

Bachelor's Thesis

Degree Programme in International Business

General Management Specialization

2014

Eeva-Leena Lehtonen

APPLYING PUBLIC FUNDING FOR FINNISH SMES' INVESTMENTS

– Case Kaune Oy



TURUN AMMATTIKORKEAKOULU
TURKU UNIVERSITY OF APPLIED SCIENCES

Eeva-Leena Lehtonen

APPLYING PUBLIC FUNDING FOR FINNISH SMEs' INVESTMENTS – CASE KAUNE OY

Financial decisions are an important part of business activities. One of the most important is the question of how investments are funded. This thesis studies the alternatives public funding has to offer for Finnish SMEs and their investments. The aim of the study was to discover potential sources offering public funding for Finnish SMEs' investments. The idea was to identify the main features and differences of these sources or instruments, and to find out, how these instruments can actually be applied for.

The idea and assignment for this thesis came from Kaune Oy, a Finnish SME specialized in glass and metal industries. Kaune Oy is looking for ways to finance its new laminating machine with the help of public funding. Thus, the research took the form of a case study, where Kaune Oy's wishes and goals were mapped with semi-structured and unstructured interviews, followed by thorough literature review and information search on theories related to funding, investments, as well as public funding sources and instruments. Even though the thesis makes use of only one case company, the research and findings are of such general nature that it is safe to assume that they can be applied to other SMEs as well.

The end results of the study are the presentation of different public funding sources available for Finnish SMEs when financing investments or working capital and a six-step model for the public funding of investment projects.

KEYWORDS:

Financing, Funding, Investment, Public Funding, SME, Working Capital

Eeva-Leena Lehtonen

SUOMALAISTEN PK-YRITYSTEN INVESTOINTIEN JULKINEN RAHOITTAMINEN – CASE KAUNE OY

Rahoituspäätökset ovat yksi yritystoiminnan keskeisimmistä osa-alueista, ja yksi tärkeimmistä päätöksistä ovatkin investointipäätökset, eli päätökset siitä, mihin tuotannollisiin kohteisiin yritys varojaan käyttää. Tässä opinnäytetyössä tutkitaan, mitä vaihtoehtoja julkinen rahoitus tarjoaa suomalaisten pk-yritysten investointien rahoittamiseen. Tutkimuksen tavoitteena on löytää mahdollisia julkisen rahoituksen lähteitä yritysten investointitarpeisiin sekä selvittää, miten nämä lähteet ja niiden tarjoamat rahoitusvälineet vertautuvat suhteessa toisiinsa. Lisäksi selvitetään, miten yritykset voivat hakea julkista rahoitusta.

Opinnäytetyön idean ja toimeksiannon esitti Kaune Oy, suomalainen lasi- ja metallialaan erikoistunut pk-yritys, joka etsii keinoja rahoittaa uuden laminointipöytänsä hankinta julkisen rahoituksen avulla. Tutkimus suoritettiin tapaustutkimuksen muodossa, jonka aikana Kaune Oy:n toiveet ja tavoitteet selvitettiin erilaisten haastattelujen avulla, ja joiden perusteella suoritettiin syvälinen katsaus rahoituksen teoriaan, investointeihin ja julkiseen rahoitukseen liittyvään kirjallisuuteen ja tietolähteisiin. Vaikka opinnäytetyössä tutkitaankin vain yhtä yritystä, ovat tutkimus ja sen tulokset kuitenkin niin yleisiä, että niitä voidaan soveltaa myös muiden pk-yritysten tarpeisiin.

Tutkimuksen lopputulos on esitys erilaisista pk-yritysten investointien ja käyttöpääoman julkisen rahoituksen lähteistä. Lisäksi luotiin kuusivaiheinen malli, jota yritykset voivat soveltaa suunnitellessaan investointiprojektiansa julkista rahoitusta.

ASIASANAT:

Rahoitus, rahoittaminen, investointi, julkinen rahoitus, Pk-yritys, käyttöpääoma

ACKNOWLEDGEMENTS

To my beloved father who has always inspired me and gently pushed me towards being the best version of myself.

CONTENT

ACKNOWLEDGEMENTS	4
LIST OF ABBREVIATIONS	7
1 INTRODUCTION	6
1.1 Motivation Behind This Thesis	6
1.2 Research Questions and Objectives	6
1.3 Structure of Thesis	7
1.4 Kaune Oy	8
2 METHODOLOGY	8
2.1 Research Methods	8
2.2 Research Strategy	9
2.3 Data Collection	10
2.4 Credibility of Findings	11
3 FUNDING AND INVESTMENTS	12
3.1 Basic Questions of Funding	12
3.2 Sources of Funding	13
3.2.1 Equity, Liabilities and Mezzanine Funding	13
3.2.2 Financial Markets	14
3.2.3 Financial Intermediaries	15
3.3 Cost of Capital	16
3.4 Funding of Investments	16
3.4.1 The Concept of Investment	16
3.4.2 Investment Decisions	17
3.4.3 The Profitability of Investments	18
4 PUBLIC FUNDING IN FINLAND	22
4.1 Sources of Public Funding	23
4.1.1 ELY Centers	23
4.1.2 Finnvera	23
4.1.3 Sitra	24
4.1.4 TE Services	24
4.1.5 Tekes	25
4.1.6 European Union	26
4.2 Forms of Public Funding	27

5 SMES'S SOURCES FOR PUBLIC FUNDING WHEN FINANCING INVESTMENTS AND WORKING CAPITAL	27
5.1 Grants	28
5.1.1 Development Grant for Investments	28
5.1.2 Other Grants of ELY Centres	29
5.2 Loans	29
5.2.1 Finnvera Loan	29
5.2.2 Entrepreneur Loan	30
5.2.3 Loans of the European Investment Bank	31
5.3 Guarantees	32
5.3.1 Finnvera Guarantee	32
5.3.2 Micro-Guarantee	33
5.3.3 Guarantees of European Investment Bank and European Investment Fund	33
5.4 Options of the European Union	34
6 CASE: KAUNE OY	34
6.1 Company and Case Introduction	34
6.2 Suggestions and Solutions	35
6.3 Model for the Public Funding of Investment Projects	37
7 CONCLUSION	39
7.1 Main Findings	40
7.2 Suggestions for Further Research	41
SOURCE MATERIAL	43

FIGURES

Figure 1. Types of Business Capital (Knüpfer and Puttonen 2006, 20).	13
Figure 2. Structure of Financial Markets (Knüpfer and Puttonen 2006, 38).	15
Figure 3. A Business' Alternatives to Use Its Funds (Knüpfer and Puttonen 2006, 80).	18
Figure 4. Categories of Real Investments (Leppiniemi 2009, 27–28).	21
Figure 5. Model for the Public Funding of Investment Projects.	39

TABLES

Table 1. Comparison of Equity and Liabilities.	14
--	----

LIST OF ABBREVIATIONS

CIMO	Organization for International Mobility and Cooperation
CSR	Corporate Social Responsibility
ECB	European Central Bank
EIB	European Investment Bank
EIF	European Investment Fund
EU	European Union
IRR	Internal Rate of Return
JEREMIE	Joint European Resources for Micro to Medium Enterprises
LLC	Limited Liability Company
NPV	Net Present Value
ROI	Return of Investment
SME	Small and Medium-Sized Enterprises

1 INTRODUCTION

1.1 Motivation Behind This Thesis

Financial decisions are a focal part of business activities. The liberalization of financial markets, the internationalization of funding, the birth of new financial instruments and many other changes have had a significant effect on the planning and organizing of funding. Nevertheless, the basic questions of funding have not changed throughout the decades, and remain in outline the same in all business activities and all over the world (Martikainen and Martikainen 2006, 11.). This is why understanding the basics of funding is a key competence for international business students.

The personal starting point of this thesis was an interest to learn something new and to do something concrete while learning. I wanted to choose a subject that was interesting but also a subject that would bring some new contents to my bachelor's degree. That is why studying or exploring a topic related to the field of financing felt like a natural choice for me.

When Kaune Oy, a Finnish SME specialized in glass and metal industries, offered me a chance to look into trying to allocate funding for their investments with public funding methods I was immediately intrigued. This task met my goals of both doing something concrete and learning something new while doing it. I admit, the task was probably not the easiest one, but I was ready to take the chance and tried to make the topic work for my individual goals.

1.2 Research Questions and Objectives

In the following the research questions for this thesis are presented and the objectives behind these questions are explained.

