Financing of innovation projects

Karolinska Institutet

Financing of innovation and business-related projects

If you have ideas for an innovation project you want to carry out, you often find that you reach a point where you require external resources to continue. This document is a summary of the most important sources of financing, and makes reference to some of their advantages and disadvantages. Financing of pure research is not included in this context.

Capital requirement

In addition to a good idea, an entrepreneur requires access to resources in the form of capital, expertise and time (Money, Men & Minutes). Capital can be divided into contributions, loans and own capital, the latter also referred to as venture capital. Venture capital is money invested by an investor and that will be lost if the project fails. Input of extra capital may be required at different stages of the company's development or if there are changes in ownership.

The scope of the capital requirement depends on the phase of development for the project or company, for example:

- Study phase.
- Patent phase.
- Prototype development.
- Clinical trials.
- Market launch.
- Production phase.
- Expansion phase.

Financing and capital supply at the different commercial phases have different terminology:

- Seed funding or early stage funding; financing before a company has been founded.
- Start capital; capital required to start the new company.
- Expansion capital; capital supplied when the company has products on the market and plans to expand.
- ”Replacement”; when an investor, for example a venture capital enterprise, acquires the shares of a different investor in the company.
- Buyout; capital supplied when the company is acquired by another company.

Sources of financing

It can be difficult to find the correct source of external capital. It is therefore recommended to start by evaluating whether capital can be sourced from the immediate environment, or how long you can sustain the project without incurring debt. Below, we will study some sources of financing of early-stage business-related projects or to start a company. At the end of the document, we will also provide several possible sources of financing of non-commercial projects.

- Self-financing/internal financing.
- Customer/supplier financing.
- EU and public financing.
- Bank loan.
- Venture capital.
- Business angels.
- Crowdfunding.

