The financing of technology-based small firms

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This article summarises the report published by the Bank of England on 28 October 1996, highlighting the main findings and outlining the Bank's recommendations.

Introduction

When the Government's third competitiveness white paper—'Competitiveness: Creating the Enterprise Centre of Europe'—was published in June 1996, it noted that the Bank of England, in co-operation with Government, would be investigating the extent to which small, technology-based firms face particular problems in raising finance, especially at the start-up and early development stages. The report,(1) summarised in this article, is the outcome of that investigation.

The Bank's report focuses on the financing of small technology-based firms at the seedcorn, start-up and early stages in the United Kingdom. The claim of underfunding is considered and the extent to which small, technology-based firms are at present adequately and appropriately financed is assessed. The Bank has endeavoured to examine all potential sources of finance, although we have paid particular attention to the role played by the British venture capital industry in the provision of equity capital. The way in which technology-based firms are financed in other industrialised countries has also been considered. The report makes tentative recommendations, with the intention of stimulating further debate.

In producing the report, the Bank consulted widely in both the public and private sectors, seeking particularly the views of the providers and users of finance, relevant Government departments, and others with a particular knowledge of the subject.

The Bank also attached considerable importance to obtaining at first hand the views of a range of technology-based firms about their experiences of seeking finance in the earlier stages of their life cycle. Between May and July 1996, representatives from the Bank's nine regional Agencies conducted a series of interviews with directors and senior managers at 59 technology-based firms at various stages of development. We were struck by both the complexity and the variety of financing experiences evidenced by these firms.

The following is a summary of the report.

The report

Chapter 1 outlines the background to the report, explains its methodology and adopts a reasonably broad definition of a technology-based small firm.

Chapter 2 considers the life cycle of technology-based firms and the extent to which their financing needs differ from the generality of small firms, particularly in the earlier stages of their development.

Chapter 3 discusses a wide range of potential suppliers of finance to technology-based small firms, including: banks, venture capital firms, seed-capital firms, business angels, corporate venturing, technology transfer approaches, business incubators and innovation centres, and capital markets. Particular attention is paid to the role of the venture and seed-capital industries.

Chapter 4 outlines the findings of the programme of interviews with technology-based firms carried out by the regional Agents, emphasising the diversity of approaches to the financing of this sector.

Chapter 5, which is primarily the work of the Cabinet Office, examines the financing of technology-based small firms in other industrialised countries: the United States, Canada, Germany, France and Japan.

Chapter 6 looks at the role of public policy in addressing the financing needs of technology-based small firms.

Chapter 7 sets out the Bank's recommendations.

Observations and findings

For a number of years, reports and studies have emphasised that technology-based small firms are of considerable potential significance to the economy of the United Kingdom.

As in the United Kingdom, governments in other G7 countries are according increasingly high priority to meeting the financing and other needs of early-stage technology-based firms.

(1) A copy of the full report can be obtained by writing to the Business Finance Division, Bank of England, Threadneedle Street, London, EC2R 8AH, or by telephoning Public Enquiries on 0171–601 4878. Questions relating to the content of the report should be addressed to the authors, Adrian Piper (0171–601 4117) and Melanie Lund (0171–601 4430).

There is still, however, scope to raise the profile of this sector in the United Kingdom and to learn from other countries, particularly the United States.

Appropriate finance is a major requirement for technology-based small firms, but improving the management, marketing and financial skills of the entrepreneurs is very important too.

The distinctive requirement of technology-based firms at the seed, start-up and early stages is for genuine risk capital. Amounts required may be relatively small, but investment horizons may be long. A 'hands-on' approach by the finance provider is often needed.

Classic venture capital should provide part of the answer, but the industry in the United Kingdom has tended in recent years to focus less on early-stage investments (especially in technology) and more on development capital, management buy-outs (MBOs) and management buy-ins (MBIs).

The seed-capital sector of the industry is efficient and professional, but it is small in scale and institutional investors are wary of putting money into seed and early-stage funds.

Perceived high risks, understanding the technology, and relatively low average rates of return have increased institutional reluctance to invest in early-stage technology firms.

The foregoing may point to some weakness or inefficiency in the market, which can be addressed in part by encouraging more investment by business angels, in partnership with seed capitalists. Corporate venturing also offers considerable scope.

Banks have an important role in providing working capital and (where appropriate) longer-term loans, as well as banking services.

Changing attitudes towards technological entrepreneurship has significant implications for the educational system at all stages.

Improving the financing of technology-based firms requires a partnership between public and private sectors, based on a fair distribution of both risks and rewards. There is no quick and easy solution.

Recommendations

The Bank's recommendations fall into four categories:

Raising the profile

- Maximise the use of Business Links and other support agencies.
- Use serial entrepreneurs as role models.
- Strengthen the teaching of technology in schools.
- Encourage entrepreneurship in universities.
- Promote sectoral campaigns.
- Develop corporate venturing.

Improving understanding

- Research the role of technology angels and informal venture capital.
- Understand better the potential contribution of corporate venturing.
- Develop business incubation.

Increasing the supply of finance

- Improve management skills, to encourage finance providers.
- Develop venture and seed-capital finance.
- Increase the role of the banks.
- Continue and develop Small Firms Merit Award for Research and Technology (SMART), and Support for Products Under Research (SPUR) schemes.
- Make more use of the Small Firms Loan Guarantee Scheme.
- Investigate the role of Small Business Investment Companies in the United States.
- Review Venture Capital Trusts and the Enterprise Investment Scheme on a regular basis.

Technology-based firms

- Consider the full range of possible sources of finance.
- Improve management and financial skills.

These recommendations were put forward primarily as subjects for further debate. We propose to co-host a conference, with the Royal Society and the Confederation of British Industry, on 3 March 1997, at which representatives from the scientific, financial and business communities can discuss the way forward. In the next edition of the *Quarterly Bulletin*, a further article will discuss reactions to the Bank's findings and recommendations.