1. What are the main sources of public funding available for Finnish SME's when financing their investments and what are the differences between these sources?

Objective: To gain an understanding of the possible sources of public funding available in the financing of investments and of how these sources and public funding instruments compare to each other.

2. What are the prerequisites for applying public funding?

Objective: To find out whether there exist any preconditions or impediments for applying public funding and what these possible prerequisites might entail.

3. What does the process of applying for public funding entail?

Objective: To get a picture of how the process of applying for public funding works, what it requires and/or which steps need to be taken in order to obtain public funding.

The overall objective of this thesis is to give a clear and updated view on the different options of public funding available for Finnish SMEs in the area of investments and working capital. The goal is to present the process of deciding to invest, and to fund the investment through public funding, and to take into consideration the main peculiarities related to that process. The end product is hopefully a useful guideline, not only for the case company, but for other SMEs trying to find answers for their public funding needs as well.

1.3 Structure of Thesis

This thesis begins with an introduction to the methodology, i.e. research strategy and methods applied for this case. The methodology is then followed by a review of the research conducted concerning the theoretical framework of the thesis. The literature review begins with an introduction to the basic concepts of funding and its relation to investments, which works as a basis for understanding what is to be presented in chapters that follow. Chapter four

takes a closer look at public funding and public funding sources, and chapter five explains and compares the sources or instruments of public funding available when funding SME's investments or working capital. In the final parts of the thesis (chapters six and seven) the case company as well as the results and conclusions based on the case study are presented. References are listed at the end of this thesis.

1.4 Kaune Oy

The case company of this thesis, Kaune Oy, is a Finnish family-owned SME established in 1915. The company is a versatile professional in glass and metal industries, specialized in demanding interior design and construction industry glass projects as well as production services (Kaune Oy 2014.)

Now, since the construction industry is beginning to recover from the toughest parts of the financial crisis, and business is beginning to increase as well, the company has decided it is time to invest in new equipment and perhaps through that to come up with new products and product lines. The first step is to invest in a new laminating machine, the acquisition cost of which will fall into somewhere between 50 000 and 70 000 euros. Before the company will take on this project it wishes to find out the possibilities public funding might have to offer in securing the funds for the project, and how they should proceed with this acquisition process.

Since at this point we are clearly talking about an investment, the focal point of this thesis is investments and how to possibly fund them with public funding methods.

2 METHODOLOGY

2.1 Research Methods

Research methods are typically divided into quantitative and qualitative methods. Quantitative can mean a data collection method (e.g. questionnaires)

or a data analysis procedure (e.g. graphs, statistics) that generates or uses numerical data. Qualitative on the other hand means techniques (e.g. interviews) and procedures (e.g. data categorizing) that generate or use non-numerical data. Quantitative and qualitative techniques can also be combined, which means applying multiple methods to answer one's research questions. When only using a single technique and appropriate procedures, one is applying a mono method (Saunders et al. 2009, 151–152.)

This thesis applies **qualitative methods**. The data that is analyzed is gathered through interviews, and through a critical literature review and information search. In this case the data is also analyzed using non-numerical procedures, by categorizing and comparing the findings. This makes it a **multi-method qualitative study** (Saunders et al. 2009, 152).

The nature of data collected in qualitative research has an effect on how it is analyzed, meaning that the collected data most likely needs to be summarized, categorized or even restructured to support research analysis. This makes it almost unavoidable that the researcher himself has an influence on the data with his interpretations and perspectives (Saunders et al. 2009, 482–484.)

2.2 Research Strategy

A clear research strategy is a good basis for conducting research. The most important thing in applying and choosing the best research strategy is not what the strategy itself is called; but that it answers the prepared research questions and set research objectives (Saunders et al. 2009, 141.)

This thesis employs **case study** strategy, which according to Robson (2002, 178) means “a strategy for doing research which involves an empirical investigation of a particular contemporary phenomenon with in its real life context using multiple sources of evidence”. In a case study the context in which phenomena are studied are not clearly evident, and case study strategy is able to answer questions like “why?”, “what?” and “how?”. Case study data collection methods can be of various natures and used in combinations,

including e.g. interviews, observations, and some type of analysis (Saunders et al. 2009, 145–146.)

A case study strategy can be either a single or multiple case strategy, and it can be either holistic or embedded. This thesis employs **single case strategy**, where this particular case is typical and can represent many other cases of similar nature, and on the other hand where the actual case can be defined. A holistic case study is concerned with whole entities when embedded case studies include more than one unit of analysis. In this light this thesis employs the **holistic** method (Saunders et al. 2009, 147.)

In this thesis Kaune Oy is the case study company, which provides the framework under which public funding resources and their relation to investments is studied. Even though the information and facts are recorded with Kaune Oy in mind, the results are of general nature and can be applied to the investments of other Finnish SMEs as well.

2.3 Data Collection

To begin the research process, the background information and the needs of and goals of the to-be-conducted research were acquired through interviews and discussions with Mikko Saksi, Project Manager for Kaune Oy. The interviews and discussions helped to form the actual research questions and objectives, and offered a means of controlling whether the project was going in the right kind of direction or not.

At first, the actual interviews took the form of **semi-structured interviews**, where certain themes and questions were covered, and follow-up questions were presented where need be. Later when the project went ahead, the interviews became more informal, taking the form of **unstructured interviews**, where topics were discussed freely and more in-depth. The topics covered in interviews and discussions were recorded by taking notes for the personal use of the researcher (Saunders et al. 2009, 320–321.)

To gain knowledge of the topic of the thesis, i.e. funding and investments, a **critical literature review** was conducted. In fact, due to the nature of the project, most of the data collected was acquired through reviewing literature and other sources on funding, public funding and investments. The background information on funding and investments was gathered from literature of TUAS's library and online library Nelli Portal. The information on public funding was gathered through thorough information search in which multiple online (and offline) sources were exploited.

The information was gathered by working independently and authentically, as if the researcher was actually working for the company to fulfill its needs. This makes it valuable in the sense that the results obtained are not purely scientific or theoretical but are gathered through a real-life assignment and project.

2.4 Credibility of Findings

In the hopes of making sure that the answers obtained through the case study are right, attention was paid to both the reliability and validity of the research.

Saunders et al. (2009, 156) define reliability as the extent to which the data collection techniques or analysis procedures produce consistent findings, meaning that the measures taken would yield the same results in other occasions, or that other observers would reach similar observations in their research. Due to the generalizable nature of this research project, one can safely assume that other researchers would come to the same findings and conclusions achieved by this study.

Validity on the other hand is about making sure that the findings are actually about that which they appear to be. External validity, or generalizability, pays attention to whether the findings can be applicable to other research settings as well (Saunders et al. 2009, 157–158.) Even though this can be a concern when conducting case study research in only one organization, the nature of this research project is after all so general, that it can be generalized so that it has value for other entities than the case company alone.

3 FUNDING AND INVESTMENTS

3.1 Basic Questions of Funding

The question of funding is never separate from the business itself. On the contrary, the matters and questions related to a business's investments and funding are very closely linked to each other. The basics of business are simple: one makes investments that profit more than it costs to fund them. This is when the business is profitable and brings more value to its owners. But then if a business can't make profitable investments, its existence is not justifiable since it only obliterates the funds of its owners (Knüpfer and Puttonen 2006, 11.)

The questions of financing can be divided in two as per the business balance. On the assets side these questions are related to profits, i.e. how to achieve the best profit possible. On the liabilities side attention is paid to the costs of funding, i.e. how to achieve the most affordable funding, and how investments are financed with equity and liabilities (Knüpfer and Puttonen 2006, 11.)

According to Martikainen and Martikainen (2006, 11.) there are three core questions to funding from the business point of view:

1. To which investment items should the business invest in? It is important for businesses to decide, which kind of long term investments it makes, which kinds of buildings, machines and equipment it acquires to uphold and develop its business.
2. How should investments be funded? Are investments funded purely with owner investments and profits or is funding for example in the form of bank loans a possibility? What is the ratio between internal and external funding of the business?
3. How is a business's daily financial management organized? In addition to long term funding it is also important to have enough money to pay the daily invoices and to make sure that the business's debtors pay their payments on time.

3.2 Sources of Funding

3.2.1 Equity, Liabilities and Mezzanine Funding

There are many sources available from which a business can acquire the means it needs to fund its operations. The ways of acquiring capital vary in the different stages of business life cycle (Martikainen and Martikainen 2006, 39–40.) In the early stages of business especially public funding is used to initiate the business. Equity funding is also needed as well as liabilities to the extent the business has collateral securities to cover the loans. When company revenue grows, more and more alternatives of funding become available.

