

Raising capital for Finnish IT SMEs through IPOs

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<p>This is a research-based thesis that aims to point out the possibilities for Finnish IT SMEs to generate capital through an initial public offering, i.e. IPO. Information technology companies usually need a significant amount of capital, e.g. for their R&D, so that they can improve their products or services and satisfy customers. In addition, European Union has encouraged companies, especially SMEs, to join the public equity market.</p> <p>The research consists of theoretical knowledge regarding different kinds of equity financing, especially regarding IPO, and general overview of recent development of Finnish stock market, i.e. NASDAQ OMX Helsinki, as well as of Finnish IT SMEs. In addition, the research also provides two case studies of two public Finnish IT companies: one is listing on the Main Market of NASDAQ OMX Helsinki, and another one is listing on First North in Helsinki.</p> <p>The final result of this research suggests that only later-stage SMEs that already have attractive products or services and an excellent management team should consider an IPO. Furthermore, a promising market condition is also necessary. NASDAQ OMX Helsinki has not been so active but First North in Helsinki has recently developed and attracted new listings since 2014. In order to successfully transform to a public company, a SME should pay attention to a variety of risks, including compliance, operational, strategic, and financial ones. In Finland, there are approximately 51 potential IT SMEs that can engage in public equity market. If they think of IPO as a method to generate more capital, they should initially evaluate their business and consider the advantages and disadvantages of the IPO. Post-IPO operations are also very important because they strongly affect company's credibility and investors' attitude.</p>	
<p>Keywords IPO, Finnish IT SMEs, NASDAQ OMX Helsinki, First North Helsinki, capital structure</p>	

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1 Introduction

Mostly all companies in all industries need to have a substantial amount of capital in order to maintain and develop the business, and entrepreneurs can generate capital by many different ways such as borrowing money from banks, buying bonds issued by government, by local municipality, or by corporations, etc. One alternative for companies to acquire capital is utilizing the stock market, specifically by selling part of the ownership to the public. This alternative is known as public equity financing and the very first time in which a company sells its parts of ownership to the public is called initial public offering, or IPO. Many well-known organizations adapted this practice, for example Facebook and Twitter. According to an article written by John McDuling (8 November 2013), Facebook raised \$16 billion after its IPO in May 2012, Twitter and Google earned about \$2 billion, and other companies like LinkedIn or Amazon.com also profited from an IPO.

Recognizing the ability to raise capital through going public, the author considers applying this alternative in Finnish SMEs (i.e. small and medium enterprises) that operate in technology industry and provide IT solution for business services. According to the market quotes from Kauppalehti (2 March 2015), there are 134 shares listed in different sectors: Oil & Gas, Basic Materials, Industrials, Consumer Goods, Health Care, Consumer Services, Telecommunications, Utilities, Financials, and Technology. Among those 134 shares, some of which belong to the same company. For example, Orion group has two classes of share listed there: Orion A and Orion B. The Technology sector consists of 19 shares listed that specialize in different professions but many of which focus on providing business services solution to organization's divisions (e.g. marketing, logistics, finance, human resources). In addition to these technology public companies, there are other Finnish companies working in the same field but not engage in public trading. These non-public companies can consider an IPO in Finnish stock market to generate capital for further development.

Now, this chapter continues by presenting the thesis topic with the research question (RQ) and the investigative questions (IQs), the demarcation process, international aspect of the research, the anticipated benefits for potential stakeholders, and key concepts with definitions. After that, the author presents her research methodology in chapter 2. Chapter 3 describes theories that relate to public equity financing, initial public offering, and IPO's important issues. Then, the author gives an overview of the development of Finnish IT SMEs as well as the performance of Finnish stock market in chapter 4 and chapter 5. Based on those theories and information, the author moves on to present two case studies regarding two Finnish public IT companies and their pre-IPO and post-IPO operations. Finally, the paper's conclusions are described in chapter 7.

1.1 Research question and investigative questions

This thesis will investigate the process of raising capital by actively engaging in the public equity market. As a result, the research question is: **How can Finnish IT SMEs generate capital through an IPO?** In order to answer this question, it is necessary to understand Finnish stock market, the process of an IPO, and the results of going through it. The author came up with four investigative questions (IQs) that would support her in gathering needed information as well as analyzing market situation and companies' performances. Those IQs are:

- IQ1: Why do companies choose IPO as a method to generate capital?
- IQ2: What are the risks that associated with an IPO?
- IQ3: How is the current situation of Finnish IT SMEs and Finnish stock market?
- IQ4: How did some Finnish public IT companies perform after their IPOs?

The table below presents the overlay matrix that consists of related theories, used sources of information, and the chapters in which each of the IQ discussed and answered.

Table 1. Overlay matrix

IQs	Theories	Sources of information	Chapter
IQ1	Public equity financing, private equity financing, IPO	Books, news, articles, publications of consultant firms	3.1, 3.2
IQ2	IPO, risk management	Books, news, articles, publications of consultant firms	3.3
IQ3	Stock market, stock market index and data	News, publications of government, publications of stock exchange (NASDAQ), books, Selector's database	4 and 5
IQ4	Public equity financing, IPO, financial results	Companies' press releases and annual reports, news, articles, other internet sources	6

1.2 Demarcation

Since finance field includes a variety of topics and focused areas, the author chose to conduct a research on Finnish financial market, in which players can trade different kinds of financial instruments. Generally, financial market can be divided into money market, which consists of short-term instruments, and capital market, which includes medium- and long-term instruments. In order to increase the amount of capital, a company should enter the capital market.

In a capital market, there are many different financial instruments such as shares, bonds, options, warrants, etc. The author chose to focus on Finnish stock market, in which a company can raise capital by selling part of its ownership to individual or institutional investors. Finnish IT SMEs may need a large amount of capital to, for example, invest in their Research and Development (R&D) Department. Therefore, utilizing an IPO may be a good alternative for them to accumulate more capital, which may result in better services and higher reputation as well as customer loyalty.

1.3 International aspect and anticipated benefits

Business information technology services are not tangible products that require delivery or inventory. As a result, companies can easily export those services and attract international customers. Moreover, almost all Finnish public IT companies have international presences and sell their services worldwide. An IPO may not only generate capital for enterprises but also enhance their accessibilities. In other words, public companies can be interesting to both global customers and global investors. Since this thesis studies the application of an IPO, it supports companies in making decisions as regards entering Finnish stock market and becoming more internationally approachable. Moreover, Attachment 1 of this paper provides the list of Finnish IT SMEs that can possibly follow an IPO; this list can give investors some insight regarding promising candidate of Finnish public equity market.

At the end of this study, the author will present her findings regarding Finnish stock market, Finnish IT SMEs, and the possibilities of raising capital through IPO for those SMEs. The author used case study research method and the findings can be helpful to Finnish SMEs now or in the future. In addition, the study also helps the author to strengthen her knowledge of IPO and of companies' source of capital. Going through all stages from collecting and analyzing data to presenting the results, the author will have deeper financial understanding, which is very useful for her further personal development.

1.4 Key concepts

Common stock market is the market in which equity instruments are traded. These equity instruments can be called common stock (Fabozzi & Modigliani 2009, 10). In addition, common stock can also be referred as "share". Therefore, later in this study, the term "stock" and "share" will be used interchangeably to refer to common stock.

According to Fabozzi & Modigliani (2009, 252), an **exchange** is a "specific geographical" location where financial instruments are traded, for example, the New York Stock Exchange in the United States, the Tokyo Stock Exchange in Japan, or the London Stock Exchange

Group in the United Kingdom and Italy. **Listed stocks** are stocks traded on an exchange. A company must satisfy a number of criteria required by the local stock exchange, and it is possible for the exchange to delist a company's stock if those criteria are not fulfilled (Fabozzi & Modigliani 2009, 253).

Initial public offering (IPO) is a stock offering by a company that did not previously issue common stock to the public (Fabozzi & Modigliani 2009, 102). This public offering usually happens shortly before the first trading date of that company's stock in a stock exchange.

Stock market indicators are indices that work as benchmark for examining the activities of traders and represent the markets' daily performance. There are different indicators in the market and each of them relates to different aspect of the stock market. For example, there are indices that either applied to the whole market or applied to specific sectors such as consumer service, energy, or healthcare (Fabozzi & Modigliani 2009, 286-288).

IT SMEs are small- and medium-sized enterprises (SMEs) that utilize their know-how and capabilities in information technology to provide different kinds of business products, services, and solutions to customers. SMEs are independent enterprises that: have fewer than 250 employees, and their annual revenue is not over €50 million or their annual balance sheet is not over €43 million. If at least 25 percent of one enterprise's capital or voting rights is owned by another company or by a corporate group, that enterprise is not an independent one. (Statistics Finland 2015.)