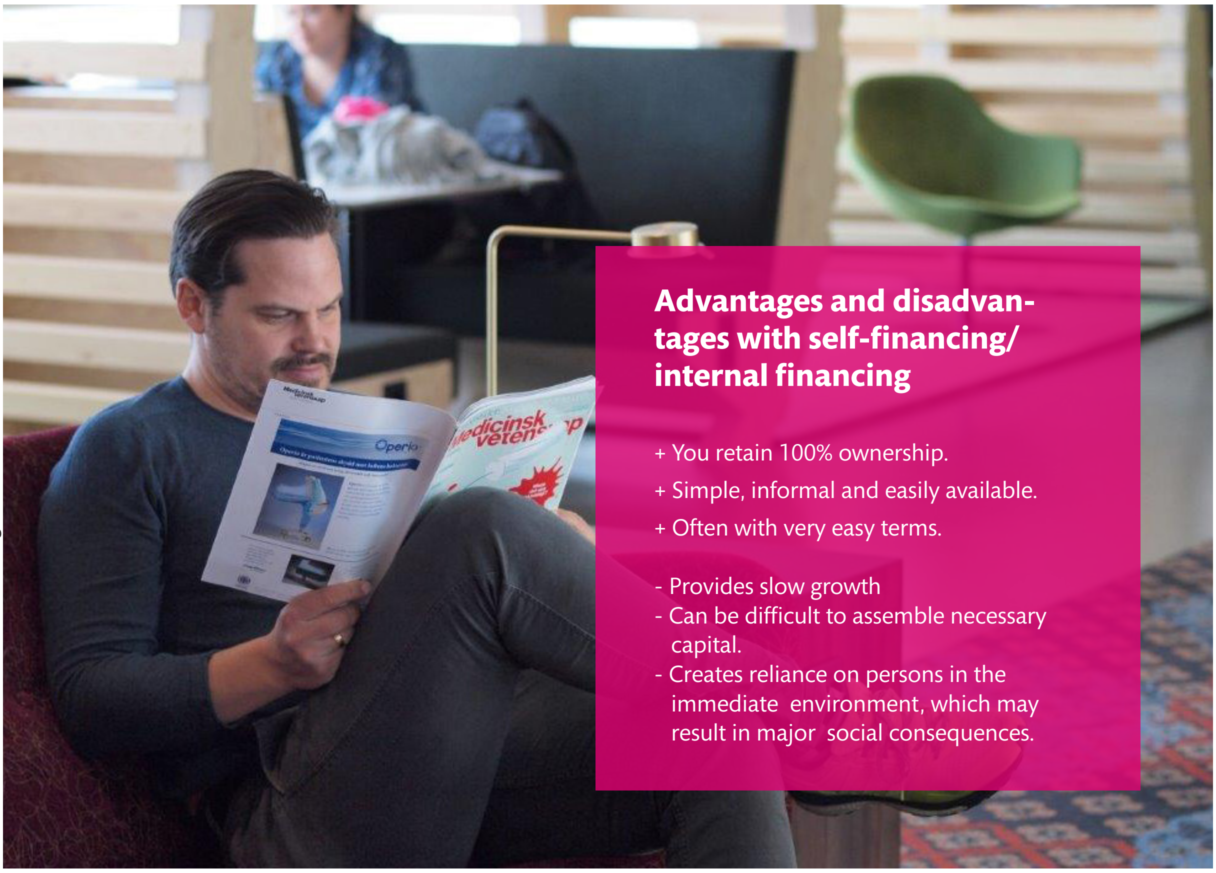
Self-financing/internal financing

This type of financing is often the first choice as it is easily available and has low costs. Think carefully about how much you want and can afford to spend, and the possible consequences if the project fails. If you are not willing to invest at least a certain amount yourself, you will most probably find it difficult to convince others to do so.

Internal financing is when financing is generated by earnings from sales or via the injection of private funds. A common source of self-financing may also be friends and family (often referred to as the three F – Family, Friends & Fools). Keep in mind however that the consequences of involving those closest to you may not only imply a financial risk but also a social risk.

One type of internal financing is referred to as "financial bootstrapping", implying that you are extremely conscious of costs and always attempt to find alternatives that involve as low costs as possible. You could, for example, choose inexpensive premises (or work from home as long as possible rather than renting an office), or offer employees the opportunity to be co-owners or receive shares in the company in return for accepting lower salaries or working for free in the initial period. You can also attempt to find students to help with the project, purchase services (instead of employing staff) or borrow or buy second-hand equipment and technology required for operations. One good way of quickly obtaining external capital for the company can be, at least initially, to offer the company's expertise in the form of consultancy services – work that can be carried out simultaneously with the development of ordinary operations for the company.

If you are able to manage with internal financing and allow the company to grow in line with increased sales, then your company will have what is known as "organic growth". However, if you are not satisfied with this, or if internal financing is not sufficient, you will have to seek external financing. External financing can be sourced from customers/suppliers or via external financers. The following paragraph contains several examples of external financers.



Advantages and disadvantages with self-financing/internal financing

+ You retain 100% ownership.
+ Simple, informal and easily available.
+ Often with very easy terms.

- Provides slow growth
- Can be difficult to assemble necessary capital.
- Creates reliance on persons in the immediate environment, which may result in major social consequences.

Axel C. Carlsson. Photo: Stina Branting.

Customer or supplier financing

Customer or supplier financing implies that you arrange financing from your customers and/or suppliers. Financing from customers can take the form of advance payments or if you have long-term agreements with your customers by attempting to choose a payment model that provides earnings as early as possible, for example by charging an up-front fee.

Another option is to allow suppliers to contribute towards financing. This could, for example, take the form of an agreement to extend the period for payment of their services or goods, a postponement of costs. Alternatively, you can postpone payments by e.g. hiring equipment instead of purchasing it or finding some other way of sharing the risk with the suppliers.

Customer/supplier financing helps improve liquidity and solvency for the company or project. As compensation for their assistance with financing, the customer or supplier normally requires certain benefits in return.

Examples of such benefits may be providing the customer with a time-limited exclusive right to your product or providing the supplier with a time-limited sole right as supplier of necessary materials or components to your company.