A business's capital is usually divided into equity and liabilities. In principal, equity is an owner's financial contribution to a business (Leppiniemi 2009, 71–74.) Thus, equity is made up of capital invested in the business and of the capital accumulated through income flows and left to the business. In addition, the appreciation of business's assets also adds amount of equity (Suomen Yrittäjät 2014.)

Equity can be divided into both internal and external equity (Knüpfer and Puttonen 2006, 20–21, 47.) Internal equity or cash flow financing is made up of business profits, and external equity is collected from investors through the issuing of shares.



Figure 1. Types of Business Capital (Knüpfer and Puttonen 2006, 20).

Liabilities on the other hand mean funding through loans (Leppiniemi 2009, 71, 84–88.) They can be observed as two different groups: account-based and market-based loans. Typical forms of account-based loans are bank loans and

insurance company loans. These types of loans are interest-bearing and they require some form of collateral. When account-based loans are no-good on the secondary market, market-based loans can be traded with. These types of instruments, including certificates of deposits, can be issued both in monetary and capital markets.

Both equity and liabilities have their benefits. If one alternative were above the other there wouldn't be any businesses that would have financed their investments through both equity and liabilities. Knüpfer and Puttonen (2006, 21.) have presented the main features of equity and liabilities in the following table:

Table 1. Comparison of Equity and Liabilities.

	Equity	Liabilities
Privileged position in bankruptcy	Paid last	Paid before equity
Obligation to pay profit	Does not exist	Contractual obligation
Return and risk	High risk, high returns	Low risk, low returns
Right to vote	Yes	No
Repayment of capital	Not usually repaid	Repayment according to loan agreement

According to Knüpfer and Puttonen (2006, 47.), there are also so called mezzanine or hybrid financing instruments that have the characteristics of both equities and liabilities and can't be clearly determined as being one or the other (Leppiniemi 2009, 101). The most important examples of these instruments include convertible bond loans, option loans, equity loans, and preference shares. These types of instruments are usually employed in situations where the interests of different investors would be conflicted if more traditional methods of financing were used (Knüpfer and Puttonen 2006, 47.)

3.2.2 Financial Markets

Financial markets, often divided into monetary and capital markets, offer invested equity and liabilities (Leppiniemi 2009, 73.) Monetary markets offer short-term foreign capital investments for up to one year maximum. Capital markets on the other hand offer long-term foreign capital and invested equity.

That part of capital markets which offers invested equity and is organized in the form of securities market is also called the stock market. Also a part of both short and long-term liabilities is organized as securities markets.

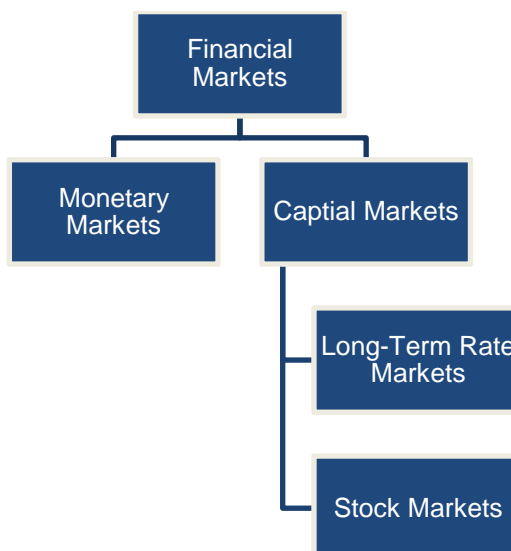


Figure 2. Structure of Financial Markets (Knüpfer and Puttonen 2006, 38).

The functionality of the financial markets benefits all (Knüpfer and Puttonen 2006, 36). The responsibilities of the financial markets include the allocation of funds between the surplus and deficit sectors, the dissemination of information between those investing and those acquiring funds, the pricing of different forms of funding, and the improving of liquidity of financial claims (Knüpfer and Puttonen 2006, 36; Leppiniemi 2009, 73.)

It is up to the financial system to guarantee that capital resources can be transferred there, where they will be most efficiently used. In the financial system funds flow from the surplus sector (households) to the deficit sector (businesses). Sometimes the funds are transferred to the deficit sector through financial intermediaries and sometimes directly through financial markets (Knüpfer and Puttonen 2006, 35–37.)

3.2.3 Financial Intermediaries

Businesses can acquire funding either directly from the public financial markets or through the so called financial intermediaries, i.e. financial institutions whose

responsibility it is to produce services in the financial markets for both investors and businesses (Knüpfer and Puttonen 2006, 37.) Financial intermediaries include institutions like banks, insurance companies, other credit institutions like finance companies and special credit institutions, and businesses specialized in investment activities, including investment companies, investment funds and banking companies (Knüpfer and Puttonen 2006, 43–44).

3.3 Cost of Capital

The cost of capital can be thought of as the yield requirement of investors (Knüpfer and Puttonen 2006, 21). The profits to be received for a business's assets only realize in the future, which brings uncertainty with it. It is this uncertainty that financiers and investors take into account in the price of funds. The more uncertain the investment, the higher the cost for funding since the investor wants his risk to be compensated (Knüpfer and Puttonen 2006, 11.)

The cost of capital is thus based on the evaluations of financiers, who measure the risks associated with the business and strive to take a stand on how the profit for the invested funds should be (Martikainen and Martikainen 2006, 80.) This is what determines for example the price financiers are willing to pay for the stock a business issues into circulation.

3.4 Funding of Investments

According to Martikainen and Martikainen (2006, 80.), one of the most important decisions of business activities is the question of investments: decisions on to which production related objects a business uses its funds for. The profitability of a business depends on whether the undertaking of these investments was in fact remunerative. This is why selecting the most profitable investment projects of all project alternatives is a focal funding question in business activities.

3.4.1 The Concept of Investment

Investing means the acquiring of investments or long-acting factors of production (Leppiniemi 2009, 15.) Typical targets of investment include land,

waters, buildings, machines, equipment, devices, tenements, and subsidiary shares. Intangible investments include for example intangible assets and development work.

Martikainen and Martikainen (2006, 24–25.) relate that businesses expend their capital (invest) to achieve profits in the future. A real investment means the acquiring of factors of production to achieve future profits. The investments a company makes can vary. Some investments can cause larger cash flows, the importance of which is essential for the business. The benefit gained from investments is partially measurable directly as financial gain, but it can also be non-financial, at least at first. Some of possible investments can be mutually exclusive, some complementary, and some can be seen as substitutes for each other.

An investment project is usually a multi-phase, long-term project. The phases of the project include searching for investment projects, evaluating the factors affecting the profitability of investments, formulating and comparing of investment cost-benefit calculations, planning for investment funding, making investment decisions, and following up on the investment project (Martikainen and Martikainen 2006, 27.)

3.4.2 Investment Decisions

As mentioned earlier, investments are usually long-term projects of high importance. That is why every business should have a way to somehow assess its investments as a part of its financial planning, and thus be able to decide which projects are profitable and which are not (Knüpfer and Puttonen 2006, 80.)

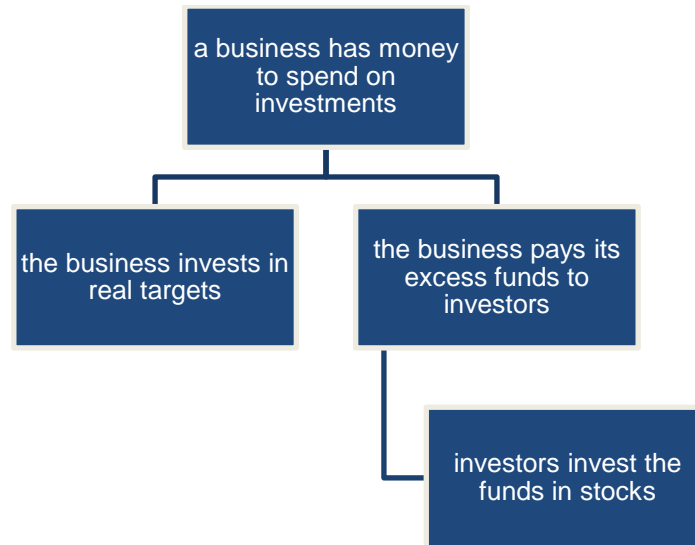


Figure 3. A Business' Alternatives to Use Its Funds (Knüpfer and Puttonen 2006, 80).