The market price of a company's stock in an **efficient stock market** demonstrates all available information about the company. In other words, how new information affect stock indicates the efficiency of a stock market (Pike & Neale 2009, 33).

Brealey, Myers & Allen explains that **capital structure** is the firm's mix of debt and equity financing (2006, 445) and that **cost of capital** is investors' expected rate of returns from the portfolio of all securities issued by the company (2006, 215). Cost of capital is also referred to as **weighted-average cost of capital** (WACC) which includes all sources of capital used by the company like debt financing and equity financing.

2 Research Methodology

This chapter describes how the author designed the research plan, collected data, and analyzed it. Considering the main research question of this thesis, which is “How can Finnish IT SMEs generate capital through an IPO”, the author chose to follow the case study research method since the principal objectives of this paper are to research why Finnish IT enterprises decided to carry out an IPO and how they managed that complicated process. Yin (2014, 16-17) defines case study research method as that focuses on examining an event, or a set of events, in detail and measuring it in a real-life circumstance. Accordingly, this method is suitable for the objectives of this thesis because the author wanted to study factors that affected the IPO decision of a company and apply the theoretical knowledge in Finnish IT SMEs. This chapter continues with the research design, data collection, and data analysis.

2.1 Research Design

For case study research method, Yin (2014, 29) lists five important elements: the research question, the research’s proposition, unit(s) of analysis, logic between the data and propositions, and principles for explaining the findings. To begin, the research question of this paper is clearly mentioned and the research’s proposition is that company is going to use IPO as a way to generate more capital to finance its business operation, but only when the company is at its later-stage with interesting products or solutions and promising market condition. Secondly, the author decided to study factors that affected IPO decision and how IPO changed the company’s business operation. In conducting the case study, the author chose the embedded two-case design in which she examined two different companies in different contexts, using the same units of analysis. Due to small number of IT companies recently listed on the Main List of NASDAQ OMX Helsinki and on NASDAQ First North Helsinki, the author was only able to investigate two case studies but she managed to compare the focused companies’ operation with that of their peers. This practice was expected to generate a more general case study with practical findings at the end of the analysis. The data collected directly relates to the research’s propositions and the findings will then be explained in accordance with the research’s question and research’s propositions. This research design aims at using different sources of information, maintaining the connection between sources as well as the coherence of the whole study, defining the method of analysis, and generalizing the study’s findings.

2.2 Data collection

During writing this paper, a variety of sources was used to collect data, mostly secondary one. For the theoretical part, books, e-books, and articles from HAAGA-HELIA University of

Applied Sciences' database was utilized. Books, e-books, and articles about capital market, equity financing, IPO, and Finnish stock market's development are essential to create the theoretical base for this thesis. Database concerns the number of Finnish IT SMEs was taken from Selector, a product provided by Bisnode Finland Oy. Students from HAAGA-HE-LIA can utilize this database for their academic purposes. This database consists of information about companies in Finland, Russia, Estonia, Latvia, and Estonia; that information is categorized into country, national regions, size of company (i.e. number of employees), revenue, and legal form (Bisnode Finland Oy). In order to reflect the most up-to-date background, the author tried to examine the as recent as possible database concerns Finnish IT SMEs. However, it should be noted that the number of companies will be continually updated. Furthermore, there is no certainty that this database has included all companies in Finland and comparison with other database is recommended. The rest of case studies' database consists of companies' financial results and operational news, Finnish stock market's indices, and other secondary sources collected from the Internet and companies' website. Specifically, financial results and operational news were compiled from companies' annual reports; stock market's indices were collected from NASDAQ's website; other secondary sources include NASDAQ's surveillance reports and Kauppalehti's news.

2.3 Data analysis

The data analysis process followed principal strategies suggested by Yin (2014, 136 – 139): to focus on initial research question and propositions, to apply theoretical knowledge into real-life practice, to use both qualitative and quantitative data in the analysis, and to follow a descriptive framework for each case study. To begin, after collecting information and building case study database, the author continued to put data into different units of analysis and to compare the findings with theories. Particularly, quantitative data was consolidated into tables and figures so that readers can quickly have an overview of the matter being discussed. Moreover, it is important to analyze data from multiple sources in order to avoid looking at the phenomenon from only one point of view. As a result, the author did collect data from different secondary sources, compare the data to check for reliability, and combine it to generate the outcome. Same process was implemented in both case studies; eventually, cross-case synthesis technique was applied in which outcome was developed from both case studies and measured against theoretical propositions. Finally, the conclusion was presented in chapter 7.

3 Initial Public Offering (IPO)

An enterprise may finance its business by two main sources: debt and equity. Debt financing means that you will borrow money from financial institutions for a short- or long-term and have to pay a fixed amount of expense each period as agreed when borrowing. On the other hand, equity financing means that individual investors or institutional investors will invest their money in your company. In exchange for their investment, these investors own parts of the company and have the right to receive their proportions of the company's returns. Moreover, there are two kinds of equity financing: private equity and public equity. As the names indicate, information in connection with private equity is not disclosed. Enterprises that use private equity as their source of financing also have stocks but these stocks are not publicly traded in an exchange. On the contrary, when enterprises seek for public equity, their stocks are listed in a stock exchange and are traded by every person. IPO happens when an enterprise makes its stocks publicly traded for the first time. In this chapter, the author described both private equity and IPO and compared them. Eventually, the author will summarize reasons for a company to choose IPO as a mechanism to generate capital as well as demonstrate critical issues concerning this approach.

3.1 Private equity

Many start-ups and early-stage companies look for sources of finance from private equity. Raising capital through private equity means that companies will sell parts of the company to specific investors and those parts of ownership are not publicly traded. There are two main players in private equity market: angel investors and venture capital firms. They both invest their money in a company in exchange for a proportion of investee's ownership.

To begin, in private capital market, angel financing is the most critical form of private equity financing for a start-up or an early-stage company, in addition to families, friends, and relatives of the founders. An angel investor is individual investor who makes a big investment in one company and actively engages in its management activities. As a result, angel investors are usually interested in investing their money in business or industry that they are familiar with since they have enough appropriate knowledge and experience as regards the business, industry, and the market so that they can provide both financial and administrative support to the investee. Moreover, angel investors also look for business that has high potential of growing, good management, and sufficient information available in order for them to be able to make fair valuation of the company. (Sihler, Crawford & Davis 2004, 216 – 217.) In Finland, companies can look for angel investors by using Finnish Business Angels Network

(FiBAN), a part of European Business Angel Network (EBAN). FiBAN has around 500 members, and they invested more than €21 million in 238 startups during the year 2014 (Finnish Business Angels Network).

The second type of private equity financing is through venture capital (VC) funds. Both individual and institutional investors can invest their money in venture capital firms and these firms manage different kinds of funds to finance potential private companies. Generally, venture capital firms usually require a higher rate of returns from company than angel investors do and these firms often invest in companies that are in a later stage of development. Normally, companies seek financial support firstly from founders' personal network (i.e. families, relatives, friends), then from angel investors, and, after that, from venture capital firms. In Finland, the Finnish Venture Capital Association (FVCA) is a platform for different venture capital firms to come together and for growing companies to approach those firms.

Table 2. Comparison between angel investors and venture capital firms (Sihler, Crawford & Davis 2004, 217 – 220; Vinturella & Erickson 2003, 193 – 199 & 213)

	Angel investors	Venture capital firms
Level of involvement	<ul style="list-style-type: none"> - They want to be involved in the business by giving advice, providing assistance, widening investee's professional network. - It depends on the type of investors that they want to have high or low level of control over investees. 	<ul style="list-style-type: none"> - They want to be involved in the business and help create internal management of the investees. - They usually ask for a high level of control over investees so that they can assure good performance, hence high returns.
Purposes	<p>Angel investors focus on not only monetary returns but also their own satisfaction from the investments. They want to enjoy doing business and having the good feeling of making successful investment.</p>	<p>The main purpose of normal venture capital funds is monetary returns and that of corporate venture funds is achieving strategic goals.</p>
Characteristics of targeted investees	<ul style="list-style-type: none"> - A business with high potential that has advantage in technology, engages in a thriving market, possesses excellent management team, etc. - The investment should give the investors enjoyment. 	<ul style="list-style-type: none"> - Venture capital firms look for very growing industry with huge market potential and for companies that are similar to other companies in their portfolio so that VC firms can benefit from synergies. - An investee with good management team and satisfying financial results are more interesting.
Required rate of returns	<p>Different types of angel investors require different rate of returns; generally, the required rate varies between 20 and 30 percent.</p>	<p>The normal required rate of return is 30 to 40 percent. An early-stage company is required to have higher rate of return.</p>

Approaching	Companies can seek angel investors mostly from their personal and professional networks, e.g. FiBAN, EBAN, etc.	Companies seek venture capital firms through: <ul style="list-style-type: none"> - finders: someone who specializes in locating venture capitalists, - founders' professional network such as bankers, lawyers, or accountants, etc., - venture forums.
Drawbacks (from investors' point of views)	<ul style="list-style-type: none"> - Changes in ownership structure with old shareholders must have their parts diluted. - High cost of capital: a large amount of earnings will be distributed to these investors proportionately to their share of ownership. 	<ul style="list-style-type: none"> - Changes in ownership structure, the possibilities of the companies being taken over, and old shareholders must have their ownership diluted. - Sources of financing in the future is limited: no change in capital structure, no more shares dilution, etc.