Advantages and disadvantages with customer or supplier financing

+ Increased liquidity for the company.
+ Low costs.

- Limited amount of capital available.
- Requires participation by a customer or supplier.
- Affects relationship with customers and suppliers.

Public financing and EU financing

Public organisations, such as the government, municipalities or the EU, may at times provide support to companies and commercially-oriented projects via loans, grants or own capital. The underlying purpose of such support is often a political objective that promotes growth, employment or generation of new businesses. The purpose may also be to promote a certain field within industry, technology or a specific target group based on origin, age or gender.

Public funds available for companies

There are no general grants available for starting a new company or business. There is a time-limited grant for unemployed persons who want to start their own company, in the form of so-called “Support for starting a business”, up to six months and provided by Arbetsförmedlingen, the Swedish employment service.

There are numerous publicly financed programmes for research-based companies, particularly new companies and small and medium-sized companies, to help you develop your ideas and make them more competetive.

Such programmes frequently require the involvement of several professional partners, e.g. based on consortiums that comprise researchers, industry and other partners. For projects associated with health, there is often a requirement for involvement in healthcare.

Example of Swedish public funds

The two most significant Swedish enterprises that are sources of financing for innovation projects and new companies are Vinnova and Almi. Vinnova provides funding for evaluation/verification of business ideas and projects, but also for cooperation projects between industry and academia. Almi provides various forms of grants, loans and venture capital for companies in the start-up phase.

Vinnova, Sweden's innovation agency, has a large number of grants and programmes available for new companies and ideas that are developed from academia. The best way to find relevant Vinnova programmes (future and current announcements) is to visit Vinnova's website, www.vinnova.se. One example of a programme financed by Vinnova is "the verification for growth" (VFT). This programme allows Vinnova to carry out a comprehensive commercial verification of the results of research in order to minimise the technical and commercial risks, identify the most appropriate strategy for commercialisation and develop a concept that can be adequately protected during the ongoing commercialisation process. You can apply for up to SEK 300,000 with this programme. Vinnova's verification programme is currently administered by the univeriteies themselves.

Almi is a governmental financing body represented throughout Sweden via regional subsidiaries. Almi provides consultation, mentorship and different forms of financing:

Innovation cheques

Almi administers so-called Innovation Cheques on behalf of Vinnova. An innovation cheque can be utilised for innovation projects in the early phase or to develop a company and intellectual property rights, not for patent applications. External services can be purchased from other suppliers.

- Maximum amount is SEK 100,000.
- The company should have minimum three employees.
- The company shall have been active in the industry for minimum one year.
- Net revenue shall be more than SEK 1.5 million.
- The company should not have received more than SEK 50,000 from Vinnova over the past five years.

Innovation loan

- May be utilised to develop a product, protect intellectual property rights or for market surveys.
- Soft money (the loan is only repaid if the product reaches the market). Two years without amortisation, repayment within five years, only for companies.
- Minimum amount is SEK 50,000.
- For loans that exceed SEK 300,000, there is a requirement of minimum 50% co-financing.
- Security required for the loan, may be a patent, brand, industrial design right.

Feasibility study funds

- A grant of up to SEK 35,000. Can be applied for by companies or private individuals.
- For innovative products in the development phase that are applicable for commercial and technical evaluation, for example services by consultants/ specialists, legal, technical or market.
- The grant may cover maximum 90% of capital equirement.

Business loans

- Loans for both new and established companies (<250 employees).
- Requirement for minimum one other co-financer.
- No maximum amount for the loan.
- Repayment in maximum five years.
- High risk – high interest (> the bank).
- Takes security in the company and requires a guarantee.

Micro-loan

- Loan for new companies and companies struggling to find financing on the traditional capital market.
- Maximum amount: SEK 250,000.
- The loan may cover 100% of capital requirement.
- Mainly based on business opportunities.
- High risk – high interest (> the bank).