According to Knüpfer and Puttonen (2006, 80.) a company's acceptance or rejection of possible investment should primarily be based on how well it generates profit in comparison to the investors' yield requirement. Figure 3 depicts a business' alternatives to use its funds. It is up to a business' shareholders to decide how funds are spent. This is why every investment decision should be regarded as a situation of choice as presented above. In practice this means that a business must take into consideration the desire of investors to obtain the best possible return on their investment. This also means that businesses should implement projects that turn a profit of at least the amount of the investors' opportunity cost.

3.4.3 The Profitability of Investments

The most essential question of an investment project is whether an investment is actually profitable or not (Martikainen and Martikainen 2006, 28.) The profits from an investment only realize in the future, sometimes even over ten or more years. That is why it is of key importance to take the time value of money into account when making investment calculations. The **time value of money** is taken into consideration by counting the present value of future cash flows,

which means "transposing" or discounting the future sums into the present value.

Making investments always brings uncertainty of future revenues and expenditures with it, and when these revenues and expenditures take place in different points in time one must apply a counting method to make them comparable. This uncertainty is managed with the help of careful preparation of possible investments, by formulating investment calculations (Leppiniemi 2009, 15.)

3.4.3.1 Investment Calculations

When assessing the profitability of investments, a practical way is to depict an investment with the help of cash flows (Leppiniemi 2009, 20.), with the help of anticipation and calculation methods as cash outflows and inflows. It is common for investment calculations to simplify the real situation so that cash outflows and inflows are merged to form only one cash inflow or outflow occurring halfway of the examination period. When the hold time of an investment is several years, this simplification usually doesn't cause a significant error.

According to Leppiniemi (2009, 20–21.), an investment calculation allows for the consideration of un-synchronization of cash inflows and outflows, or time value of money. This value is usually depicted with the help of interest rates, most commonly with the help of an annual interest rate. Basic investment calculations are based on taking the interest rate into account. In addition, the usual calculations include the repayment period method, which explicitly does not take the interest rate into account.

In the **net present value** method (or discounting method or capital value method) the current value of future cash flows is calculated by discounting the yield requirement. The initial investment of the investment project is subtracted from the current value of the future cash flows. If the yield of an investment is greater than the yield requirement of investors, the net present value (NPV) of an investment is positive. If, on the other hand, an investment earns less than

the yield requirement of investors, the NPV of the project is negative. Businesses should strive towards fulfilling those projects that guarantee a higher profit than the investors' cost of capital (Leppiniemi 2009, 21; Knüpfer and Puttonen 2006, 83.)

When the NPV method gives a monetary value of the profitability of an investment, the **internal rate of return** (IRR) method results in a rate of return. This method is about finding that rate of interest, where an investment is barely profitable or its NPV is zero. Thus the basic rule of the IRR method is, that if the IRR is greater than or equal to the yield requirement of investors the investment can be accepted, and if the IRR is smaller than the yield requirement the investment should be rejected (Knüpfer and Puttonen 2006, 84–85.). The IRR method is the most commonly accepted method when considering funding and investment decisions (Leppiniemi 2009, 24)

There are many variants to the calculation of the **return of investment** (ROI), but the basic idea that they all share is to compare the cash flows an investment brings to the capital it binds. To calculate ROI one divides the average annual net income with the capital invested. This method, however disregards the time value of money since the cash flows for all years are regarded to be of equal value (Knüpfer and Puttonen 2006, 86–87.)

In the **annuity method** the initial cost of an investment is divided into yearly yield requirements. This is done by way of an amortization or annuity factor. The yearly expected returns are compared to the early yield requirements aka annuities. Those investments whose yearly expected returns are enough to cover the annuity are considered to be profitable. The more the expected return exceeds the annuity, the more profitable the investment is (Leppiniemi 2009, 25.)

The simplest investment calculation method is the so called **payback period method** that deciphers the time it takes for an investment to pay back itself. The payback period is a period of time which results in the cumulative cash flow of

an investment to be zero. The shorter the payback period, the more profitable the investment (Knüpfer and Puttonen 2006, 87; Leppiniemi 2009, 25–26.)

3.4.3.2 The Yield Requirement of Investments

According to Leppiniemi (2009, 26.) the yield requirement of investments is a common criteria for deciding whether an investment is acceptable or not. Different yield requirements are set for different types of investments.

Investments can be typed on many bases. They can be divided into financial and real investments. In financial investments money can be invested into shares, the yield requirement of which is comprised of the risk-free yield requirement of markets and of the risk premium associated with the investment (Leppiniemi 2009, 26–27.)

Real investments on the other hand are factors of production that can be used in production facilities for the manufacturing of goods. These include for example machines, equipment and facilities. The yield requirement is not similar to all real investments but is based on the different categories of real investments. These categories are presented in Picture 5 (Leppiniemi 2009, 27.)

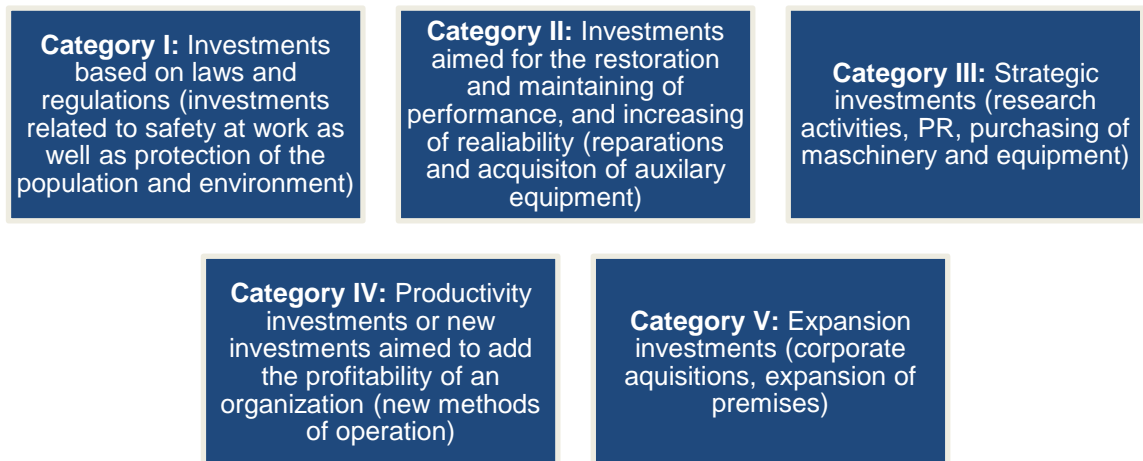


Figure 4. Categories of Real Investments (Leppiniemi 2009, 27–28).

Leppiniemi (2009, 28.) states that at least in categories IV and V an investment project must fulfill a certain yield requirement for it to be accepted and executed. Organizations can set their own different types of general yield requirements that need to be fulfilled before investments can be accepted and studied further. In addition to profits, the acceptability of an investment is also influenced by whether it is financially realizable and whether it fits an organization's strategy.

4 PUBLIC FUNDING IN FINLAND

There are many ways in which public entities have an effect on the financing methods of organizations. These effects can be either direct or indirect. For example tax laws affect the profitability of different forms of funding or investing. What concerns organizations directly are the different forms of funding offered either directly through public corporations or through special credit institutions: loans, interest subsidies, grants, investments in shares, guarantees and sureties. In addition to direct support public entities also offer advisory and consulting services (Leppiniemi & Lounasmeri 2014.)

Public funding is of special importance especially during the initial and growth stages of business operations. It can also have a special meaning in the course of particular situations, such as project development and internationalization processes. The Finnish government offers both direct support through different forms of funding and indirect support by developing infrastructure to better suit the needs of Finnish businesses (Leppiniemi 2009, 232.)

According to Leppiniemi (2009, 232.), the effect public entities have on the funding of businesses is often indirect. For instance the taxability or tax exemption as well as the deductibility or non-deductibility of expenditure have influence over both investments and funding. It is also occasionally possible for the society to take part in investment projects by for example building infrastructure: constructing roads and acquiring or renting premises.

This chapter takes a look at the **main sources of public funding** from the Finnish perspective.

4.1 Sources of Public Funding

4.1.1 ELY Centers

The Centres for Economic Development, Transport and the Environment (ELY Centres for short) have a responsibility for the regional implementation and development tasks of the Finnish central government (ELY Centres 2014a.) There are a total of 15 ELY Centers in Finland, all of which have the task of promoting regional competitiveness, well-being and sustainable development and curbing climate change. The areas of responsibility of the ELY Centres include business and industry, labor force, competence and cultural values, transport and infrastructure and environment and natural resources. The ELY Centres also supervise and guide the activities of TE Offices (discussed later in this chapter).