Table 2 presented six aspects in which comparison was made between the two types of private equity financing: level of involvement in investee's operations, the purposes of the investment, the anticipated characteristics of potential investees, required rate of returns, how private equity can be approached, and drawbacks of the type of financing from the point of view of investees. To summarize, both types expect their investee to be a potential business that is engaging in a burgeoning industry and expect their investment to result in monetary benefits. Nevertheless, angel investors usually also aim at achieving their own enjoyment with lower required rate of return than that expected by VC firms. Furthermore, VC firms often ask for high level of involvement in investee's business like being member of either the board or the executive management team. Finally yet importantly, receiving finance from either angel investors or VC firms results in higher cost of capital and dilution in ownership structure; especially, there are more restrictions concern sources of financing if the investee is backed by VC firms.

Private equity market in Finland has recently developed with many start-ups established and significant amount of capital generated. A report from Finnish Venture Capital Association (June 2015) stated that in 2014, venture investments in Finland grew significantly and resulted in a record of 281 Finnish companies supported by venture capital firms or private equity firms; in addition, investments made in SMEs reached €469 million in the same year. The report also mentioned that most of the venture investments was allocated to life sciences industry and computer and consumer electronics industry, with more than €80 million invested in about 100 companies.

3.2 IPO as a method to generate capital

For later-stage companies, it is possible to consider another type of equity financing: public offering. Unlike private equity, an IPO makes company's stock available to the public. Because of its extensively complicating process, in which many parties are involved and which requires thorough planning, PwC (2011, 3 – 5) suggested that an enterprise should consider the following questions to know if it is ready for an IPO or not:

- Does it have an interesting product or service that is on developing stage and is able to attract customers and investors?
- Does it have an excellent management team that is capable of following up the whole process of an IPO, preparing all the documents and disclosure requirements needed, and being strongly committed?
- Are the present market condition and future prospects auspicious for the company to grow and generate strong revenues as well as earnings?

Therefore, IPO is not an option for start-ups and early-stage companies, mainly because these companies are not yet well known, their products or services are not popular among customers, and they do not have strong financial base to afford the costly public offering. Apparently, deciding to follow an IPO is not a decision that is made in one or two single days. Instead, it is the result after careful consideration and comprehensive discussions between current owners. The transforming from a private company to a public entity is not simple, and the company itself needs to go through a lot of restructuring, not only in the organization but also in its strategy. Public offering brings new owners to the company, besides already existing ones, and these two groups of owners may not share the same vision. In addition, selling ownership to the public means that current owners will lose control over their company and face the risk of being taken over. As a result, owners have to determine how much ownership will be publicly sold as well as how the new ownership structure of the company will be. The table below presents the advantages and disadvantages of an IPO so that readers can have a general view of this approach.

Table 3. Advantages and disadvantages of an IPO (Geddes 2003, 24 – 29)

Advantages	Disadvantages
<ul style="list-style-type: none"> - possibility of liquidity and risen share price - increasing motivation across management and personnel - improved company's image and prestige - possibility to attract other investors or to have access to other sources of finance - other possible advantages concerns business strategy and company's operation 	<ul style="list-style-type: none"> - more information disclosed - high cost - owners may lose control - possibility of problems arisen from agency conflicts - the needs to satisfy expectations of investors and analyst, especially short-term ones

A successful IPO should try to take the most of those advantages and mitigate the costs of those disadvantages as much as possible. In order to generate additional capital effectively, the company should make a detailed plan concerns the IPO process as well as create an excellent team with excellent knowledge about the public offering. There are many parties participate in an IPO beside the company itself: investment banks, legal advisers, auditors, property valuation experts, consultants, and public relation experts. (Philippe 2011, 57 – 61). Of those parties, investment banks are the main partner that will contribute mostly to the IPO. Philippe (2011, 54 – 58) stated that investment banks are underwriters that help owners to draft the prospectus and to negotiate deals with stock exchange, manage the demand coming from stock market, keep the list of orders placed by investors, and allocate stocks to those investors. Generally, one company needs to rely much on the investment banks to go through an IPO smoothly and achieve the initial goals of it. Usually, an enterprise uses more than one investment bank to be in charge of its IPO in order to ensure the successful outcome. For example, Facebook's IPO included 33 investment banks of which Morgan Stanley was the leader (Saitto, Alesci & Spears 2012).

Not only includes many parties, an IPO also consists of many critical steps that require careful planning. To begin, after deciding to pursue an IPO, the company needs to move on with preparing the required financial information and other documentation, constituting due diligence (i.e. detailed examination of company's operations and financial records), and marketing the offering to possible investors (Philippe 2011, 71). The first two steps are the most painstaking ones and they need months to be carefully carried out. Enterprises with strong human resources can complete the task more quickly than those with fewer personnel can. Having the documentations ready and being equipped for the due diligence are critical actions that will determine whether the company is qualified for the listing in stock exchange. As a result, the company has to prepare all the paper work based on the regulations and requirements of the stock exchange. After that, a prospectus is drafted, reviewed, and finalized so that the official advertising paper is created. The prospectus is the official document that clearly states all the details about the IPO and aims at attracting investors' attentions. Apparently, company's valuation is carried out prior to the publication of this prospectus in order to result in a reasonable offering price. In addition to the offering price, the prospectus also includes other information such as company's introduction, its recent financial results, the purposes of the IPO, the number of shares offered publicly as well as shares allocation to different types of investors, and the timetable of the public offering. Finally, it is also very important to have a marketing plan to advertise the offering to the public. Normally, there are three types of offering: to institutional investors, to retail investors, and to company's personnel. During marketing step, it is also possible for the company to adjust its offering price. After all these steps were completed, the actual IPO takes place. During the offering period, as stated

in the prospectus, company's share will be offered to institutional investors, retail investors, and personnel. The IPO can last for about one week but can also be suspended in the event of oversubscription (i.e. the number of shares subscribed by investors is higher than the number of shares offered). After the offering, the company finalizes its share allocation and offering price and prepares for the first trading date on stock exchange. (Philippe 2011, 77.)

Although it is an arduous and lengthy process, which involves many parties, IPO is encouraged by the European Union (EU) in order to boost up the regional capital market as well as the regional economy. Specifically, plans have been made to improve the accessibility of SMEs to the public equity market in all over Europe. European IPO Task Force report (23 March 2015, 5) emphasized the importance of European capital markets and of SMEs, the "engines of economic growth", which were interested in public equity offerings. The report also made some recommendations to improve the practice of IPO in European countries, especially for SMEs:

- establish flexible controlling environment for SMEs that makes entering the public capital market easier and requires lower cost of equity,
- increase the investors' ability to enter the IPO market, e.g. support investors for understanding the structure of the market,
- improve market structure so that it works effectively for varied companies at all stages of growth and for different kinds of investors,
- promote equity culture in Europe and enhance access to the European equity market,
- increase tax incentives for going public and investing in IPOs.

In addition to those recommendations, Finnish stock exchange, NASDAQ OMX Helsinki, published a report in January 2015, updating status of different proposed measures in the IPO Task Force. Some important measures are: making tax treatment of private and public companies indifferent, implementing less-intense reporting standard for listed SMEs, and reducing administrative burden for public companies. Overall, the stock exchange, Finland, and European Union should work together to strengthen the European capital markets and European economy. The report from NASDAQ specified that some measures were completed, other measures were in progress, and a few were still in discussion. (NASDAQ OMX 2015.) With all those attempts to promote public equity market to companies, especially to SMEs, it is expected that more companies will be listed, receive more funding, and help to boost the overall economic situation in Europe.

In summary, an IPO will not only bring more capital to the company but also improve its reputation, increase level of liquidity, motivate employees, and strengthen company's business strategy. However, an IPO is not appropriate for an early-stage company. It also requires meticulous planning and protracted preparation of much documentation. Furthermore, the process involves many other parties and eventually alters company's ownership structure.

