A GUIDE TO FINANCING INNOVATION

This guide is intended to help you identify the sources of finance which are most relevant for technology based business ventures.
A Guide to Financing Innovation

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1. Characteristics of Innovative Firms

Although innovative development can occur anywhere, the culture of the big company is often a stifling influence on the development and marketing of new products. Where this is not the case, the larger company is likely to finance such product development internally rather than seek finance from investors.

It has been shown, however, that new technology-based firms (NTBFs) are the major source of product innovation. But they are also the class of company, which, in Europe at least, has the most difficulty in raising capital.

For the purposes of this document, therefore, we have tended to concentrate on NTBFs. An understanding of the special characteristics of such firms is we believe, essential to the successful exploitation of innovation.

A survey by Warwick Business School on UK start-ups in the North of England showed that out of any hundred new firms, 40% would cease trading by Year 3, rising to 60% by Year 10. Of the remaining 40 companies, 4 would represent 50% of the employment and the total economic value of the surviving firms. Those with more than 50 employees after five years were called “Fast Trackers”, or “Successful Innovators”.

Innovation can include:

- new products or services
- new methods of production, supply and distribution
- changes in management and work organisation
- creation of new patterns of use or consumption

NTBFs are a classic form of Innovative Organisation. Innovative firms are the prime sources of advances in technology and are capable of high growth and as such, would appear to be prime targets for investors. A comparison of the performance of venture-backed NTBFs in Europe and the US supports this (Table 1).
Table 1: Comparative Performance of Venture Backed NTBFs in Europe and the US

<table>
<thead>
<tr>
<th></th>
<th>Europe 1991-95</th>
<th>US 1990-94</th>
</tr>
</thead>
<tbody>
<tr>
<td>EUR-NTBFs</td>
<td>15</td>
<td>20</td>
</tr>
<tr>
<td>Top 500 EUR</td>
<td>2</td>
<td>0.9</td>
</tr>
<tr>
<td>US-NTBFs</td>
<td>35</td>
<td>35</td>
</tr>
<tr>
<td>Fortune 500</td>
<td>57*</td>
<td>2</td>
</tr>
<tr>
<td>Employment Growth %</td>
<td>15</td>
<td>20</td>
</tr>
<tr>
<td>Sales Growth %</td>
<td>35</td>
<td>35</td>
</tr>
<tr>
<td>Exports Growth %</td>
<td>30</td>
<td>57*</td>
</tr>
<tr>
<td>R&amp;D/Sales Ratio</td>
<td>8.6</td>
<td>1.3</td>
</tr>
<tr>
<td>R&amp;D/Equity Ratio</td>
<td>30</td>
<td>14.7</td>
</tr>
</tbody>
</table>

Source: Coopers & Lybrand Economic Impact Surveys of the US and Europe, 1996
*1994 growth figure

But they have weaknesses, too. This is illustrated in Table 2 and the result is that venture investors, who are largely risk averse, tend to shy away from such opportunities, in spite of the possible returns.

Table 2: A ‘Balance Sheet’ of NTBFs. Strengths & Weaknesses

<table>
<thead>
<tr>
<th></th>
<th>CREDIT</th>
<th>DEBIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rapid Growth</td>
<td>Vulnerable to Capital Scarcity</td>
<td></td>
</tr>
<tr>
<td>Export/Internationally Oriented</td>
<td>Reliant on Equity</td>
<td></td>
</tr>
<tr>
<td>High Value Added</td>
<td>Erratic Cash Flows</td>
<td></td>
</tr>
<tr>
<td>Quality Employment</td>
<td>Limited Funds for R&amp;D</td>
<td></td>
</tr>
<tr>
<td>Innovative, quickly adaptive</td>
<td>Difficult to Manage Rapid Growth</td>
<td></td>
</tr>
<tr>
<td>Disseminate Technology</td>
<td>Long Investment Cycles (often &gt;5 yr.)</td>
<td></td>
</tr>
<tr>
<td>When successful, show very high IRR’s / Euro multiple</td>
<td>One Product ‘Successes’ common</td>
<td></td>
</tr>
<tr>
<td>Underpin success of large corporates</td>
<td>Vulnerable to Government Policies</td>
<td></td>
</tr>
<tr>
<td>Create tomorrow’s large corporates</td>
<td>A tiny minority succeed in the long term</td>
<td></td>
</tr>
</tbody>
</table>

Investors tend to see risk in everything, as illustrated in Table 3.
## Table 3: Sources of Venture Capitalists’ Risk in an NTBF Investment

