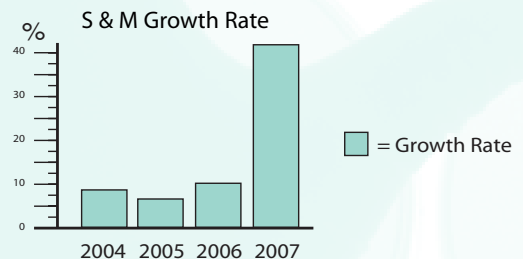
IVCA backed high technology companies grew exports in 2007 by 17.8% to €266m compared to a growth rate of 15.5% from the total Irish computer and miscellaneous business service sector. This represented export intensity of 79%, up from 63% in 2005.

Graduate Based Employment

In 2007 graduate employment in IVCA backed high technology companies increased by 4.4%. In the same period PhD employment increased by 20%. Graduates represented 76% of the workforce, up from 74% in 2005. This graduate % ranges from a high of 88% in 3-5 year old high tech companies to a low of 13% in the 6-10 year old non-tech companies.

Sales and Marketing

In 2007 IVCA-backed high technology companies invested €64.5m in sales and marketing, an increase of 37.3% on 2006. Momentum is escalating reflecting a maturing portfolio.



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.

New Investments

The IVCA continues to invest in early stage high tech companies. Since 2004 there have been 58 new investments, 50 (86%) of them into the high tech area and the majority concentrated in the IT and Healthcare sectors.

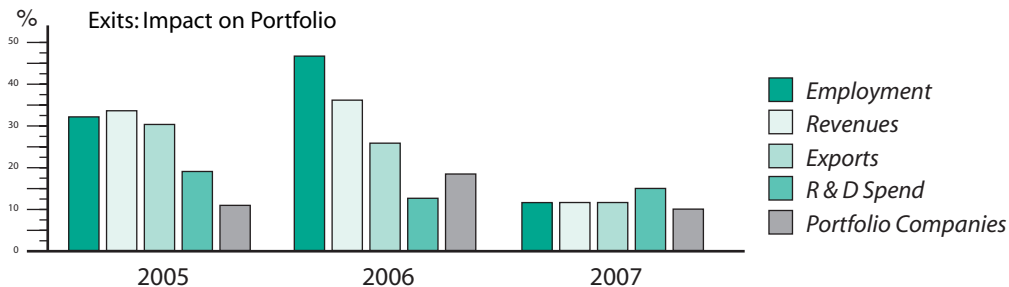


These new Entrants continue to exhibit a high propensity of exports, R&D spend and graduate employment.

| Financial Characteristics | Entrants '05 | Entrants '06 | Entrants '07 |
|-----------------------------|--------------|--------------|--------------|
| Revenues per company | €2.2m | €4.5m | €0.8m |
| Employees per company | 27 | 36 | 11 |
| Export Intensity | 74% | 51% | 86% |
| Graduates as % of Employees | 53% | 82% | 84% |
| R&D as % of Revenues | 20% | 20% | 105% |
| S&M as % of Revenues | 13% | 11% | 7% |

Realised Investments

During the same period there were 71 exits, 49 (69%) were in the high tech area. Since 2004, 41% of the Total Portfolio has been turned over indicating a healthy level of regeneration and renewal. In the three years 2005, 2006 and 2007 exits, on average, were seven times the size of new entrants. Realised investments tend to be from companies that are also significantly larger than the average in the Portfolio. This is borne out by the fact that in each of the three years 2005 to 2007 exits represented a disproportionate share of revenues and employment.



Venture Capital in Ireland: Its role in implementing Ireland's National Innovation Strategy

Innovation is the creative process of exploiting new ideas not inventing them. Venture capitalists will say that successful investments are driven by 10% invention and 90% innovation. The lesson of all innovation is that things change and a critical component is about seeing a transformation sooner than others and becoming demonstrably the best in the world at it. A central theme to successful innovation is that platforms trump products. **Venture capitalists seek out and invest in these scenarios.**

The definition of innovation has been broadened to include both technological and non-technological arenas and includes the development of new or enhanced products and services and the introduction of new business models, new organisational structures or new work practices. Enterprises and individuals are the primary sources of innovation. Important firm-level innovation is often incremental and built on the day-to-day expertise of employees and their thorough knowledge of customers. What provides many companies with an edge is the change employees can bring to service and product innovation.