Despite many complications and hardship, the ongoing IPO Task Force has promoted IPO in European capital market. It is expected that less intense listing terms for SMEs will be applied and the European public equity market, along with European economy, may be able to develop.

3.3 Important issues concern an IPO

We now know that IPO is a next step for a company to enter the public market, to grow bigger, to receive higher recognition from both customers and investors, as well as to expand its capital. However, some critical issues are caused by the decision to follow an IPO. To begin, when using private equity financing, company may have angel investors and/or venture capital (VC) firms, along with company's founders, as owners. Angel investors and VC firms usually own a significant part of the company in which they invest. The percentage of ownership they own is determined by their expected level of involvement, expected rate of return, and expected holding period (Vinturella & Erickson 2003, 205). On the other hand, when using public equity financing, company will have more investors: angel investors, VC firms, institutional investors, and individual investors. This diversification, together with the transformation from a private company to a public one, results in many critical changes in corporate governance and ownership structure. Secondly, going public means that the company will sell its shares to public at a reasonable price; an appropriate cost of capital and proper valuation process are necessary to come up with that price. Therefore, it is important to consider how company's cost of capital and company's capital structure will be affected, from the point of view of both the company and its shareholders; moreover, company also needs to pay attention to its disclosed financial results. Thirdly, changes in company's tax plan should be considered since the transforming will result in different tax policies, especially that concerns dividends paid to shareholders. Finally, company has to consider risk management strategy regarding post-IPO operations.

3.3.1 Corporate governance and ownership structure

In order to transform from a private to a public company, the enterprise should have at least €80,000 as share capital (Limited Liability Companies Act 624/2006). After that, the owners need to modify company's Articles of Association, register it at the Trade Register, and adhere to the Finnish Corporate Governance Code applied for a public enterprise. Besides stating rights of shareholders and requirements concerns General Meeting, the Code also mentions different groups of executives that should be established when transforming: board of directors, and managing director. The board of directors (hereafter: the board) is in charge of administrating the company's operations, designating managing director, and making important decisions like business strategies. On the other hand, managing director, also known

as Chief Executive Officer (CEO), is in charge of the daily operation of the company, following instructions and orders given by the board. Additionally, a public company should also have board committees to support the board's activities, audit committee to take care financial reporting and controlling activities. (Securities Market Association 2010, 10 – 18.)

In private company, angel investors, VC firms, or other types of private equity firms can act as both members of the board and managing director. In other words, they are the owners and the managers of the company. In this respect, there is no conflict between the owners and the managers. Being a public company and having company's stock listed and traded publicly result in a number of new owners with different expectations and purposes. Old shareholders are now not the only owners and cannot solely make important decisions without considering the expectations of the new ones. In this case, conflicts between shareholders and managers can arise and cause difficulties in management. This kind of conflict is called agency conflict in which there are low incentives for managers (i.e. agent) to perform at their best and bring values to the company and its shareholders (i.e. principals). One typical example of agency conflict happens when company's managers have long-term provisions while many other shareholders are only interested in achieving short-term goals. In this regard, financial results, which may be considered acceptable by managers, can possibly be inadequate results from the point of view of other shareholders; and that may result in decreasing company's value and stock price. Another example takes place when managers only focus on receiving high remunerations and do not perform at their best to bring the highest returns to the company's shareholders.

In order to avoid this agency problem, which will eventually result in a cost for the company, Brealey, Myers & Allen (2006, 305) suggested monitoring managers' performance closely and providing them the right incentives to contribute their best effort. Firstly, the board of directors is in charge of supervising managers and of making sure that the managers really devote to the company. Finnish Securities Market Association (2010, 17) requires that in a public company the chairperson of the board must not be the CEO. Finnish Governance Code also states that the majority of the board should be independent of the company and even of company's shareholders so that the board can make strategic decisions based purely on the interest of the company (Securities Market Association 2010, 11). Secondly, incentives to managers can come in many different forms in addition to their salary. For example, the board can give them compensation based on their performance, provide them company's shares and the possibilities to purchase more in the future. Latham and Braun (2010, 668) said that making managers company's shareholders would decrease the possibilities of agency conflict since their risks returns were tightly connected to those of the firm. Besides the two methods to mitigate agency conflicts mentioned above, executive managers should

try to align their interest with that of company's shareholders so that two parties are looking at the same direction and together create value for the firm.

In another respect, when considering an IPO, firm's founders and its investors should carefully discuss the post-IPO ownership structure following new corporate governance. For example, they should know if any significant shareholders, like an angel investor or VC firm, will leave the company through IPO, and examine potential new owners like investment banks or institutional investors. This may result in the initial allocations of shares to different types of investors. Overall, at the end of the IPO process, the company will have many more shareholders from different sectors such as private companies, households (i.e. individual investors), financial and insurance institutions, etc.

3.3.2 Capital structure

Entering the public equity market does not only change the company's corporate governance and ownership structure but also changes the company's capital structure by increasing the amount of equity financing. Additionally, company's cost of capital, or weighted-average cost of capital (WACC), is also altered because of the public offering. Cost of capital is investors' generally expected rate of returns from their investment in the company. Main components of one company's cost of capital are cost of debt and cost of equity. Similar to cost of capital, cost of debt (or equity) is the creditors' (or shareholders') expected rate of returns when investing their money in the company. Brealey, Myers & Allen (2006, 503) presented the formula used to calculate WACC as follow:

$$WACC = r_D(1 - T_C) \frac{D}{V} + r_E \frac{E}{V}$$

In the formula above, D and E are respectively market value of company's long-term debt and equity, V is total market value of the company and equals $D + E$, r_D and r_E are respectively cost of debt and cost of equity, T_C is the marginal corporate tax rate applied to the company. Because interest payments to creditors are tax deductible, we need to apply marginal corporate tax rate and use the after-tax cost of debt in the calculation, which gives a more correct and realistic figure. Clearly, company's capital structure and its cost of capital link to each other. Public offering results in higher equity and higher market value; if cost of debt and cost of equity remain the same, WACC will also get higher. In other words, the increase in equity results in the increase in the overall expected rate of returns. On the other hand, if the amount of debt is increased, company's market value will also escalate but WACC will dwindle. As a result, company prefers using debt financing to equity financing because debt financing seems to be cheaper (and interest payments are tax exempt). However, in practice, cost of equity will not remain at the same level as when the amount of debt is increased, it

will tend to go upward instead. More debt means that company has lower level of liquidity and its shareholders are exposed to higher risks. Naturally, shareholders must ask for higher rate of returns; and thus, company has higher cost of equity and may have higher WACC eventually. Therefore, company should consider how public offering would affect capital structure as well as its WACC so that it can satisfy investors (both creditors and shareholders) with as low cost of capital as possible. Moreover, in order to have an overview of one company's capital structure and its liquidity level, people usually look at the company's equity ratio and gearing ratio. While equity ratio represents the percentage of equity in the company's asset, gearing ratio (or net debt-to-equity ratio) shows the difference between available cash and interest-bearing liabilities, i.e. loans and other types of borrowing which require interest payments periodically. The calculations for those two ratios are presented below:

$$\text{Equity ratio} = \frac{\text{Total equity}}{\text{Total assets}}$$

$$\text{Gearing} = \frac{\text{Interest bearing liabilities} - \text{Cash \& Cash equivalent}}{\text{Total equity}}$$

Similar to the debt equity ratio calculation described by Keown, Martin, and Petty (2011, 97), equity ratio is calculated by dividing company's total equity by its total asset. Moreover, in order to calculate gearing, which is also called net debt-to-equity ratio, we first need to calculate the interest-bearing net debt by subtracting company's cash and cash equivalent from the total amount of interest-bearing liabilities; after that, we divide the interest-bearing net debt by total equity (Affecto 2006, 31). Both of these financial ratios are presented as percentage. A positive gearing (e.g. 20%) means that there are more interest-bearing liabilities than the amount of available cash and that the net debt equals 20% of total equity. On the other hand, a negative gearing (e.g. -20%) means that the company has enough cash to pay for its interest-bearing liabilities and that the surplus amount equals 20% of total equity. In this respect, shareholders prefer the second circumstance to the first one because there are cash available for them if company goes into liquidation; in other words, they have lower risks of losing money.

To conclude, generating capital through stock issuance results in changes in total amount of equity and equity ratio; these changes may also affect company's WACC. In addition, the capital raised also brings more cash to the company and lowers net interest-bearing debt.