The services ELY Centers offer can be divided into education and events, advice and information services, permissions, announcements and damages, supervision, expert services, and last but not least funding and grants. Funding is offered for the purposes of industries (businesses, agriculture and fishing), transportation, employment and the environment (ELY Centres 2014a, ELY Centres 2014b.) In the case of business funding, funds can be offered to start a business, to develop a business or to internationalize a business.

4.1.2 Finnvera

Owned by the State of Finland, Finnvera is a specialized financing company that offers its clients loans, guarantees, venture capital investments and export credit guarantees. Financing is provided for the start, growth and internationalization of businesses, and guarantees are provided against the risk arising from exporting goods or services (Finnvera 2014a.)

Finnvera aims to strengthen the operating potential and competitiveness of Finnish enterprises through its offering of loans, domestic guarantees, venture capital investments, export credit guarantees and other services that are

associated with exports financing. The possible risks that are included in financing are shared between Finnvera and other providers of financing (Finnvera 2014a.)

The operations of Finnvera are guided by special goals and legislation. The goals of Finnvera's actions include for example increasing the amount of start-up businesses, enabling the funding of changing situations in SMEs, and promoting growth, internationalization and exporting of enterprises. What is expected from the business is that its operations are self-sufficient (Finnvera 2014a.)

4.1.3 Sitra

The Finnish Innovation Fund Sitra is a public fund acting directly under the Finnish Parliament. Sitra's task is to promote Finland's steady and stable development, economic growth, and international competitiveness and cooperation. Sitra's actions are governed by law (Sitra 2014a, Sitra 2014b.)

The actions of Sitra are funded by the profits earned from original capital and investments. The organization is thus not funded by the Finnish government. Sitra (2014b.) states that it invests its original capital both profitably and safely, and that it takes corporate social responsibility (CSR) into account in its investment actions.

Sitra invests in Finnish start-up and growth stage businesses mostly through private equity funds. Direct investments are rare and made only in special occasions when some kind of strategic goals need to be reached. Sitra calls itself a responsible, long-term investor that commits itself to a business as an owner and a developer for approximately 4 to 10 years. Gratuitous support or grants are not allocated to individual businesses. (Sitra 2014b.)

4.1.4 TE Services

The Finnish Work and Business services (TE Services from the Finnish title Työ- ja elinkeinopalvelut) offer different kinds of services that are produced both

by TE Centres and labor service centers. TE Centres offer three different kinds of services: employment and entrepreneur services, know-how development services, and services for supported employment (TE Services 2014.)

Services offered to businesses and employers include for example aid in finding and recruiting personnel both in Finland and within the European Union (EU). TE Centres also offer support, guidance and training for those planning to become entrepreneurs. Beginner entrepreneurs may receive start-up money, professional training and coaching, entrepreneurship training, and services for establishing and developing businesses (TE Services 2014.)

4.1.5 Tekes

The Finnish Innovation Funding Centre Tekes (2014a.) describes itself as being an investor and activator of challenging research and development projects and innovative actions of businesses, universities and research institutes. Developable ideas are turned into businesses with the help of funding and expert services. The ELY Centres (see 4.1.1.) offer Tekes's services as part of its network.

Tekes's funding can be applied by businesses, research organizations and producers of public services, and funding is offered to research, development and innovation activities. SMEs searching for international growth are the most important target group (Tekes 2014b.)

Funding is offered to those businesses whose development projects strive for growth and renewal of business. However, Tekes only funds a part of the costs of the project, and to receive Tekes's funding a business must be able to arrange its own financial contribution. The funding comes in form of grants or loans. A grant is paid biannually in phase with the realized costs. A loan on the other hand is a risk loan without collateral security, a part of which can be paid up front. Tekes funding is available for those businesses and other organizations engaged in economic activities that operate in Finland (Tekes 2014b.)

4.1.6 European Union

The European Union (EU) offers multifaceted funding, and funds and aids various projects and programs for example in the fields of education, consumer protection and humanitarian aid. There are many different kinds of funding programmes that are governed by many different bodies. One example is the EU's structural funds which are used to fund regional politics, social programs, educational programs and agriculture (European Union 2014 b.)

EU funding occurs in two main forms: project-based grants and public procurements concerning services, goods or building contracts. Public procurements are those procurements that EU's organs need in their actions or that are necessary to fulfill EU's programs. SMEs may attract EU funding through grants, loans and sometimes guarantees. Funding is either granted directly without intermediaries or through member state governed programmes. In addition to funding, other forms of support available to SMEs include for example the services of Enterprise Europe Network. (European Union 2014 b; Euroopan Unioni 2012.)

Where EU funding is applied from depends on the quality and nature of the project that needs to be funded. ELY Centres (see 4.1.1.) are for example responsible for projects related to work and economic life, when the Organization for International Mobility and Cooperation (CIMO) is responsible for funding related to youth, culture and human resources exchange. The European Commission, then, allocates grants to projects and organizations that promote EU's goals or participate in EU programs or policies, and contracts on public procurements on the basis of quotation requests (Euroopan komissio 2014 a.)

The conditions of applying for funding vary according to field, but some apply for all aids. The precondition for EU support of projects is always national funding, meaning the own financial contribution of the state, municipalities, businesses and organizations. Funding is not granted for the costs of already fulfilled projects, and one project may only receive one aid from the EU. It is thus not

possible to apply for funding in many instances at the same time (Euroopan komissio 2014 a.)

4.2 Forms of Public Funding

Public entities, especially the government and the municipalities, have the possibility to participate in businesses' investments mainly through loans, grants, stock investments, interest subsidies, sureties and guarantees (Leppiniemi 2009, 232)

A **loan** means giving or taking debt which is usually repaid with compensation aka interest. A **grant** on the other hand is a monetary contribution meant for the commencement or development of different activities. **Stock investment** funds are collected and allocated through the issuing and selling of company shares to investors. An **interest subsidy**, then, means that an entity (e.g. government) pays a part of a loan's interest, or otherwise supports business activities by cutting down interest costs. In the case of **sureties** and **guarantees** someone else takes responsibility from someone else's debt as if the debt would be his own or offers something to guarantee a financial contribution (Taloussanommat 2014.)

5 SMES'S SOURCES FOR PUBLIC FUNDING WHEN FINANCING INVESTMENTS AND WORKING CAPITAL

In the following chapter, the alternatives of public funding in the case of financing investments and working capital are presented. Even though this thesis only focuses on investments and working capital, one must bear in mind that there exists even more public funding possibilities that are related to different themes, e.g. innovations or internationalization. The sources to be presented are general in nature, meaning that due to the nature of this thesis, funding related to specialized areas like agriculture and forestry, have been left out. The sources are presented in the form of what the funding entails, where it is applied from, for whom it is meant and how the funding is applied for.

According to the European Union a small and medium sized enterprise (SME) is an enterprise that has fewer than 250 employees and which has yearly revenue of maximum of 50 million euros or the balance sheet total of maximum of 43 million euros (Euroopan Unioni 2012.)

5.1 Grants

5.1.1 Development Grant for Investments

What? Development grant for investments can be allocated for both tangible and intangible investments, and also the rent expenses equivalent to purchase price of machines and equipment of three years may be an accepted target. Administrative, financial, insurance, repairs, maintenance, or any other similar expenditure cannot be taken into consideration in this context. (Yrityssuomi 2014a.)

Where from? ELY Centres (see 4.1.1.).

For whom? The development grant may be allocated for SME's investments, and also for the investments of larger enterprises under special conditions. This grant cannot be awarded to fisheries, agriculture, forestry, and not for the primary processing or marketing of agricultural products (Yrityssuomi 2014a.)

The development grant for investments is discretionary, and is awarded based on business and project evaluations. The maximum percentage of acquisition costs varies depending on the form and location of a business. For small and medium sized enterprises the percentage varies between 20 to 35 percent (Yrityssuomi 2014a.)

The precondition for allocating this grant is that the beneficiary funds at least 25 percent of the acquisition cost of the investment with such funding, which does not involve any public support. The awarding of the grant also requires that the applicant meets the preconditions of continuous profitable operations (ELY Centre 2014; Yrityssuomi 2014a.)