<table>
<thead>
<tr>
<th>Source of Risk</th>
<th>Internal (I) or External (E) Risk</th>
<th>Characteristics of Risk:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management Risk</td>
<td>I</td>
<td>the entrepreneur and management team possess insufficient skills to grow the company effectively and profitably</td>
</tr>
<tr>
<td>Market Risk</td>
<td>E</td>
<td>the product/service introduced by the firm is insufficiently attractive to the market place to generate the necessary sales revenues, the target market is to small, or competitors react vigorously eroding away potential sales and profits</td>
</tr>
<tr>
<td>Technology Risk</td>
<td>E</td>
<td>the proposed novel technology or its application proves unsuccessful by either not working or producing insufficient benefits to potential users</td>
</tr>
<tr>
<td>Pricing Risk</td>
<td>I/E</td>
<td>the investor over-estimates the terminal value of the enterprise and, thus, undervalues the contribution of equity provided</td>
</tr>
<tr>
<td>Finance Risk</td>
<td>I/E</td>
<td>the enterprise does not generate the scale of revenues or profits to meet the investment return targets of the investors and/or cover debt interest</td>
</tr>
<tr>
<td>Liquidity/Exit Risk</td>
<td>E</td>
<td>the investors are unable to either find a buyer for the company or to undertake a market flotation at a termination price which will return a sufficient capital gain to meet the investment targets of the investors</td>
</tr>
</tbody>
</table>

We thus have a situation where innovative NTBFs are universally considered to be desirable sources of technology and growth, but nevertheless find it difficult to attract finance. The challenge (Table 4) for R&TD professionals and entrepreneurs is to understand and develop the competitive advantages of these firms.
Table 4: The Challenge for RTD Professionals and Entrepreneurs

- Understanding the nature of the NTBFs’ ‘Sustainable Competitive Advantage’ (SCA)
- Determining the key constraints on the realisation of the SCA
- Contributing to and supporting the innovative firm in:
  - building the management team
  - facilitating information networks
  - building appropriate systems of financial/admin. Control
  - creating effective and realisable future plans (‘scalability’)
  - ensuring the dominance of a market orientation
- And most importantly: recognising the key strengths and weaknesses of the founders

2. Sources of Finance for Innovation – The issues

In general terms, innovation finance comes from the public sector, banks or from private finance-sources. Which of these is appropriate to a specific case depends on a number of factors: the stage of development of the project, the size of the innovating company, the amount of money required, to name but three.

Banks may provide loans. Venture capital, also known as risk capital or private equity investment, normally seeks to provide capital through the purchase of shares in the company.

As a rule, a large corporation with an innovative project would be most likely to look to a bank for financing that project. An alternative, for a listed company, i.e., one whose shares are quoted on a Stock Exchange, might be to raise extra capital by a new issue of shares. The latter approach is not really an option for NTBFs, which typically have no track record and are seen as risk investments.

Typically, an entrepreneur who sees an opportunity to exploit a new technology will have founded an NTBF. The entrepreneur may have developed this technology himself or possibly have financed its development with help from, for example, the Public Sector or he may have acquired it from an outside source via a licence agreement (technology transfer).

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1 Stock Exchanges (bourses) all require that companies have a certain level of assets and a trading record before listing. So-called “new” markets, such as EASDAQ, AIM (Alternative Investment Market) or the Nouveau Marché have less stringent rules but may still not be generally appropriate for a new company. Preparing a company for a listing is expensive both in financial terms and in management time.
It is a characteristic of most entrepreneurs that they have very little money; usually they will start their business with whatever they can afford, augmented by loans or investments from family and friends, plus, in many cases finance from regional or national grants or awards².

It is unfortunately also a characteristic of NTBFs that the costs of developing a technology into a product and then implementing a successful marketing programme are generally much greater than anticipated. One can only generalise on this, but as a rule of thumb, for every EURO spent on R&TD, ten EURO’s will be needed to bring the product into production and as much as one hundred more to bring it to the market. It follows then that almost any project is going to require additional finance if it is to be successfully exploited.

The new finance may be sought from individuals, banks, venture capital or other sources.

### 3. Sources of Finance for Innovation - An overview

Finance may be available from a number of sources, as we shall see, but before looking at these, some general factors need to be considered. The first point to take into account is: at what stage of development is the project/process/company?

**RESEARCH STAGE**

Funding will come, usually in the form of non-reimbursable grants, primarily from:

- **Public Sector** - national governments, regional authorities or the European Commission;

- **Corporate** - industrial/commercial companies, industrial research associations, charities (where research directed to social benefits such as health is concerned);

Neither banks nor any form of equity investor is likely to be interested at this stage.

**DEVELOPMENT STAGE**

As the project reaches the stage where a prototype of pilot plant can be built to demonstrate its feasibility, the situation begins to change. The Public

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² Grants and awards for technological advances differ from other forms of investment in that they are usually one-off, non-reimbursable payments intended to support regional or national development. Their availability varies widely between countries and regions.
Sector and Corporate Sector remain in the running as for Research, but also some interest may be shown by:

- **Seed Capital** - venture funds prepared to make pre-start-up investments in the technology, followed by further investment if/when the project results in a company formation. Pre start-up funding may be in the form of loans, convertible to equity when (if) the company is formed.

- **Venture capital** - may be interested where an established company seeks additional finance for a specific project.

**START UP STAGE**

In some respects this remains the most difficult stage to finance, though much depends on the size and type of project involved.

- **Business Angels**: May be able to provide the start-up equity finance and "hands on" advice and help to the new company. This source is most appropriate where relatively small sums are needed and where the project in question is not in the high technology area.