3.3.3 Other important financial figures and financial ratios

The previous subchapter listed important financial ratios regarding company's capital structure (equity ratio and gearing). In addition to those measurements, investors and analysts usually also look at other financial figures and ratios in order to evaluate one company's performance; those of a public entity undergo even deeper analysis because mostly all information is required to be disclosed to everyone.

Revenues, operating profit, and net profit are three common financial figures used in the evaluation of company's performance in one specific period. Horngren, Datar, Foster, Rajan, & Ittner (2009, 63) defined revenues as "inflows of assets (usually cash or accounts receivables) received for products or services provided to customers." The revenues minus costs and expenses that relate to operating, i.e. cost of goods sold, results in operating income; other expenses such as administrative expenses or interest expenses are not included in the calculation (Horngren, & al. 2009, 66). Finally, net income equals operating income add other non-operating revenues minus non-operating expenses minus income taxes (Horngren, & al. 2009, 94).

When company starts trading on a stock exchange and its stock has a trading price, there is a new financial figure that is used to analyze the stock price's performance: the price/earnings ratio (P/E). In addition, other important financial figures are earnings per share (EPS) and returns on equity (ROE). EPS equals net profit attributable to common shareholders divided by the average number of shares outstanding. Brealey, Myers & Allen (2006, 790) described the calculations for ROE and P/E as:

$$ROE = \frac{\text{Earnings available for common shareholders}}{\text{Average equity}}$$

$$P/E = \frac{\text{Stock price}}{EPS}$$

ROE measures the profitability of one company since it represents the amount of profit results from the company's equity. Earnings available for common shareholders equal net profit minus dividends paid to preference shareholders¹ (if any); average equity is the average amounts of common equity during the period. Watson & Head (2010, 55) stated that P/E ratio showed how much investors were willing to pay for one company's share based on the

¹ Preference shareholders are owners of preference shares, one type of shares that will be discussed in following chapter.

current EPS; overall, high P/E usually means that the company is likely to increase its earnings in the future. However, Brealey, Myers & Allen (2006, 795) also mentioned that high P/E might also be a result of low EPS instead of high stock price.

In general, investors usually look at public company's financial figures and ratios to evaluate company's performance as well as evaluate the potential of their investments. Common analyzed financial figures are revenues, operating profit, and net profit. Popular examined ratios are EPS, P/E, and ROE. All of these financial ratios relate to company's earnings and to how earnings affect company's creditability.

3.3.4 Taxation of dividends

For every company, taxation is an important aspect to look at since it relates to the government and has direct effect to the after-tax profit (or loss). To begin, equity financing is less preferred than debt financing. From the company's perspective, interest payments to creditors are tax deductible while dividends paid to shareholders are subject to tax. In other words, the cost of using equity financing is higher than the cost of using debt financing. In addition to higher cost, companies are reluctant to go public also because there are different tax treatments applied to listed and non-listed companies. Let us take a closer look to the tax levied on dividends distributing by the two kinds of enterprise.

Company usually pays dividends to its shareholders; and from shareholders' perspective, they receive dividend income from the company. This amount of dividends is taxed differently in various circumstances. The company that pays dividends can be a listed or non-listed while the recipient can be an individual taxpayer or a legal corporate entity. How the dividends are taxed depends on the type of both distributing company and recipient.

Table 4. How dividends are taxed in different circumstances (Finnish Tax Administration)

	to Individual	to Corporate Entity
from Non-listed company	Dividends can be partly taxed as capital income and partly taxed as normally earned income. The residual amount is tax-free.	In most cases, dividends are tax-free.
from Listed company	85% of dividends is taxed as capital income and the other 15% is tax-free.	<ul style="list-style-type: none"> - In most cases, dividends are tax-free. - If the beneficiary is a non-listed company and holds less than 10% of company's ownership, 100% of dividends is taxed. - If the beneficiary is a financial institution, insurance company, or pension institution, 75% of dividends is taxed and the other 15% is tax-free.

As stated by Finnish Tax Administration, corporate entity needs to pay 20% levy on the taxable dividend income received; individual who receives dividend income is taxed 30% on capital income less than €40,000 and 32% on the amount that outstrips €40,000. For dividends that is taxed as normally earned income, progressive personal income tax rate is applied.

From an individual investor's perspective, transforming from a non-listed to a listed company strongly affects dividend income since it is taxed differently.

If a non-listed company pays dividends to the individual, 25% of the dividend is taxable capital income and 75 % exempt from tax for the individual, up to the amount equaling 8% of net corporate assets owned by the individual. This amount corresponds to a 8-percent yield of his share of the company. If more than €150,000 is distributed as dividends, then 85% of the excess is taxable capital income and 15% of the excess is exempt from tax. Furthermore, if the amount exceeds the limit of 8% of corporate assets, then 75% of the excess is considered taxable earned income and 25% of it is exempt. (Finnish Tax Administration.)

Let us take an example so that we can understand this clearer. Assuming Mr. A owned 3,000 shares of company X. The market value of those 3,000 shares was €300,000. At the end of the year, Mr. A received €30,000 dividends. If X is a non-listed company, because 8% of company X's market value equals €24,000 and is lower than the amount of dividends that Mr. A received, 25% of €24,000 is considered taxable capital income, 75% of €6,000 (amount exceeds the threshold 8%) is considered taxable earned income, and the rest is tax-free. On the other hand, if X is a listed company, 85% of €30,000 is taxable capital income and the rest 15% is tax-free. The figure below demonstrates different kinds of taxable income in those two different types of company X and the amount of tax to be paid, assuming that Mr. A needs to pay 20% on his personal income.

Company X			Effective tax rate
Non-listed company	Taxable capital income	6,000	Tax expenses 1,800 900
	Taxable earned income	4,500	
	Tax-free income	19,500	9.00%
Listed company	Taxable capital income	25,500	Tax expenses 7,650
	Tax-free income	4,500	25.50%

Figure 1. How dividends are taxed differently when X is a non-listed company and when X is a listed company.

If X is a non-listed company, €19,500 is tax-free income and the effective dividend tax rate levied on Mr. A is only 9%. In contrast, if X is a listed company, Mr. A only has €4,500 tax-free income and his effective dividend tax rate is 25.5%. Even if Mr. A's personal tax rate is 40%, his effective dividend tax rate when X is a non-listed company will be only 12%, much lower than that when X is a listed one. Apparently, individual investor has to pay more tax when receiving dividends from a public company. As a result, it is reasonable if they ask for a higher rate of returns from the public company to offset the higher tax that they have to pay.

To summarize, dividends paid by a corporate entity to another corporate entity are usually exempt from tax. If the distributing company is listed while the recipient is not a public company and does not hold more than 10% ownership of distributing company, 100% of the dividends are taxable. Moreover, if the recipient is financial institution or similar entity, only 75% of the dividends are taxable. In both cases, the corporate tax rate applied to dividend income is 20%. On the other hand, if the beneficiary is an individual, he or she has to pay more tax on the dividends received from a public company than those from a private one. Recognizing those regulations, the company should be able to come up with a tax plan as well as a thoughtful dividend payout policy so that individual shareholders, especially those who have been with the company prior to IPO, will be satisfied with their investment. Nevertheless, as previously stated above, Finland is trying to apply some tax incentives to advocate IPO such as neutralizing tax treatment variations between a listed and a non-listed company. Hopefully, when those actions are enforced, companies, especially SMEs, will have more opportunities to raise capital and to grow bigger when entering the public equity market.

3.3.5 Post-IPO operation

Being ready for an IPO, having determined that the market timing is suitable for a glorious public offering, and well preparing for all the changes and modifications required by transforming to a public entity are just one side of the story. The company still has to consider many other things after its IPO: to satisfy shareholders, to maintain company's market value, to utilize the capital raised through IPO, and to continue to grow strongly. Ernst & Young (EY), an advisory services provider, suggested post-IPO companies having good risk management strategy in order to confront economic difficulties or other challenges that happen regularly in the business environment. EY listed four main categories of risk that a newly public company may need to consider after its IPO: compliance, operational, strategic, and financial. Overall, the main purposes of risk management are to keep existing shareholders contented and to attract new ones. **Compliance** risks consist of ones that relate to regulatory, legal, and code of conduct aspects. Company has to manage compliance risks by care-

fully managing how it complies with requirements of the stock exchange as well as other national and international regulations. **Operational** risks pertain to all of company's activities such as physical assets, personnel, sales and marketing, supply chain, etc. **Strategic** risks refer to company's strategic decisions regarding future expansions, international development, or investors' communication. Finally, **financial** risks include risks that associate with accounting and reporting, capital structure, etc. (EYGM Limited 2013, 3-5.) Marsh (2013, 2) also described some IPO risks that emphasize regulations, shareholders' relations, and employee risks which are caused by changes in pension plans. Actually, the four important issues, mentioned in previous subchapters, also belong to at least one of the four categories of risk suggested by EY. Specifically, corporate governance and ownership structure issues relate to compliance risk and operational risk; capital structure and the disclosure of other financial information can cause operational and financial risks; and taxation of dividends directly links to compliance, strategic, and financial risk.