How? Before submitting an application for the grant, the investment project should be discussed with an ELY Centre expert. The grant is applied for with its own application form, or it is also possible to fill the grant application directly online. The application form is delivered to the registry of one's own ELY Centre (Yrityssuomi 2014.) The awarded grant is paid in arrears based on a separate payment application (ELY Centre 2014).

5.1.2 Other Grants of ELY Centres

The development grant may also be awarded for **other development measures**, meaning the development of business know-how, internationalization, products and production methods, determination of establishment and functioning preconditions, as well as other major business development.

The prerequisites and peculiarities for these forms of funding are the same as mentioned for the development grant for investments, they are only applied for different kind of development measures.

5.2 Loans

5.2.1 Finnvera Loan

What? Finnvera loan (previously known as investment and working capital loan) is meant for the funding of Finnish SMEs construction, machinery and equipment investments, energy and environmental projects, working capital needs, and different ownership arrangements. The Finnvera loan may be used to fund all fields, excluding agriculture, forestry or the contract work of building business (Finnvera 2014d.)

The Finnvera loan is usually a part of total funding, and its minimum amount is 5 000 Euros. The interest rate of the loan can be fixed or tied to a reference rate. The interest rates are affected by the company's profitability and financial position, operational risk as well as loan collateral. The general loan period is

three to fifteen years, depending on the size and nature of the investment. The collateral for the loan is to be discussed on a case by case basis (Finnvera 2014d.)

Where from? Finnvera (see 4.1.2.).

For whom? Finnvera loan is meant for both small and medium-sized enterprises. Larger enterprises may only apply for the loan under special conditions. The enterprise may be a start-up company or an already operating business (Finnvera 2014d.)

How? The application can be filled electronically on Finnvera's webpages, or printed and sent to one of Finnvera's regional offices. There are two alternative applications: one for loans under and one for over 35 000 euros. Finnvera recommends adding the following attachments to speed up the application process: business plan, profit plan, financing plan, financial statements (already existing companies), and entrepreneur's CV(s), articles of association or partnership agreement (Finnvera 2014d)

5.2.2 Entrepreneur Loan

What? The entrepreneur loan is an entrepreneur's personal loan used to fund investments to the share capital and/or invested unrestricted equity fund of a limited liability company (LLC). The entrepreneur loan can also be used to fund the purchase of shares of an already operating company (Finnvera 2014b.)

The amount of the entrepreneur loan varies from 5 000 to 100 000 euros. A minimum amount of 20 percent of self-financing is required when allocating the loan. The loan period is up to 10 years, maximum three of which can be installment free. A borrower is personally liable for the loan, and possible collaterals are negotiated on a case by case basis (Finnvera 2014b.)

Where from? Finnvera (see 4.1.2.).

For whom? A target company of the entrepreneur loan can operate on other sectors but not on agriculture, forestry nor on contract work on building

business. The company must fulfill EU's criteria on SMEs (see p. 28) and it must have potential for profitable business (Finnvera 2014b.)

The entrepreneur loan may be granted to a LLC's shareholder, whose share of the capital stock and voting power is at least 20 percent after the investment or share purchase which was funded with the entrepreneur loan. The loan can also be granted to more than just one of the same company's founders or shareholders. The amount of loan can be maximum of 100 000 euros per debtor. A minimum amount 20 percent of self-financing is required when granting the entrepreneur loan (Finnvera 2014b.)

How? The application can be filled electronically on Finnvera's webpages, or printed and sent to one of Finnvera's regional offices. In addition to the application, Finnvera also requires a report of the applicant's assets and liabilities. Finnvera recommends adding the following attachments to speed up the application process: business plan, profit plan, financing plan, financial statements (already existing companies), and entrepreneur's CV(s), articles of association or partnership agreement (Finnvera 2014b.)

5.2.3 Loans of the European Investment Bank

What? SMEs can also receive favorable European Investment Bank (EIB) loans, which are channeled through its partners on national level. The terms for these loans are set by the intermediaries, and must be matched by at least the same amount by the partner (European Investment Bank 2014 b.)

Most tangible and intangible investments that are necessary for SMEs to develop themselves are eligible for these types of loans. For example purchases, research & development projects, and working capital needs may be funded. Activities in almost all economic sectors may receive EIB loans, except for e.g. projects related to ammunition and weapons, projects which are ethically or morally controversial, or activities that are prohibited by national legislation (European Investment Bank 2014 b.)

Where from? EU's partner commercial banks and other intermediaries. In Finland these include Aktia Bank, Nordea Bank Finland and Pohjola Bank.

For whom? SMEs (see p. 28).

How? Applied for through EIB's national partner banks.

5.3 Guarantees

5.3.1 Finnvera Guarantee

What? The Finnvera guarantee is meant as collateral for the different financial needs of Finnish SMEs, like investments and/or working capital as well as business or company acquisitions. It is applicable for SMEs, and also on certain grounds for larger enterprises (Finnvera 2014c.)

Finnvera guarantee is suitable for the collateral of loans granted by banks, financial companies or insurance companies for example in following forms of funding: bond loans, credit accounts, credit line, bank guarantee, and factoring financing. Thus, the financier and Finnvera share the financial risk associated with the funding process. The amount of Finnvera guarantee is usually 50 percent of the amount of loan or other financial commitment (Finnvera 2014c.)

Where from? Finnvera (see 4.1.2.).

For whom? Finnvera guarantee can be allocated to all industries, excluding agriculture, forestry and contract work on building business (Finnvera 2014c.)

How? The application can be filled electronically on Finnvera's webpages, or printed and sent to one of Finnvera's regional offices. As with other products, Finnvera recommends adding the following attachments to speed up the application process: business plan, profit plan, financing plan, financial statements (already existing companies), entrepreneur(s)'s CV(s), articles of association or partnership agreement (Finnvera 2014c.)

5.3.2 Micro-Guarantee

What? Finnvera's micro-guarantee is meant to aid a business in obtaining funding for its different investment or working capital needs. Finnvera's guarantee can be a maximum of 60 percent of acquisition cost, with the exception that the amount of micro-guarantees granted for one company may be up to 85 000 euros (Finnvera 2014e.)

Where from? Finnvera (see 4.1.2.).

For whom? A micro-guarantee is meant for start-ups or already existing companies with no more than 49 employees. The funded industry may be anything other than farming, forestry or construction business (Finnvera 2014e.)

How? A business presents its financing application to its own bank. The bank evaluates the business's operating prerequisites and risks related to collateral before it grants funding. The bank electronically applies for the micro-guarantee from Finnvera on behalf of the business. The business itself usually has no direct contact with Finnvera (Finnvera 2014e.)

5.3.3 Guarantees of European Investment Bank and European Investment Fund

What? The EIB also offers guarantees for large and small projects to make them look more attractive to other possible investors (European Investment Bank 2014 a). The European Investment Fund (EIF) cooperates with financial intermediaries (banks, institutions, funds) that provide financing for SMEs or guarantees for their Financing (European Investment Fund 2014).

EIF's guarantee instruments consist of credit enhancement/securitization and guarantees/counter-guarantees for portfolios of micro-credits, SME loans or leases (European Investment Fund 2014).

How? EIF helps SMEs indirectly through its cooperation with financial intermediaries, which vary depending on the project or field funded (European Investment Fund 2014).

5.4 Options of the European Union

SMEs and other organizations can usually apply for grants directly from EU's programmes, if they present a feasible international project that brings added value with it. The application criteria are defined in the call for proposal (Euroopan Unioni 2012.)

It is possible for SMEs to obtain direct support for their investments, but only in areas where the economic growth is below average. In other areas grants are not allocated to a single SME, but are directed to actions that have a significant leverage effect (including for example entrepreneurship training, business incubators and networking) (Euroopan Unioni 2012.)

The European Commission, the European Central Bank (ECB) and the European Investment Fund (EIF) have a joint program to aid SMEs operating in less developed areas in their strives for funding: the JEREMIE program (Joint European Resources of Micro to Medium Enterprises (Euroopan Unioni 2012.)

EU's funding instruments do not offer direct funding to SMEs, but funding is usually arranged through financial intermediaries, e.g. banks, credit institutions or investment funds. The funding instruments are hoped to add the funding available to SMEs by encouraging financial intermediaries to increase the amount of loan financing offered to SMEs (Euroopan Unioni 2012.)