- **Venture capital**: Although most venture funds concentrate on large deals, there are some willing to provide start-up finance. Usually venture capitalists very experienced and able to contribute management assistance.

- **Public sector**: Can provide grants or other non-reimbursable finance to cover start-up and capital costs. Public sector venture funds may be willing to intervene where for example significant employment opportunities are seen.

- **Corporate** finance may also be available from industrial or commercial firms seeking a "window" on developments. Such firms are potential buyers of the new company.

**EXPLOITATION STAGE**

At this stage of a company's life, when it is in full commercial operation, banks and all kinds of venture funds can be interested.

It is also a stage at which the management might wish to consider a stock market flotation as a means of raising additional capital. This would normally be on one of the "new" markets: AIM, Nouveau Marché, Neuer Markt, etc. which do not have such strict regulation as the main stock exchanges. In an increasing number of cases, European companies establish American connections which allow them to float on the US NASDAQ exchange, taking advantage of the greater willingness to invest in new technology-based firms which exists in the United States. The relatively new EASDAQ (European Association of Securities Dealers - Automated Quotation system) is based on
the American model and may provide a similar service to European companies.

Looking now at the different players at each stage:

**FOUNDERS AND ENTREPRENEURS**

Will have normally put in all the finance that they are able to afford, as well as non-financial contributions, e.g., little or no salary, working from home (no rent) and so on. Putting a value on these non-financial contributions ("sweat equity") can increase their effective shareholding. New investors will expect to see a significant contribution from the founders, since this shows a commitment to the project.

**FRIENDS AND FAMILY**

- A "helping hand" rather than a serious investment
- Cannot be relied upon for follow-up finance
- May not have useful commercial contacts
- Generally less than about EURO 10'000

**INFORMAL INVESTORS OR BUSINESS ANGELS**

- Individuals "of high net worth"
- 75% invest between 15'000 and 150'000 EURO’s and up to EURO 250'000 when co-financing with others ("syndicated" investments)
- Usually invest locally and in projects they understand
- Quick decisions
- Likely to take a "hands on" approach to their investment

**VENTURE CAPITAL**

- Seek investments in firms with high-growth possibilities
- Not usually interested below EURO 250'000
- Slow decisions but very thorough
- Add value, not just financial assistance
- No outflow of cash in interest on loans or dividends to investors before exit

**BANKS**

- Provide the usual banking services
- Loans and loan guarantees from a few thousand to millions of EURO’s
- Investment services
- Quick decisions

**PUBLIC SECTOR**

- Grants
- Awards
- Investment support schemes
European Investment Fund (loan guarantees and investments in venture funds)

It can be seen that some sources are more appropriate than others for a given case. Entrepreneurs' own resources and those of friends and family are easy enough to find. Business Angels, though a very important source of money - it is estimated that for early-stage investment the total available from them is substantially greater than from the formal venture capital industry - may be difficult to find. They have their own networks and anyone seeking capital from this source might try financial consultancies, banks and similar sources.

SMEs and others with projects financed in part by the European Commission may be attractive to various sources of capital, including the Business Angel sector (especially where groups of these individuals are prepared to syndicate their finances), but are most likely to appeal to more formal sources.

This guide concentrates on the two main formal sources: Banks and Venture Capital.

4. Raising finance: the role of banks

For the purposes of this guide, there are two kinds of bank: Investment Banks and Retail Banks.

- An **INVESTMENT BANK** is a firm, acting as underwriter or agent that serves as intermediary between an issuer of securities (shares) or bonds and the investing public. The investment banker, either as manager or participating member of an investment banking syndicate, makes outright purchases of new securities from the issuer and distributes them to dealers and investors, profiting on the spread between the purchase price and the selling (public offering) price. Investment bankers may well be involved as advisers or intermediaries when a company decided upon a stock exchange flotation.

- A **RETAIL BANK**, on the other hand, is the kind of bank found in all towns, providing general banking facilities to the general public and to business, including loans, savings accounts, financial services and so on.

Investment banks are not normally concerned with small deals or companies at the earliest stages of development and they are therefore not considered in this paper. Retail banks normally provide services to all
members of the public and it is to these that new companies, entrepreneurs, etc will turn for credit.

Banks, as a general rule, are averse to risk and therefore are unlikely to invest in the equity of a new company. They can, however, provide loans and they can also provide the conventional banking services: cheque and deposit accounts, overdraft facilities and so on.

It is not a good idea to try to finance a company by means of overdraft facilities alone. The interest rate will be high and the bank is likely to call in the loan at very short notice if it should become dissatisfied with the progress of the business.
5. Equity Investment - the role of Venture Capital

5.1. Venture Capital

Provides financial support to a company in the form of a participation in its equity or an option to convert a loan to equity. The relatively high risks are compensated by the possibility of high returns. It has a high risk-bearing character, focusing on industries with high growth potential.

5.2. Investment Stages

When considering an approach to a venture capitalist, it is important to understand that some funds specialise in certain aspects of the investment business and it is useless to talk to one, which is not focused on your particular type of opportunity. Most important, perhaps, is the stage of development of your project/company. The following outlines the various stages recognised by equity investors:

Seed finance
Finance provided to research, assess and develop an initial concept before a business has reached the start-up phase.