In general, after an IPO, the public company now has to both delight its broad base of shareholders and aspire to achieve its long-term strategic goals. In the meantime, the economic situation is very hard to predict and uncertainties can happen in any minute. As a result, it is necessary that company should consider developing risk management strategy, even before its decision to go public. Doing so may assist the company with handling the risks of being a public entity, overcoming difficult circumstances, and achieving desired results.

4 Finnish IT SMEs

This thesis focuses on Finnish IT SMEs so that it was necessary to look at how IT SMEs in Finland have developed. In recent years, the number of startups in Finland has increased rapidly, and many of them are information-technology-based. FiBAN mentioned that its business angel network receives annually more than 400 submissions for funding from startups and that it had invested €21 million in 238 startups in the year 2014 (Finnish Business Angels Network). Additionally, FiBAN is not the only organization that provides financial support to startups; the Finnish Funding Agency for Innovation (Tekes) and Enterprise Finland are the other two organizations that support startups in Finland. As a result, the number of SMEs in Finland has grown significantly over the past years. In this chapter, we will look at the number of IT SMEs in Finland and their potential to enter the public equity market.

IT companies are enterprises that provide technology solutions for business activities like payment, financial management, product development, etc. The world of technology is changing rapidly day after day so that one technology can be an innovation this year but it can already be obsolete the year after. Therefore, IT companies should continually invest in research and development (R&D) and improving its services and solutions offered to customers. Those activities normally ask for more capital; and as mentioned in previous chapter, there are many sources of additional finance: financial institution borrowings, private equity firms, and public capital market. Pursuing an IPO, i.e. entering the public equity market, can help the company to raise the essential capital, attract new investors, and strengthen its public image and reputation. Nevertheless, IPO is appropriate for later-stage companies with unique products that can catch the attention of potential investors; moreover, the market condition should also be promising and provide good future prospects.

In order to have an overview regarding Finnish IT companies, the author utilized the database provided by Selector of Bisnode Finland Oy, a database that HAAGA-HELIA students can use for academic purposes, to see the number of IT companies in Finland altogether. Selector categorizes companies into different activities, i.e. industries. Since IT companies are the focus of this paper, the author chose the activities called “computer programming, consultancy and related activities” and “information service activities”. Based on the extracted data from Selector’s database on 16 November 2015, of the two categories mentioned, there were 9,750 companies operated under the former and 1,238 companies operated under the latter. Furthermore, Selector also allows its user to categorize selected companies into classifications of number of employees and of amount of annual revenues. As a result, it is very convenient to examine both the total number of companies and the number of SMEs. Furthermore, because this paper focuses mainly on limited corporations, the author

did not include other legal forms (e.g. partnerships, sole proprietorship) in the analysis. Of the total 10,988 companies selected from the two activities mentioned above, there were only 28 companies that had more than 250 employees and there were 10,799 IT SMEs (161 companies with unknown information were excluded from this figure), of which there were only 7,092 limited corporations. Specifically, based on Selector's database, more than 99% of IT companies in Finland were SMEs. This figure stays at the same level with the number of SMEs in the EU altogether; the European Commission (30 October 2015) also stated that 99% of all businesses in the EU was SMEs and that SMEs were the engine of regional economy.

As mentioned previously, an IPO is not appropriate for all of those Finnish IT SMEs because it requires much time and effort during the procedure. Furthermore, the IT SMEs should have a stable and promising financial performance in order to attract investors. As a result, the author set the initial criteria for a company to possibly afford and pursue an IPO are:

- to have at least 50 personnel,
- to have latest revenues of more than €2 million,
- to be private Finnish limited corporations; foreign companies and private Finnish companies whose parents are public entities are excluded.

Most of IT SMEs in Finland are micro-enterprises, each of which has less than five employees. Selector's data on November 16th reported that 5,820 out of 7,092 (which equals 82%) IT limited corporations that have between zero (0) and four (4) employees. On the other hand, only 108 IT limited corporations had both between 50 and 250 employees and revenues of more than €2 million. Among those, only 51 companies met the third criterion of being a Finnish private limited corporation. The pie chart below presents the municipalities in which those 51 companies locate.

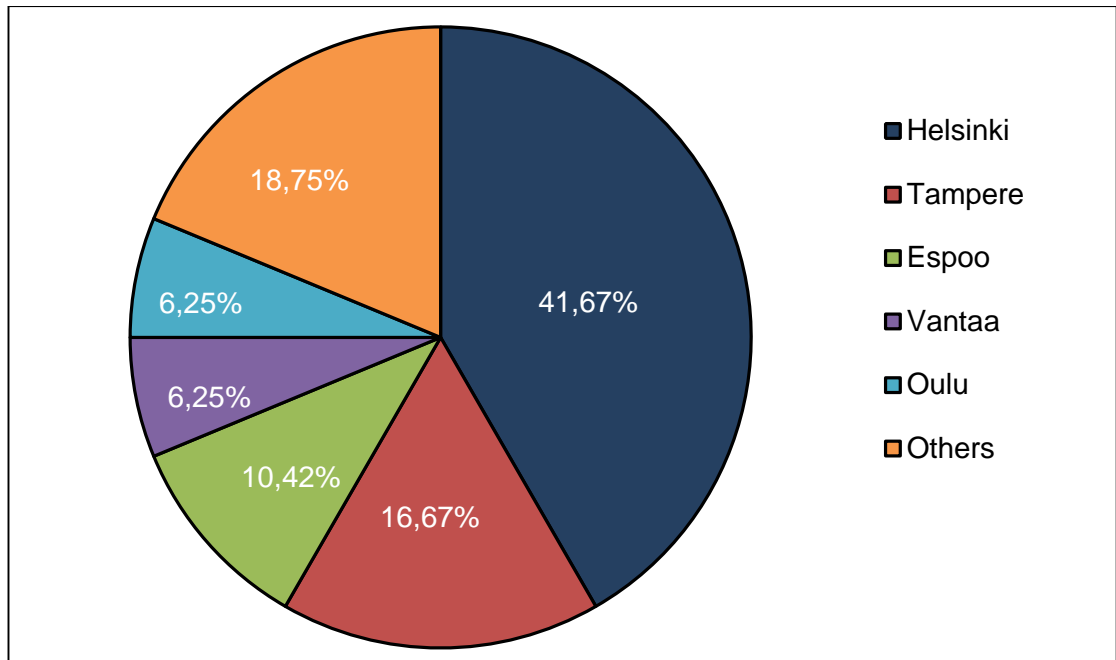


Figure 2. 51 potential Finnish IT SMEs divided into locations of their headquarters

Figure 2 shows that more than 40% of 51 companies, which can possibly afford and pursue an IPO, has headquarters in Helsinki. Others companies locate mainly in other Uusimaa's regions, Tampere, and Oulu². Moreover, we already know that these 51 companies operate under either "computer programming, consultancy, and related activities" or "information service activities". As the data suggested, 47 out of 51 SMEs were doing business through programming, consultancy, facilities management, and other related activities; 36 out of those 47 SMEs provided programming services. Table 5 below presents detailed figures.

Table 5. 51 potential Finnish IT SMEs divided into activities

Computer programming, consultancy, and related activities	47
Computer programming activities	36
Computer consultancy activities	4
Computer facilities management activities	5
Other information technology and computer service activities	2
Information service activities	1
Data processing, hosting and related activities	1
Web portals	0
News agency activities	0
Other information service activities n.e.c.	0

² More information about potential Finnish IT SMEs can be found in Attachment 1.

5 Finnish stock market

Previous chapters introduce IPO, its critical features, an overview of Finnish IT SMEs, and their potentiality to follow and achieve the best of an IPO. In order to complete a successful IPO, it is also necessary to get to know the listed location, i.e. Finnish stock market. Firstly, this chapter presents general theoretical knowledge as regards stock market and stock market analysis. Secondly, the author gives a brief overview of the history and development of Finnish stock market. Finally, recently activities and performance of this stock market are demonstrated through different figures as well as in comparison with other stock markets in Nordic region.