Almi also has a special growth loan for companies targeting growth, the minimum amount you can apply for is SEK 250,000, in addition to an export loan for companies that want to start exporting. The latter can cover up to 90% of capital requirement with no limitation on amount.

Almi Invest, a subsidiary in the Almi Group, is a venture capital enterprise that invests from seed stage to expansion phase. 50% of the capital in the fund originates from the EU's structural funds.

EU financing

The EU does not provide general financing or loans for setting up new companies, but there are several programmes available for development of early-stage business concepts, product development and cooperation projects, particularly if you are a small or recently established company.

Horizon 2020, the EU Framework Programme for Research and Innovation, has in total more than EUR 80 billion in funding available, of which EUR 2.8 billion targets entrepreneurs. Companies can receive support in the form of grants, loans or guarantees. There is also the option to have exclusive contracts for the delivery of different goods and services.

Applications for financing can be submitted for: risk assessment activities, design or market surveys and investigation of intellectual property rights, prototypes, miniaturising, upscaling, design, performance verification, testing, demonstration, development of pilot, validation for market launch.

Such financing often requires the involvement of project partners from several EU nations (applications can be made for travel expenses). It can be difficult to gain an overview of current and future announcements, but information and a support office are available on Vinnova's website, www.vinnova.se, click on the menu for EU and international cooperation.

Venture capital

Venture capital is the same as the company's own equity, i.e. the capital that you or some other party (person or company) invests in your company in expectation of a return on the investment. Venture capital is therefore the capital invested in exchange for a share in the project.

Today, there is an entire industry of enterprises and funds (Venture Capital or VC enterprises) that provide venture capital in return for a good yield on their investment. The so-called venture capital industry emerged in the USA in the 1950s. It arrived in Sweden some 20 years later. Today, venture capitalists administer more than SEK 200 billion in Sweden alone, 70% of this amount is foreign capital. The largest enterprises comprise pension funds and insurance companies. Private individuals that provide venture capital are often referred to as business angels, more information in the next paragraph.

Venture capital can be divided into two sub-groups:

- Public Equity; investments in listed companies, companies on the Stock Exchange – venture capital realised for example via new share issues.
- Private Equity; active and time-limited capital offered to unlisted companies. Private equity can in turn be divided into; Venture Capital (primarily targeting companies in the seed, start-up or expansion phases) and Buy-Out (transactions between mature companies).

Advantages and disadvantage with VC financing

\+ Financing at an early stage (no requirement for existing sales).
\+ Large amounts of funding available allowing more rapid development for the company.
\+ Financer often an active owner (contributes experience, expertise and network).

\- You lose a certain amount of control over the company/diminished influence
\- The financer demands rapid growth..
\- Very selective financers.

For an external person or party willing to invest in your project, you should provide an exit opportunity, that is a point in time when the financer can leave the project and recover the capital invested, hopefully with a good return, or investment.

Examples of exit opportunities:

- Listing on a stock exchange. Also referred to as IPO (Initial Public Offering) or stock exchange introduction.
- Industrial financing. An established company acquires the investor's shares.
- Financial financing. A different financer takes over the investor's shares.
- Repurchase by the entrepreneur.

There are certain fundamental requirements for a venture capital enterprise to invest in a company or project:

- The company shall be a limited company.
- It should have a unique business concept.
- Strong focus on growth and profitability.
- The company concept should be scalable.
- The company shall have the correct expertise and experience (strong team).
- Clear and trustworthy business plan. This should comprise what is behind the project, experience, mission, type of operation, clear description of the product, market description and, not least, the proposed exit strategy.

The money invested mainly originates from institutes such as pension funds and foundations (limited partners) and is placed in joint funds that are administered by the venture capital enterprise (general partner). The size of the investment can vary substantially, from perhaps a few hundred thousand SEK to some hundred million SEK. The investment horizon, that is the period from which the investor invests in the project until the date of exit, may vary between three to ten years. The longer alternative is not uncommon for projects/companies involving life sciences. Venture capitalists are often active investors and will require an influence on the company's development by means of involvement in the company's Board of Directors.