Start-up
Finance provided to companies for product development and initial marketing. Companies may be in the process of being set up or may have been in business for a short time, but have not sold their product commercially.

Other early stage
Financing to companies that have completed the product development stage and require further funds to initiate commercial manufacturing and sales. They will not yet be generating a profit.

Expansion (or Development)
Financing provided for the growth and expansion of a company which is breaking even or trading profitably. Capital may be used to finance increased production capacity, market or product development and/or to provide additional working capital.

Mezzanine (Bridge finance)
Finance made available to a company in the period of transition from being privately owned to being publicly quoted.

Management Buy-out
Finance provided to enable current operating management and investors to acquire an existing product line or business.
Management Buy-in
Finance provided to enable a manager or group of managers from outside the company to buy into the company with the support of venture capital investors.

(Source: EVCA YEARBOOK 1997)

5.3 Venture Capitalists

In a general way, venture capitalists can be divided into three types, each appropriate to a given range of investments. They may specialise in one or several of the above investment stages and they may also concentrate their attention on specific industrial or geographical sectors.

5.3.1 Private Investors

Often known as "Business Angels," these are wealthy individuals who are prepared to use their own financial resources to make risk investments based on their own experience and interests. They are often retired senior executives of major enterprises, or people who have sold their companies and now wish to use the money. The may even have been made redundant and now wish to invest the redundancy payment.

Their motivations are many and they may invest alone or in small groups.

Typically, business angels tend to invest locally in business sectors in which they have some experience. Individually, their investments may be quite small - around EURO 50'000 - but in syndication, considerably larger sums may be available. They make quick decisions.

It is estimated that in the UK alone some EURO 2 billion is available for investment by private individuals. This is substantially more than is available for the early-stage investment sector from formal venture capital sources and it is therefore clear that private individuals are an important potential source of finance. Although little research has been done in other countries of Europe, it seems likely that in many, the situation will be similar.

Table 5 illustrates some of the pros and cons of business angels as investors.
### Table 5: Pros & Cons of Business Angels

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major source of funds</td>
<td>Invisible</td>
</tr>
<tr>
<td>Supply funds&gt;demand (wish to invest more)</td>
<td>Less finance available</td>
</tr>
<tr>
<td>Possible ‘leverage effect’ on other investors</td>
<td>More limited investment experience</td>
</tr>
<tr>
<td>Provide small amounts of finance</td>
<td>Networks less extensive</td>
</tr>
<tr>
<td>Less restricted investment criteria</td>
<td>Danger of excessive intrusion in business</td>
</tr>
<tr>
<td>More opportunistic - less formal analysis</td>
<td>Less professional experience</td>
</tr>
<tr>
<td>Lower ROI expectations</td>
<td>Less prestigious than VC backing</td>
</tr>
<tr>
<td>Non-economic factors important -‘hot buttons’</td>
<td>May believe have ‘Midas Touch’</td>
</tr>
<tr>
<td>Cheaper in fees to obtain finance</td>
<td>May have ulterior motives</td>
</tr>
<tr>
<td>Provide know how, advice and contacts</td>
<td>May become ‘Business Devils’</td>
</tr>
<tr>
<td>Patient money - less pressure for exit</td>
<td></td>
</tr>
<tr>
<td>Widely spread in economy/community</td>
<td></td>
</tr>
<tr>
<td>Invest in own locality</td>
<td></td>
</tr>
</tbody>
</table>

### 5.3.2 Fund Management Companies

This is the conventional, formal venture capital sector. The Venture Capital Fund Management Company manages the funds of its investors (shareholders) and, in due course, returns the profits, after deduction of expenses and fees, to those investors.

Some of these companies manage quite small sums - a few million EURO - while the biggest of them handle many billions of EURO. All of them have a clear focus for their investments, concentration on management buy-outs, development capital or seed and start-up as the case may be.

Most of these funds have a fixed term, usually ten years, after which period the fund is closed the profits distributed.
5.3.3 Public Sector Funds

These are funded from regional or national sources, sometimes with private money as well and their purpose is often not for profit and their objectives are regional development and job creation. Any surplus is re-invested in the fund. Public sector funds are usually found in less developed areas.

The primary purpose of every venture capital fund should be the creation of wealth - i.e., profit. It may have other foci, such as the environment or regional development, but unless the policy is to invest in companies capable of producing a sustained growth and hence a satisfactory return on the investment, the money will be wasted.

Whatever the focus of the venture fund, be it preferred industrial or geographical sector, or stage of development (these points will be discussed later), there are two fundamental questions that will be asked by all business angels or fund managers:

1. What is the potential return on this investment?
2. How much money is being sought?

The Internal Rate of Return (IRR) is an important measure of the viability of an investment. While any positive IRR indicates that the investment will realise a profit, venture funds tend to set a "hurdle rate," below which they will not invest. This is because of the inherent risk of unquoted venture investments, which will inevitably result in some of the companies in an investment portfolio collapsing. The good investments will, it is hoped, compensate for the bad ones and hence a high hurdle rate is chosen so that only potential stars are included in the portfolio.