5.1 Stock market and stock market analysis

As mentioned in chapter 1, stock market is a virtual market place for trading equity financial instruments, and shares are a typical trading asset in a stock exchange. Owning a share usually provides owner the possession of four basic rights: voting rights, rights to receive dividends, rights to receive a proportion of assets that remain after company's liquidation (i.e. going out of the business), and rights to maintain his or her part of ownership in the company (Harrison, Horngren, Thomas & Suwardy 2014, 610). Generally, there are three types of shares: common shares, preferred shares, and non-voting shares. Non-voting shareholders, obviously, have no voting rights. Owners of common shares and preferred shares usually have all of the four basic rights. However, owners of preferred shares will receive dividends and part of assets in liquidation before owners of common shares. On the other hand, preferred shareholders only receive a fixed amount of dividends while dividends paid to common shareholders can be adjusted, depends on company's retained earnings in that period and decision made in the Annual General Meeting. In addition, a company can also issue different classes of shares (e.g. Class A and Class B). The company has to define the rights applied to each class of shares clearly.

A company that aims at achieving its goals needs to engage in an efficient financial market, or an efficient stock market (Pike & Neale 2009, 33). The Efficient Market Hypothesis (EMH) suggests that there are three forms of efficiency: weak, semi-strong, and strong. In a weak form of efficient stock market, current stock price fully displays all of its past movement and trying to predict stock price based on past data is impossible. Semi-strong form offers the fact that stock price is the result of not only past price development but also of new press releases published by the company. A strong form means that all relevant information, which is available both publicly and privately, is reflected through company's stock price and that no one, even individual who has access to private information, can take advantage of the stock

market to earn extraordinary returns. (Pike & Neale 2009, 34.) Based on the EMH, it is impractical to predict future stock price, or future market development, by using only the past price movement. However, people with more information can be better off people with less information if the stock market is at weak form or semi-strong form. In addition to look at the efficiency, people can also analyze a stock market by observing its activities through the number of listed companies, stock market's development, and different market indices.

5.2 Origin and characteristics of NASDAQ OMX Helsinki

At the present, Finland's stock market is located in Helsinki and called NASDAQ OMX Helsinki. NASDAQ OMX Helsinki is a part of NASDAQ OMX Group, the "leading provider of trading, exchange technology, information, and public services across six continents" (NASDAQ OMX Nordic-a). The history of Finnish stock market can be traced back to October 1912 when the Helsinki Stock Exchange was created as a market place for trading. Until now, the Helsinki Stock Exchange (HSE) has gone through many ups and downs, as reflections of the world's economic situation. The First and Second World War caused serious problems to Finnish stock market as well as the world's economy: high inflation and high market instability. After those wars, the economy recovered, stock prices increased, and there were more companies listed their stock on the exchange. In early 1980s, foreign investors started to have interest in Finnish companies so that some Finnish enterprises sold their stocks to those investors or tried to list their stocks in foreign stock exchange. However, at that time, Finnish government was so afraid of Finnish companies being acquired by those foreigners that they decided to put a limit to the degree of foreign ownership. Later on, these restrictions were removed and that made trading much easier for both national and international players in the market. (Nyberg P. & Vaihekoski M. 2013, 4 – 9.)

In addition to the ups and downs in business activities, HSE also went through some changes in ownership. Initially, it was just a non-profit organization but eventually became a limited liability company in 1995. Two years later, HSE merged with Finnish Options Exchange to form HEX Ltd. In 2003, HEX Ltd. merged with Swedish options exchange to form the OMX. After that, OMX continually merged with the stock exchanges in Copenhagen and Iceland as well as expanded its operation to other Nordic and Baltic countries. In 2007, NASDAQ acquired OMX and formed the NASDAQ OMX Group. (NASDAQ OMX Nordic-a.)

The NASDAQ OMX Group provides two trading markets for different kinds of companies: the Main Market and First North. The Main Market is appropriate for companies that are able to conform to high level of standard reporting, transparency, and accountability. Companies listed on the Main Market are categorized into Small Cap, Mid Cap, and Large Cap based on

their market capitalization, which equals current stock price multiplied by the total number of stock trading. As stated by NASDAQ OMX Nordic (2012, 7), Small Cap companies have their market capitalization below €150 million, that of Mid Cap companies range between €150 million and €1 billion, and that of Large Cap companies are larger than €1 billion. Moreover, when applying to list on the Main Market, enterprises can also choose to be on the Official List or on the Prelist. Prelist is a temporary trading market in which the issuer expects to list its shares on the Official List later on. Shares listed on the Prelist can remain there for one year at the most. (NASDAQ OMX Helsinki Ltd. 2014, 27–28.) First North, on the other hand, is not a regulated exchange as defined by EU legislation but a multilateral trading facility that operates in Helsinki, Stockholm, Copenhagen, and Iceland (NASDAQ OMX First North 2015, 4); First North in Finland was established in June 2007 (NASDAQ OMX Nordic Surveillance 2008). Companies that issue their shares on First North instead of on the Main Market do not have to follow as strict regulations as that of the Main Market and have more time and effort to focus on their operations and developments. Some differences are listed below:

- when applying to be listed on First North, company only needs to have at least 10% of its shares held by public hands (e.g. person that holds less than 10% of company's shares) while that number is 25% on Main Market (NASDAQ OMX First North 2015, 5; NASDAQ OMX Helsinki Ltd. 2014, 16),
- on First North, company does not have to disclose its annual reports and financial statements according to IFRS but according to generally accepted accounting standards in home country (NASDAQ OMX First North 2015, 14; NASDAQ OMX Helsinki Ltd. 2014, 38),
- First North's registration fee is €9,000 while that of Main Market varies between €45,000 and €120,000, and First North's annual fee ranges between €8,000 and €42,800 while that of Main Market ranges between €10,500 and €73,500 (NASDAQ OMX Group 2014a, 1; The NASDAQ OMX Group 2014b, 1).

Although the list above does not present all the differences between First North and Main Market, it can be seen that First North provides a more accessible exchange for new companies that do not have much capital, time, and effort to adhere to the exacting requirements on Main Market. As a result, company can have more resources to support its business while still get the advantages of being a public enterprise. Moreover, company can remain on First North for an unlimited time, which makes First North more promising to growing companies than the Prelist of Main Market.

5.3 NASDAQ OMX Helsinki's performance

NASDAQ OMX Nordic consists of exchanges in Helsinki, Copenhagen, Stockholm, Iceland, Riga, Tallinn, and Vilnius. However, main activities takes place in the four locations: Stockholm, Helsinki, Copenhagen, and Iceland. NASDAQ OMX First North is also available in these four places. At the end of October 2015, there were 554 listings on NASDAQ OMX Nordic Main Market. In addition, there were also 11 companies listed their shares in more

than one market. For instance, Nordea bank has listed its shares on Stockholm, Helsinki, and Copenhagen, and Tieto has listed its shares in Helsinki and Stockholm. (NASDAQ OMX Nordic 13 November 2015.) The figure below presents the numbers of listings in Main Markets in three exchanges: Stockholm (XSTO), Helsinki (XHEL), and Copenhagen (XCPH). Each of three exchanges has more than 100 listings on its Main Market. All figures were taken from an excel file published by NASDAQ OMX Nordic on 13 November 2015.

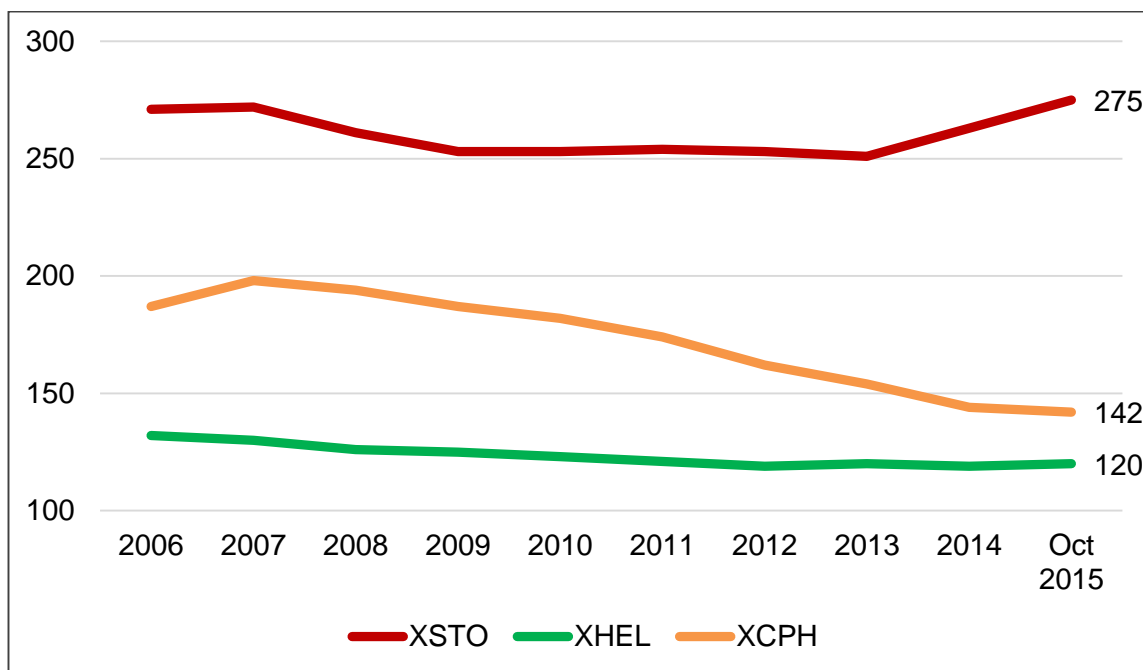


Figure 3. Number of listings in three Main Markets from December 2006 to October 2015, multiple listing excluded (NASDAQ OMX Nordic 13 November 2015)