6 CASE: KAUNE OY

6.1 Company and Case Introduction

The case company of this thesis, Kaune Oy, is a Finnish family-owned SME established in 1915. The company is a versatile professional in glass and metal industries, specialized in demanding interior design and construction industry glass projects as well as production services (Kaune Oy 2014.) Now, the company has reached a point where its old laminating machine needs to be replaced with a new one, which requires an investment of 50 000 to 70 000

euros. To accumulate the funds it needs, Kaune Oy wishes to explore the possibilities public funding might have to offer. The company has had previous positive experiences with public funding, for example when business activities were commenced after near bankruptcy and when the company has allocated support for its more innovative projects with the help public funding. Because of timing and scheduling problems, the company decided to give the task of finding public funding alternatives to an outside researcher, the task being to clarify:

1. How should Kaune Oy proceed with the laminating machine procurement process? Which steps does the process entail?
2. What are the alternatives public funding has to offer for the funding of investments? Which are the best alternatives from Kaune Oy's point of view?

6.2 Suggestions and Solutions

The alternatives for Finnish SMEs in the need for public funding for their investments (or working capital) are presented in Chapter 5. The options include different forms of grants, loans and guarantees.

The ELY Centres Development Grant for Investments is a worthy alternative, and a possible one, too since Kaune Oy and its future investment meet the requirements set for applying for this grant. The grant would cover 20–35 percent of the acquisition cost (approximately 12 000–21 000 €), and requires that 25 percent (approximately 15 000 €) needs to be funded with other than public support measures. This option should be considered carefully.

Finnvera's loans (Finnvera Loan and Entrepreneur Loan) are also possible options for Kaune Oy. Finnvera Loan, with its minimum amount of 5 000 €, is also only a part of total funding, meaning some other form of funding needs to be applied in addition to it. The loan seems reasonable with its negotiable collateral and its loan period of 3–15 years. The Entrepreneur Loan can also be considered possible, even though it differs quite much from the Finnvera Loan.

This is a personal loan of entrepreneurs, and is not directly used to fund investments, but is rather used to add to the share capital or invested equity of a company. The amount varies between 5 000 and 100 000 euros, requires 20 percent of self-financing (approximately 12 000 €), and the loan period can last to up to 10 years. Considering Kaune Oy's history in trying to keep the entrepreneurs' funds separate from the funds of the company, it might be more recommendable to choose the Finnvera Loan instead of the Entrepreneur Loan.

Finnvera also offers strong guarantee candidates with its Finnvera Guarantee and Micro-Guarantee. Finnvera Guarantee could be used as collateral for a bank loan, and its amount can be as high as 50 percent of total loan amount. The Micro-Guarantee covers maximum of 60 percent of acquisition cost, and when the Finnvera Guarantee is applied from Finnvera itself, the Micro-Guarantee is applied by a company's own bank, which perhaps makes it an easier option to go for.

The options EU, the EIB and the EIF offer feel to be infinite and complex, and complexity is perhaps not what Kaune Oy had in mind when deciding to fund as ordinary target as laminating machine. Even though EU funding could be reserved for more complex (future) projects, the loans of the EIB are a viable option and could possibly be applied for with the help of Kaune's own bank. The EIF guarantees might also be applicable here, but are perhaps again too complicated when considering the other options available. Nevertheless EU's options are a viable option and should perhaps be discussed through with the company's own personal banking advisor.

There are many opportunities that could be recommended. The final decision, however, is for the case company to make. What I would recommend, however, would be the Development Grant of the ELY Centres: It does not need that much of other forms of funding (approximately 15 000 €). I personally would look for ways to combine the Development Grant with for example bank loans, and only funding the minimum amount with the company's own financial contribution.

6.3 Model for the Public Funding of Investment Projects

To answer the questions on how a company should proceed with its investment procurement process, a six-step model for the public funding of investment projects was developed. This model is based on the model of investment projects presented by Martikainen and Martikainen (2006, 27) as well as what was found in the Yrityssuomi portal (2014), and can be used as a guideline by SMEs when in need of guidance in their aims to find and use public funding for their investments.

The model was developed and formed by the actual experience of going through the (public) funding process for the case company. The framework given by both Martikainen & Martikainen and the Yrityssuomi portal were completed with the findings and personal observations accumulated during the actual public funding process.

1. Search for Possible Investment Targets

- Identify the problem or a need the investment is supposed to solve.
- Set demands that the investment needs to fulfill in order for it to be considerable (product features, safety measures, other production related demands) and make notes of the alternatives that fulfill some or all of these demands
- Try to find as many alternatives as possible for you to compare and contrast with each other. Take into consideration their advantages and disadvantages as well as their differences.

2. Evaluate Factors Influencing the Profitableness of Investment Targets

- Which of the sought alternatives are profitable and on which areas?
- Which kinds of cash flows would the different alternatives bring?
- Which alternatives are not that profitable in relation to the demands and requirements set for them to fulfill?
- What are the risks related to each investment alternative?

3. Draw Up Profitability Calculations for the Investment Targets and Compare Them With Each Other

- Make use of the different kinds of investment calculations.
 - Calculate the net present value, internal rate of return, return of investment and payback period for each possible investment target, and compare them with each other.
 - Discard those targets that do not meet the set demands or which are recommended to discard based on investment calculations.

4. Plan The Funding of The Chosen Investment Target

- Search for and become acquainted with different public funding options available to fund the investment target.
- Compare the public funding options available for your investment. Which of these options are suitable for your needs? Which are eligible?
- Prepare the documents needed for the applying of public funding (business plan, profit plan, financing plan, financial statements).

5. Make the Investment Decision

- Contact public funding experts and discuss the options and availability of public funding.
- Fill in the required applications (online or on paper) and remember to attach required attachments to the application.
- Wait for the funding decision.

6. Follow-Up on Your Investment Project

- Does the investment fulfill the set demands and requirements?
- Was the public funding arrangement a success?
- Were there any unexpected costs? Did any mistakes occur? What can be learned from the process for future reference?

By following this model or guideline, companies can make sure that they have looked at their investment decision from many different perspectives. They have compared and contrasted different options and calculated their cost-effectiveness. It aids in locating the key questions that need to be considered

and answered before making investment decisions. The model is summed up and presented in Figure 5.

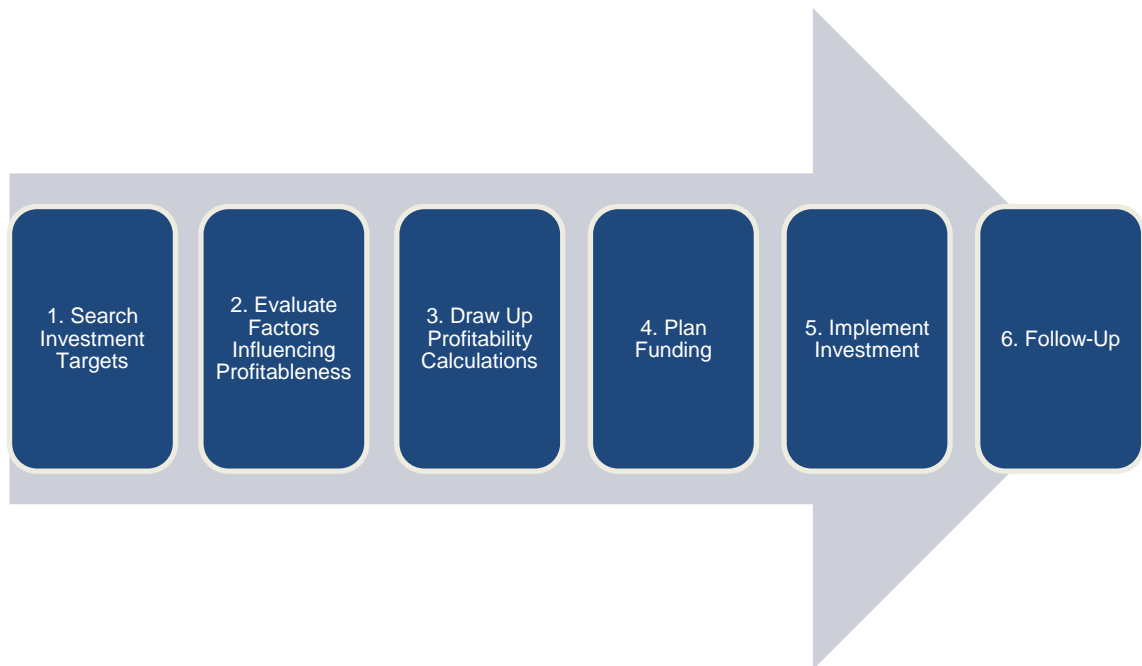


Figure 5. Model for the Public Funding of Investment Projects.