Innovation and Entrepreneurship: Where does Ireland Stand

The 2007 GEM study measures innovation in terms of the:

- newness of the product/service - Ireland is mid ranking, 12th in the OECD and 8th in the EU;
- extent of competition i.e. the number of entrepreneurs reporting that few or no competitors offer the same product - Ireland ranks 2nd to Denmark in the OECD and the EU;
- newness of technology used i.e. technologies not available five years ago - Ireland ranks 8th in the OECD and 5th in the EU.

Innovation Strategy

The pressure to be competitive drives innovation across the range of business practice; and conversely innovation is a key driver of competitive advantage.

The EU Competitiveness Council has adopted a broad-based innovation strategy and in Ireland the Government has refocused its Strategy for Science, Technology and Innovation to emphasise its ambition to become a world leader in innovation. In this context the Department of Enterprise Trade and Employment has developed a policy statement on innovation that identifies key policy areas underpinning Ireland's approach to innovation:

Building a World Class Research System

The goal is to place world-class research and world-class people at the centre of the national system of innovation.

The Science Technology and Innovation (STI) Programme has set a target to increase BERD in indigenous companies (business expenditure on research and development) 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. Since 2003 the annual average rate of increase to 2007 has been 8% pa. During the same period IVCA-backed high technology companies increased their research and development expenditure by 24% pa. If this annual rate of increase is maintained up to 2013, it will represent a tripling of the R&D spend, indicating that this sector will play a major role in meeting this STI target.

The STI Programme has set a target to double the number of PhD graduates over its lifespan. IVCA-backed high technology companies increased their graduate employment between 2003 and 2007 at an annual average rate of 12.5% and in 2007 PhD employment increased by 20% compared to 2006 levels. If these rates of increase are maintained up to 2013 it will represent a doubling of the graduate/PhD employment, indicating that this sector will play a major role in meeting this STI target.

Transfer of Knowledge from Research Organisations to the Market

The development agencies are improving the quality of the public research infrastructure and promoting its links to industry. Some initiatives include:

- The establishment of SFI Centres for Science, Engineering and Technology with the aim of significantly advancing knowledge and exploiting opportunities for discovery and innovation – these Centres involve research partnerships between Irish universities, multinational companies and SMEs;
- Linking academic researchers and industry within Strategic Research Clusters that focus on aspects of the ICT and Biotechnology industries;
- The establishment of effective Technology Transfer Offices in third level institutes to achieve economic returns from R&D investments;
- Providing Innovation Vouchers that enable businesses to collaborate with higher education knowledge providers.

A “Spin Out” survey conducted by the IVCA in 2008 found that the average incidence of “spin out” investments within venture capital portfolios was 18%. This compares with an average incidence in Europe and the US of approximately 15%. The implication is that there is greater capacity in the Irish venture capital community to commercialise research and development.

Networks Clusters and Gateways

Public policy encourages collaboration through the establishment of the infrastructure necessary to support networks, clusters and regional gateways. These can be geographical or sectoral and are usually based near a third level institute or other research centre. The venture capital community supports and collaborates with this process. Several Funds are specifically linked to a particular third level institute and often to a particular region or sector.

Innovation in Services and in Emerging Sectors

Ireland is the eleventh highest exporter of services in the world and nearly 70% of the Irish workforce is now employed in the services sector. To retain and grow Ireland's competitive position innovation is critical. Within the venture capital community there has been a distinct shift away from investment in "product" to investment in "services" particularly in the ICT and Telecoms sectors. This change matched the growth in marketing and selling on the Web.



Study Methodology

This is the third 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 2006 and at the end of 2007;

- 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 2006 and at the end of 2007;

- revenues,
- employment,
- capital raised.

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



IVCA

3 Rectory Slopes,
Bray, Co Wicklow,
Ireland.

T 01 276 4647

F 01 274 5915

E secretary@ivca.ie

www.ivca.ie