You can find the addresses for venture capitalists (companies and funds) and their target areas on the website for the Swedish Private Equity & Venture Capital Association (SVCA) at www.svca.se.

Photo: Arcive, students

Business angels

A different type of venture capital is the capital offered by so-called “business angels”. Business angels are private investors, that is a persons who invest both capital and knowledge in promising new projects and companies.

Business angels are often persons with previous experience of starting and running their own businesses. They have frequently achieved successful exit strategies, releasing capital that they want to invest in new ideas. In addition to the actual capital, they also provide experience, expertise and networks. It is often said that business angels “combine heart, brains and wallet” when investing.

A business angel’s investments are often of a different nature than investments made by VC companies:

- Business angels tend to invest lower amounts.
- The decision to invest is based more on intuition and confidence in the entrepreneur.
- The business angel can decide quickly to invest as they only have to take their own money into consideration.
- Business angels assess other parameters than purely commercial issues, such as projects with a social utility value, “the fun factor”, how challenging the project is, whether the project has a certain purpose.

There are between 3,000 and 5,000 active business angels in Sweden. In total, they invest approximately SEK 2 billion annually. Many business angels are organised and invest in so-called networks (BAN–Business Angel Network). There are currently 200 to 300 such networks in Sweden. A list of business angels can be found on the Swedish website for the Swedish Private Equity & Venture Capital Association (SVCA) www.svca.se

Advantages and disadvantages with business angels

+ Potential for financing at early stage (no requirement for existing sales).
+ Rapid decision-making and quick access to capital.
+ Offer expertise, experience and networks (active owners).

- Can be difficult to find the correct business angel.
- Very selective.
- Entrepreneur/founder loses some Influence over the company.

Bank loans

Bank loans are perhaps the most common form of external capital. Banks specialise in supplying capital and managing risk. Before lending money, banks normally require some form of security from the borrower. As security, you can use mortgages on for example inventory, machinery, trade receivables or the company’s real estate. You can also allow another party to take the role of creditor (loan guarantor).

Bank loans almost always require presentation of a business plan for the company, in addition to a reliable budget and an annual report. The latter is required to allow the bank to assess the capacity to pay back the loan, the risk.

The company shall preferably have initiated sales and have generated a profit. When the company (loan applicant) signs an agreement with the bank (lender), the owner also signs a repayment plan (when and how the loan shall be repaid), specification of the security and the interest rate.

The interest rate is primarily based on the market, the company's risk and the security provided. Please note that interest rates are almost always negotiable.

When assessing the borrower, the bank investigates the following:

• Liquidity – namely the capacity to pay in the short term.
• Financial strength – the percentage of own equity in relation to total assets.
• Yield – result in relation to capital.

In addition, the bank will always carry out a credit rating and examine former credit history to ensure that the borrower is able to pay the cost of the loan and that the bank can hedge its earnings.

Advantages and disadvantages with bank loans

+ Financially strong financer that can quickly supply capital.
+ A number of different loan alternatives/ credits available.
+ Several ways to obtain capital from your company's assets, for example invoice factoring.
- Formal financer that demands profitability and "figures in the black".
- Security required.
- Primarily target relatively mature projects/ companies.

Crowdfunding

Crowdfunding, or grassroot financing, is a form of financing that allows a large number of investors (so-called backers) to individually invest smaller sums of money in a project. The individual investments are combined to help a company reach its financing goals.

Financing of a project, product or company is generated by preparing a so-called "campaign" presented on a specific crowdfunding platform. The crowdfunding platform is normally maintained by a commercial party via a website and social media.

For a campaign, the financial targets you want to achieve and what you can give back to the investors in return for their financing (reward) are defined. This type of financing has seen an increase and has become much more popular as the general public is more interested in the development of society and wants to play a role in a success story. Crowdfunding kills three birds with one stone; marketing, market validation and financing.