7 CONCLUSION

The purpose of this thesis was to find out, which kinds of public funding opportunities there might exist for Finnish SMEs in their funding of investments. Special attention was paid to the sources and their differences, the prerequisites the funding instruments might have, and how the process of applying for public funding proceeds.

The research questions and objectives were:

- 1. What are the main sources of public funding available for Finnish SME's when financing their investments and what are the differences between these sources?**

Objective: To gain an understanding of the possible sources of public funding available in the financing of investments and of how these sources compare to each other.

Results: During the research the main sources of public funding available in the case of funding investments (and working capital) were successfully identified. Each alternative was presented by answering questions: What is the source of funding about? Where can funding be applied from? For whom is the funding meant? How should funding be applied for? By answering all the questions it was easy to gain the understanding of the different opportunities and how they can be compared with each other.

2. What are the prerequisites for applying public funding?

Objective: To find out whether there exist any preconditions or impediments for applying public funding and what these possible prerequisites might entail.

Result: The prerequisites of applying for different sources of public funding were also successfully presented by answering the question: For whom is the funding meant? These were the actual preconditions set by the organizations who offer the public funding.

3. What does the process of applying for public funding entail?

Objective: To get a picture of how the process of applying for public funding works, what it requires and which steps need to be taken in order to obtain public funding.

Result: To gain an understanding of what the process of applying public funding entails, the question of how public funding should be applied for was also discussed in the presentation the different public funding opportunities available when funding investments. Directions for application were given separately for each funding alternative.

7.1 Main Findings

The research conducted in this thesis resulted in finding many different sources of public funding and various instruments these sources have to offer. As expected already in the positioning of the research questions, these sources

and instruments were various in nature and differed from each other. The instruments as well as their prerequisites were successfully presented in a way that gives a clear picture of what each instrument is about, and how these instruments compare to each other.

When it comes to the actual process of applying for public funding, the research did not necessarily produce the results expected. Sure, that, how and where different instruments are applied for are also presented together with the actual introduction of the funding instruments, but the concrete process of what happens after the application is still left unclear at least for some part. This is due to the fact that unfortunately it was not possible for the researcher to actually experience the entire application process in the course of this research.

Nevertheless the model or guidelines for applying public funding of investment projects is hopefully a useful tool for different SME representatives hoping to find answers for their needs in the public funding of investments. All in all, the literature review on funding and investments, completed with the research done one public funding opportunities will hopefully offer a basic knowledge package for SMEs looking for public funding.

7.2 Suggestions for Further Research

It feels like research on public funding is never ending: there are so many possibilities, the old ones disappear and new ones keep coming to replace those that existed before.

A logical follow-up study for the public funding of investments would be to do research of similar nature on the public funding of innovation or internationalization process. This would be an interesting approach, since due to the concise and compact nature of a bachelor's thesis, all public funding opportunities were impossible to study in just approximately 40 pages. Luckily, some of the sources of public funding on those areas are still mentioned in this thesis as well.

Another possible research path would be to look into how SMEs have used public funding when financing their investments. This could be researched with questionnaires of a selected group of SMEs. It would however need something more, another angle to be interesting and sufficient to work for a bachelor's thesis work.

SOURCE MATERIAL

Centre for Economic Development, Transport and the Environment (ELY Centre). 2014a. Consulted 2.4.2014 <http://www.ely-keskus.fi/en/web/ely-en/frontpage>.

Centre for Economic Development, Transport and the Environment (ELY Centre). 2014b. Business and Industry. Consulted 2.4.2014 <http://www.ely-keskus.fi/en/web/ely-en/business-and-industry;jsessionid=0B617EDD2B3A81A36F7CCBA1F62F968B>.

Euroopan komissio. 2014a. EU-rahoitusta hankkeisiin ja ohjelmiin. Consulted 13.4.2014 <http://eurooppatiedotus.fi/public/default.aspx?contentid=92852#.U3snWZVZrX4>.

Euroopan komissio. 2014b. Eurooppalainen Pk-yrittysportaali. Consulted 13.4.2014 http://ec.europa.eu/small-business/index_fi.htm.

Euroopan Unioni. 2012. EU-rahoituksen perustietopaketti. Luxemburg: Euroopan unionin julkaisutoimisto. Available online.

European Investment Bank. 2014a. Guarantees & Securitization. Consulted 14.4.2014 <http://www.eib.org/products/guarantees/index.htm>.

European Investment Bank. 2014b. Loans for SMEs. Consulted 14.4.2014 <http://www.eib.org/projects/priorities/sme/intermediaries/index.htm>.

European Investment Fund. 2014. Portfolio Guarantees & Credit Enhancement / Securitization. Consulted 14.4.2014 http://www.eif.org/what_we_do/guarantees/index.htm.

European Union. 2014a. Access to Finance. Consulted 12.4.2014 http://europa.eu/youreurope/business/funding-grants/access-to-finance/index_en.htm.

European Union. 2014b. EU Funding. Consulted 12.4.2014 http://europa.eu/about-eu/funding-grants/index_en.htm.

Finnvera. 2014a. Consulted 3.4.2014 <http://www.finnvera.fi/eng>.

Finnvera. 2014b. Entrepreneur Loan. Consulted 3.4.2014 http://www.finnvera.fi/eng/node_2686/Loans/Entrepreneur-Loan.

Finnvera. 2014c. Finnvera Guarantee. Consulted 4.4.2014 http://www.finnvera.fi/eng/node_2686/Guarantees/Finnvera-Guarantee.

Finnvera. 2014d. Finnvera Loan. Consulted 3.4.2014 http://www.finnvera.fi/eng/node_2686/Loans/Finnvera-Loan.

Finnvera. 2014e. Micro-Guarantee. Consulted 4.4.2014 http://www.finnvera.fi/eng/node_2686/Guarantees/Micro-guarantee.

Kaune Oy. 2014. Consulted 23.3.2014 <http://www.kaune.fi/eng/etusivu.html>.

Knüpfer, S. & Puttonen, V. 2006. Moderni rahoitus. 2nd Edition. Vantaa: Dark Oy.

Leppiniemi, J. 2009. Rahoitus. 5th Edition. Helsinki: WSOY Oppimateriaalit Oy.

Leppiniemi, J. & Lounasmeri, S. 2014. Yritysrahoitus. Helsinki: Talentum Media Oy. Available online.

Martikainen, T. & Martikainen, M. 2006. Rahoituksen perusteet. 6th Edition. Helsinki: WSOY Oppimateriaalit Oy.

Robson, C. 2002. Real World Research. 2nd Edition. Oxford: Blackwell.

Saunders, M., Lewis, P. & Thornhill, A. 2009. Research methods for business students. 5th Edition. England: Pearson Education.

Sitra. 2014a. Consulted 6.4.2014 <http://www.sitra.fi/en>.

Sitra. 2014b. Fund Investments. Consulted 6.4.2014 <http://www.sitra.fi/en/about-sitra/fund-investments>.

Suomen Yrittäjät. 2013. Oma pääoma. Consulted 31.3.2014 <http://www.yrittajat.fi/fi-FI/minustakoyrittaja/rahoitussuunnittelu/paaoma/>.

Taloussanomat. 2014. Taloussanakirja. Consulted 13.4.2014 <http://www.taloussanomat.fi/porssi/sanakirja/>.

Tekes. 2014a. Consulted 10.4.2014 <http://www.tekes.fi/en/>.

Tekes. 2014b. Funding for the Best Ideas. Consulted 10.4.2014 <http://www.tekes.fi/en/funding/>.

TE Services. 2014. Consulted 10.4.2014 <http://www.te-services.fi/te/en/index.html>.

Työ- ja elinkeinoministeriö. 2010. Ohje valtionavustuksesta yritystoiminnan kehittämiseksi annetun lain ja valtioneuvoston asetuksen täytäntöönpanosta. TEM/414/00.35.05.01/2010. Consulted 31.3.2014 <http://www.finlex.fi/data/normit/37260-tem414.pdf>.

Varsinais-Suomen TE-keskus, Euroneuvontakeskus. 2004. Pk-yrityksen julkisen rahoituksen lähteet. Raisio: Newprint.

Yrityssuomi. 2014a. Business Development Support for Investments. Consulted 17.4.2014 <http://www.yrityssuomi.fi/tuotekortti-haku?id=30974>.

Yrityssuomi. 2014b. Investment Process. Consulted 26.5.2014 <http://www.yrityssuomi.fi/en/investointiprosessi>.