The hurdle rate does vary from fund to fund, but is usually set between 40% and 60% per annum. This may sound a lot, but it should be remembered that the venture fund does not normally expect to take this in cash from the company; it is the value of the investors' share of the company when the investment is realised, either by a stock exchange flotation or by way of a trade sale.

Another reason for using the IRR as an indicator of the worth of an investment is that it permits the investor to prioritise the opportunities on his desk in order of potential return. Thus, even a good project will not necessarily be funded if it happens that strong competitive opportunities are around. The size of the investment is a major factor. After all, even a very high rate of return will not produce significant amounts of cash if the capital invested is very small. More importantly, however, the cost of a small investment is as great, or proportionately greater than, that of a large investment. This is partly because of the number of fixed costs (professional advisers, fees, due diligence investigations) and partly because of the greater management time involved in managing the investment. For this reason, many venture funds will not consider investing less than, say EURO 500'000 - sometime a great
deal more - and concentrate their attention on major deals, including management buy-outs.

We will look at this problem further in the next section.

6. Choosing the Package

An Entrepreneur or company seeking to raise finance needs to consider very carefully the choices available. The wrong choice can be disastrous but choosing an investor who is also a partner in the business can have a profound effect on the viability of the enterprise.

Whichever route is to be chosen, the starting point is a Business Plan.

6.1 The Business Plan

Preparation of a business plan should be among the first tasks of Management. It has two functions:

- **Internally**, to examine in the minutest detail the basic assumptions of the business in order to clarify management thinking and to establish milestones for future development;
- **Externally**, to set out a convincing case to secure financing.

Many consultancies publish booklets on producing business plans and so, often, do national venture capital associations. A practical guide on “Preparing a technology business plan” is also available.

Banks and venture capitalists receive credit applications or requests for capital every day and fairly or unfairly, their choice of opportunities to consider will be based on their first sight of the Business Plan. Is it attractive and easy to read? Even the best projects will be refused if the Plan is difficult to follow or unattractively laid out. Is it short or long? Long documents don't hold the attention, but equally, a Plan that is too short may leave out important information. A good approach here is to put the main points of the programme into the body of the text and confine technical and financial justifications to appendices. The "story" can then be told in simple and consecutive fashion and the reader can refer to the appendix for the detail when required.

The Executive Summary is perhaps the most important section of the plan. It is this summary which will first be seen by the banker or venture capitalist and it is therefore imperative that it should contain the basic details of the Company, its Management, its Product and Market, the cash required and what it is to be used for, and a cash flow forecast. It should also be short.
6.2 Debt or Equity?

The choice of debt (loan) or equity financing depends on a number of factors and the following is only an outline of what needs to be taken into account when planning a strategy for financing a project or company. Loan and equity finance both have advantages and disadvantages and the choice comes down to the specific circumstances of each case and the attitude of the entrepreneurs themselves.

6.2.1 Loan Finance

The advantages and disadvantages of loan finance can be summarised as follows:

**Advantages:**
- A loan entails no loss or reduction of ownership of the Company;
- Loans may be negotiated for the short or the long term, according to the Company's needs;

**Disadvantages:**
- Security is always required, up to the value of the loan itself;
- Interest will be payable.

An added problem is that because smaller companies, especially technology-based ones, are seen as risky ventures, banks may be reluctant to offer loans. Recognising this as a legitimate problem, some authorities have put in place schemes to encourage banks to make loans to what they might otherwise consider undesirable customers. In the United Kingdom, for example, the government-backed Small Firms Loan Guarantee scheme provides guarantees to the lenders that, in the event of a default by the Company, most of the loss will be reimbursed. In France, SOFARIS offers a similar scheme. Borrowers pay a premium for this service but it is usually a small amount in relation to the loan itself.

Smaller companies should only consider bank loans if the amount required is relatively small or if it is needed for the very short term. Ideally, too, this method of financing should not be used unless the borrower has a positive cash flow with which to offset the interest payments and the repayment of the principal.

If, taking all this into account, the decision is made to apply to a bank for a loan or for credit, the bank will examine the credit application (that is, the business plan) for answers to two basic questions:

- **Will the Company be able to pay back the loan?**
What can be done to recover the money if the Company finds itself unable to repay the loan (i.e. what is the security for the loan?)

Banks differ in their approach to the analysis of credit applications, but in general they will look at the following points to get their answers:

Confidence in the client:
1. Moral standing of the borrower
2. Level of confidence and mutual understanding between borrower and bank
3. Confidence in the competence of the management/entrepreneur

Financial data:
1. Profitability, cash-flow expectations
2. Solvency \( \frac{(\text{Common stock} + \text{retained earnings})/\text{owners equity}} {\text{current liabilities}} \)
3. Liquidity \( \frac{(\text{current assets} - \text{stocks})/\text{current liabilities}} {\text{likelihood of survival of possible business failures}} \)
4. Does the borrower understand the financial consequences of his venture?
5. Quality of financial planning and financial management
6. Completeness of information

Miscellaneous:
1. Additional risks [e.g., environmental claims, currency risks, social claims, etc]
2. Quality of the collateral security

Source: K Vander Velpen, Generale Bank, Brussels

Banks can of course also assist in the provision of general banking services such as a depository for cash or for short-term variable loans in the form of overdrafts. These services are of considerable importance to the smooth financial running of the Company.