Advantages and disadvantage with crowdfunding financing

+ Can help you increase awareness of your project/company.
+ Rapid method of obtaining financing.
+ Investors can help you market your project via their networks.

- Your idea may be stolen if it is not protected.
- If you do not reach your financing goals – no money.
- Administration of fulfilment (for example rewards to backers/investors).

There are several different forms of Crowdfunding:

Reward-based crowdfunding:
Reward-based crowdfunding: This comprises financing of a campaign with economic support from numerous backers in exchange for a reward. This form has developed into the most popular form of crowd-funding. The reward may include objects such as early access to products, VIP treatment, goods etc. Normally, amounts of less than EUR 50,000 are assembled in minor stages.

Donation-based crowdfunding:
Donation-based crowdfunding implies that persons donate money in return for the positive feeling of having contributed towards something they are passionate about. The act of giving back and the entire benefit to society of making donations are what encourages these individuals to contribute towards projects they feel deserve a repayment.

Loan-based crowdfunding:
Loan-based (or debt-based) crowdfunding implies financing a company by offering numerous lenders interest in return for a loan. For loans for grassroot financing, lenders are entitled to charge interest during the term of the loan. Normally, amounts of EUR 5,000 to 150,000 are assembled.

Equity Crowdfunding:
Equity crowdfunding implies financing a company by offering shares and thereby co-ownership in the company in return for financing from a large number of investors. The investors gain ownership in the company and can also provide valuable knowledge and access to networks. This type of crowdfunding may be appropriate for both new companies and more established companies. Normally, amounts of EUR 50,000 to 150,000. are assembled.

Costs

The commercial crowdfunding parties charge a relative fee based on the total sum of money assembled for reward-based campaigns (approximately 6%). A fixed fee is charged for share-based campaigns (approximately EUR 500) included in the listing fee in order to go live with the campaign. There is also a relative fee or success fee (approximately 8%) on the total amount of money assembled by the end of the campaign.

For loan-based campaigns, crowdfunding websites charge a relative amount (approximately 4%) in addition to a success fee. Moreover, the party behind the crowdfunding platform may charge a minor administration fee on repayments to the lenders. Campaigns that do not achieve the pre-specified threshold value are not normally financed. In such an event, all assembled capital is repaid to the investors, with no cost for the entrepreneur.

Photo: Arcive

Financing of non-commercial projects

Financing of non-commercial projects differs from financing of commercially-driven projects. The driving forces and purpose for the financers with non-commercial projects is not to maximise return on invested capital, at least not in monetary terms and in the short term.

The purpose behind the financer's investments may instead be ideological, political, humanitarian or to cater for the interests of a certain group. Commercial enterprises may at times decide to display their social responsibility by providing financing for non-commercial projects, "social sponsoring". In such a case, the driving forces are naturally that the investment will provide a return for the company in the long term. As with more commercially-oriented projects, it is naturally important that potential investors in non-commercial projects understand the project, what you aim to do and, not least, how much it will cost.

The importance of a business plan for a commercial project will be replaced in a non-commercial project by a clear and well-formulated project plan.

A project plan shall contain:

• Problem and background.
• A clear description of how the project will solve the problem (corresponding to product).
• Who is the recipient of the result (corresponding to a target group).
• Who will carry out the work and how (corresponding to business model).
• What resources are required (in the form of time, expertise and capital).

For many investors/financers, it is important to be able to provide arguments for their investments. It is therefore particularly important to describe the different values generated by the project for example, financial or other. In this context, it is important to meticulously investigate the individual's financer's mission, goals and target groups.

Examples of financers of non-commercial projects may be:

• The EU.
• The UN.
• Sida (the Swedish International Development Cooperation Agency).
• Foundations.
• Patient organisations.
• Companies.

Advantages and disadvantages with financing of non-commercial projects

+ Often soft money with attractive and generous terms.
+ Opportunity for pure contributions.
+ Cooperation can result in win-win-situation, for both financer and the individual project.

- Very difficult to find the correct financer.
- Financers often very selective.
- Limited amount of capital available.

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