Note that a bank's business is to lend money at an appropriate rate of interest; it is not primarily concerned with your profit levels but it is concerned with your liquidity, since this affects the Company's ability to service its debt.

Summary:

Banks:
- provide day-to-day financial services including overdrafts, guarantees, etc;
- act as depositaries for cash;
- can provide credit on a short or long-term basis;
- offer world-wide financial transactions;
- may provide insurance and risk management;
• increasingly, provide information brokerage and consultancy;
• are everywhere!

BUT:
• Security is required for loans
• Interest will be charged on outstanding balances
• Bankers are "risk averse" and may require repayment of the loan if the Company does not perform according to its business plan

6.2.2 Equity Finance

Unlike a bank, a venture capital fund, or a business angel, chooses to become a shareholder in the company, that is, part owner of it.

The "loss of control" is proportional to the amount of the equity that the investor wishes to buy. This will usually be in the region of 20 - 35% - very few funds seek a controlling share, although they might apply financial mechanisms enabling them to take control under certain circumstances.

"Strong financial discipline" usually means monthly management accounts, but this is no bad thing. It enables Management, as well as the Board, to keep track of the firm's performance.

When the company floats or is sold all the shareholders, including the investors, participate in the profits. If this means that the management team receives less than 100% of these profits, it is also probable that the total received will be more than it would have been had there been no investment.

And if the company fails, there is no loan to be repaid. The choice of bank loan or equity financing, therefore, is likely to come down to:

• **Cash required**
• **Can a loan be serviced without crippling the company**
• **Time scale**

In most cases where NTBFs are concerned, the investor of choice will be a venture fund, but to be successful in attracting such investment, the approach to the funds must be carefully considered.
Summary

equity financing entails:
• Equity share to be given
• No security
• No interest
• Added value (from experienced investors)
• Capital gain (on realising the investment)

BUT:
• Some loss of control
• A seat on the Board for the investor
• Strong financial discipline
• Sharing the profits (on realising the investment)

Checklist for Technology Entrepreneurs Seeking Venture Capital

• An absolute mission to create a New Force in their chosen industry
• A ‘balanced team’ of entrepreneurial managers lead by a ‘doer’, and embracing technical, commercial and marketing skills and related industry experience
• A ‘track record’ of success in the targeted industry and technology
• Selection of an attractive market segment exhibiting continued revenue and profit growth
• Evidence that the project has a ‘significant and defensible competitive advantage’ against existing and/or new competitors
• A working prototype of the technology/product application
• Ownership of the key Intellectual Property Rights
• A significant commitment of personal resources, including finance, by the entrepreneur and his/her team
• A comprehensive (25 pages max.) and well thought out Business Plan
• True Grit - an implacable and unreasonable determination to succeed against all odds
7. Approaching an investor

We have seen that venture-funds, both formal and informal, focus on industrial or geographical sectors and/or the stage of the investment. It is probably a waste of time for a Belgian pharmaceutical start-up company to approach a venture capitalist interested only in electronics buy-outs in Germany. It has also been difficult in the past to find a venture capital company to invest outside of its own domicile unless it has a local partner. However, there are increasing signs that venture capitalists are now more ready to consider transnational investments.

Details of most venture capital funds can be obtained from the national venture capital associations, which exist in all countries where there is a significant venture capital industry. The Directory of Members lists, for most funds, their industrial interests and the geographical areas in which they are interested. Normally, each entry will include the investment stages in which the fund operates.

The European Venture Capital and Private Equity Association (EVCA) represents the industry as a whole and all the national associations are listed in the EVCA Directory and on its Internet site (www.evca.com). The Association was established in the 1980s with the support of DG Enterprise of the European Commission, which is currently represented on the Board of the EVCA.

The first step in seeking the finance is to short-list some of the most likely funds from these directories and identify, by name, the appropriate executives in each. A few - certainly not more than five - should be approached in the first instance; not only does this enable the business plan or the contact letter to be changed if they do not produce positive answers, but it avoids the danger of the business opportunity becoming too widely known and possibly devalued because of that.

Make sure that the strategy is developed and the first approaches made well before the need for finance becomes critical. Decisions take time and investors do not like to be rushed; furthermore, even if a deal is offered, it is not likely to be as good as might be achieved with plenty of time for negotiation.

The investment process will then proceed along the following lines:

**First contact**
A letter to the target bank or fund enclosing the Executive Summary from the Business plan. The objective here is to raise the interest of the target and obtain an interview.

**Interview**
This will be the management team's only opportunity to persuade the target to look at the business plan and it needs careful preparation. Key members of the team should be present and ready to discuss their roles.
The objective of this stage is to get the business plan properly examined by the fund manager and encourage him to take the opportunity seriously.

**Examination of the Business Plan**
If the management team has been successful in the first two stages, the fund managers will now examine the Business Plan very carefully – especially the financial projections. They may make some preliminary enquiries about the technology but their main concerns will be the cash flow forecasts and the potential returns. There will certainly be follow-up meetings between the investor and the managers during this stage.

**Due diligence**
All being well, the fund managers will now proceed to make a thorough evaluation of the Plan. This process, known as "due diligence" means taking nothing for granted, but checking all aspects of the business. Depending upon the situation, checks will be made of:

- **The Management** (CVs, references, track record...)
- **The Business** (market research, competition, barriers to entry...)
- **The Product/process/technology** (patents, competing technologies...)
- **The financial projections** (potential returns, cash flow, balance sheet, etc)

The potential investors will almost certainly require additional meetings during this time and the whole process will take several weeks - even months.

**Valuing the opportunity**
At this point, if all the preceding work has led to a decision to invest an offer will be made to the Company. The investors will decide how much of the equity they want to buy and what it is worth to them. Normally, no venture fund will want to buy more than around 35% and it may well be less, depending upon the value they put on the firm.

For example, if they propose to purchase 20% of the shares for EURO 100'000, the investors are valuing the Company at EURO 500'000 and they believe that, when it becomes time to exit from the investment, the internal rate of return, based on their share of the equity, which will be achieved will reach at least their hurdle rate.

**The Investment**
Venture capital companies make equity investments but according to circumstances, they may offer loans in addition to equity. This might be done if the deal did not justify a high valuation, so additional funds could

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3 The bank or venture capital fund may use consultants to assist in this part of the process. They would not normally do this without obtaining the permission of the Company first.
be made available as loans. These loans might be convertible to equity under some conditions to be agreed.

The details of the investment are of course subject to negotiation between the parties and will be embodied in a legal document called the Shareholders’ Agreement.

8. Costs

Although it is true that a venture capital investment does not entail interest payments or other significant outflows from a company, there will be considerable costs in making the investment. These will include:

**Management’s costs:**
- Financial and legal advisers
- Consultants
- Management costs
- Directors’ fees
- Miscellaneous costs

**Investor’s costs:**
- Due diligence expenses, technology checks:
  - patent searches
  - market information
  - company’s warranties (ownership of technology and patents; track record, etc)
  - management time and costs
- Legal fees
  - Contract negotiations
  - Articles of Association
  - Shareholders’ Agreement
- Taxes
- Miscellaneous costs

The list is not exhaustive but does cover most of the major expenses. Although these are mainly costs incurred by the investor in checking out the investment opportunity, it is usual for them to be recovered from the Investee Company, together with a fee. There are so many variables that it is impossible to quantify just how much these costs will amount to, but there are estimates which indicate the total costs may be about 5% of the deal itself for medium and large investments. The percentage may be greater for small deals.

However, the costs are not billed to the Investee Company directly but are included in the investment.
# Appendix 1 : Abbreviations and Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>AFIC</td>
<td>Association Française des Investisseurs en Capital</td>
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<tr>
<td>AIM</td>
<td>Alternative Investment Market (UK)</td>
</tr>
<tr>
<td>BVCA</td>
<td>British Venture Capital Association, London <a href="http://www.bvca.co.uk">http://www.bvca.co.uk</a></td>
</tr>
<tr>
<td>EASDAQ</td>
<td>European Association of Securities Dealers, Automated Quotation System, Brussels <a href="http://www.easdaq.com">http://www.easdaq.com</a></td>
</tr>
<tr>
<td>EIB</td>
<td>European Investment Bank</td>
</tr>
<tr>
<td>EIF</td>
<td>European Investment Fund</td>
</tr>
<tr>
<td>EFQM</td>
<td>European Foundation for Quality Management</td>
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<tr>
<td>EVCA</td>
<td>European Venture Capital Association, Brussels <a href="http://www.evca.com">http://www.evca.com</a></td>
</tr>
<tr>
<td>IPO</td>
<td>Initial Public Offering (company flotation)</td>
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<tr>
<td>IRR</td>
<td>Internal Rate of Return (on an investment)</td>
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<tr>
<td>LBO</td>
<td>Leveraged Buy-Out</td>
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<tr>
<td>MBO</td>
<td>Management Buy-Out</td>
</tr>
<tr>
<td>MBI</td>
<td>Management Buy-In</td>
</tr>
<tr>
<td>NASDAQ</td>
<td>National (USA) Association of Securities Dealers, Automated Quotation System</td>
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<tr>
<td>NTBF</td>
<td>New Technology-Based Firm</td>
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<tr>
<td>OTC</td>
<td>Over The Counter (Share Sales)</td>
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<tr>
<td>ROI</td>
<td>Return on Investment</td>
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<tr>
<td>SBIC</td>
<td>(USA) Small Business Investment Company</td>
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</table>
Appendix 2: Further Information and Reading List

I - Characteristics of Innovative Firms

- New Technology Based Firms (NTBFs) in Europe
  Centre for Small & Medium-Sized Enterprises, University of Warwick, UK

- Review of Studies on Innovative Fast Growing SMEs
  Aston Business School (UK), IKEI (E), DTI (DK), GIB (D), Logotech SA (GR),
  EIM (NL), EIMS Publication No 42, 1997, European Commission (DG XIII)

- Murray GC: Six Case Studies of Successfully Exited, Venture Backed,
  European New Technology Based Firms, New Technology-Based Firms in the
  1990s, Vol. 3. Professor Ray Oakey (ed.); Paul Chapman Publishing Ltd
  (1998)

- Murray GC: Can Europe Ever Produce Another Netscape? Invited article for
  the CBI Business handbook (Kogan Page, Spring 1997)

II - Sources of Finance

1) Banks and Corporate Finance
   For those who wish to study the finance sector in more detail, there are many
   textbooks. The following is a short list:
   - Brealy & Myers: Principles of Corporate Finance, McGraw Hill
     Risks, Pitman Publishing

   Any good bookshop with a business section will yield many other relevant
   publications.

2) Business Angels
   - Lumme A, Mason, C & Suomi M (1996): The Returns from Informal Venture
     Capital Investments: Some Evidence from Finland. Paper to the annual
     Babson College-Kaufmann Foundation Entrepreneurship Research
     Conference, Seattle, March 1996
   - Mason CM & Harrison RT: The UK Clearing Banks and the Informal Venture
   - Harrison RT & Mason CM: International Perspectives on the Supply of
     459-475

4 A revised version of this paper will be published during 1998 as: Informal Venture Capital: Investors,
• The Role of Informal Investors in the Dutch Venture Capital Market: Unknown but very much in Demand. K+V organisatie bv and Entrepreneurial Holding bv (1996). Available: Mr J Kazatzidis, Ministry on Economic Affairs, Bezuidenhoutseweg 30, PO Box 20101, NL-2500 EC The Hague. Tel: +31 70 379 6647; Fax: +31 70 379 6786


3) Venture Capital
Further Information on venture capital companies can be obtained from:

European Venture Capital Association (EVCA)
Minervastraat 6, Box 6, B 1930 Zaventem
Tel: +32 2 715 0020; Fax: +32 2 725 0704
Website: www.evca.com

EVCA's annual Directory contains details of all its members. It includes addresses of all European national venture capital associations. This information is also to be found on the EVCA website.

EVCA Publications:
• EVCA Yearbook, published mid-year, contains the results of the annual European venture capital and private equity survey, covering 17 countries in depth.
• Venture Capital Incentives in Europe. Fiscal and legal incentives relating to venture investing in 10 European countries.
• European Success Stories. Profiles 17 recent successfully exited early-stage investments.
• The Economic Impact of Venture Capital in Europe. Main findings of a pan-European survey.
• EVCA White Paper Recommendations at the European level to policy makers to promote dynamic and efficient private equity markets in Europe.

Other Publications:
• Lachmann J: Le Seed Capital: Une Nouvelle Forme de Capital-Risque, Economica 1992 (France)
• Lachmann J: Financer l’Innovation des PME, , Economica 1996, (France)
• Lorenz, A: Venture Capital Today, Woodhead Faulkner 1989 (UK)

4) Business Plans
• Preparing a Technology Business Plan. DG XIII Innovation Programme 1998
• Publications by management consultancies and by national venture capital associations

5) European Innovation Monitoring System (EIMS)
The following table is a list of publications on finance resulting from this programme:

<table>
<thead>
<tr>
<th>List of EIMS publications on finance</th>
<th>EIMS Publication N°</th>
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<tbody>
<tr>
<td>European Second-Tier Markets for NTBFs, 1994, G. Bannock &amp; Partners (UK)</td>
<td>ISBN1-898975-02-7(*)</td>
</tr>
<tr>
<td>Innovation Financing: Private Investors, Banks &amp; Technology Appraisal, Nov. 96, Fraunhofer Institute for Systems and Innovation Research (D)</td>
<td>28</td>
</tr>
<tr>
<td>Pan-European Study of the Performance of Venture Capital: Summary of Results, 1997, G. Bannock &amp; Partners Ltd. (UK)</td>
<td>43</td>
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<tr>
<td>Research into the Finance of New Technology Based Firms, 1995, Nodal Consultants (F)</td>
<td>54</td>
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<tr>
<td>Exit Mechanisms for Investors in New Technology Based Firms, 1995, Coopers &amp; Lybrand (UK)</td>
<td>55</td>
</tr>
<tr>
<td>Mobilising Private Capital: Workshop Proceedings, 1996, TNO Centre for technology and policy studies (NL)</td>
<td>56</td>
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</tbody>
</table>

(*) only available in book shops

6) Financing Innovation Homepage
More information on sources of Finance for Innovation and on current community support schemes can be found on the financing innovation home page:

http://www.cordis.lu/finance/home.html
A Guide to Financing Innovation

A publication from the ‘Innovation and participation of SMEs’ programme, part of the European Commission’s Fifth Research Framework Programme. The Innovation and SMEs programme promotes innovation and encourages the participation of small and medium sized enterprises (SMEs) in the framework programme.

For further information:
www.gate2growth.com

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DG Enterprise - Innovation/SMEs programme

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