Figure 3 shows the number of listings at the end of each year from 2006 to 2014 and at the end of October 2015 (shares listed on more than one exchange were not included). Nasdaq OMX Helsinki has had the least number of listings while Nasdaq OMX Stockholm has been the most active player. However, Helsinki's Main Market has remained stable with no significant change during the period while that in Copenhagen has experienced a continual drop in number of listings since the financial crisis in 2007 – 2008³. At the end of October 2015, there were 275 listings on Stockholm's Main Market, 142 listings on Copenhagen's, and 120 on Helsinki's.

³ Number of new listings and de-listings on these exchanges' Main Markets can be found in Attachment 2.

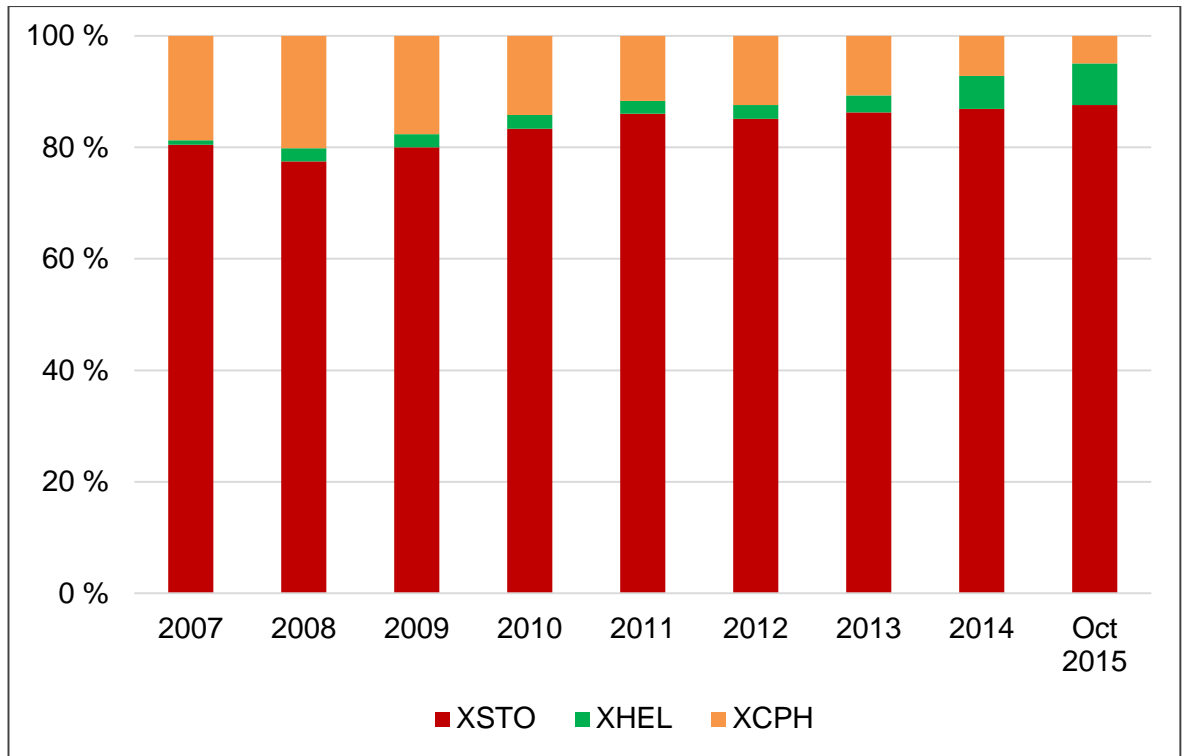


Figure 4. Participation of three exchange in First North Nordic from December 2007 to October 2015, multiple listings excluded (NASDAQ OMX Nordic 13 November 2015)

In addition to the Main Market, each exchange also provides First North platform for new and growing companies to enter the public equity market, attract potential investors, generate additional capital, and grow bigger. Figure 4 presents the percentage of participation of each exchange on First North from 2007 to October 2015. Apparently, Stockholm has been the most active player that has normally accounted for about 80% of total number of listings. The number of listings in First North in Stockholm has increased significantly since the year 2013. There were 33 new listings in 2014 and in the first three quarters of 2015 that figure was 30. In another respect, First North in Helsinki was not an active player prior to 2014. Before the year 2014, First North in Helsinki had presented only about 3% (3 listings) of the total listings but this amount started to increase thereafter. First North in Helsinki constituted 5.9% (10 listings) and 7.3% (15 listings) at the end of 2014 and October 2015, respectively. On the contrary, Copenhagen's proportion has decreased and the number of listings has gradually declined⁴. In general, while Helsinki's Main Market has overall remained at the same level since 2006, its First North has become more energetic with many new listings from 2014 onwards.

⁴ Number of new listings and de-listings on First North in these exchanges can be found in Attachment 2.

In addition to have an overview of Helsinki stock exchange, it is also necessary to look at the performance of Technology sector so that we can see what is happening in this sector and whether the market condition is suitable for an IT SME to go public.

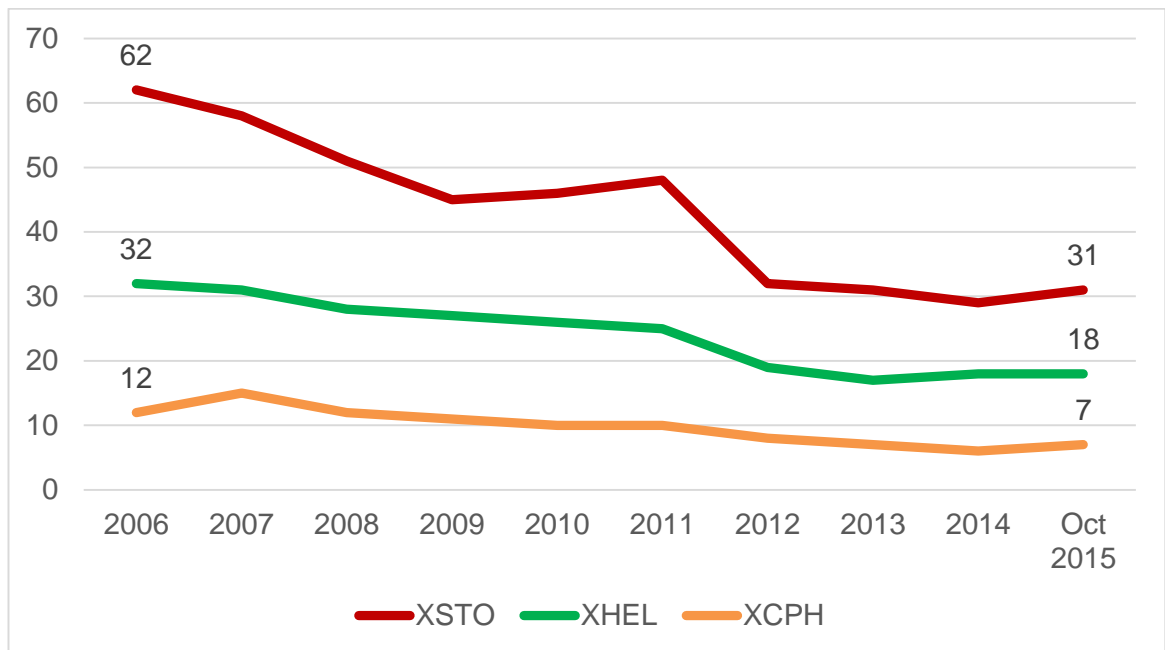


Figure 5. Number of Technology listings in three Main Markets from December 2006 to October 2015, multiple listings excluded (NASDAQ OMX Nordic 13 November 2015)

Unlike in general where there have been more listings in Copenhagen's Main Market than in Helsinki's, the Main Market in Helsinki has contributed more Technology listings to NASDAQ Nordic than the one in Copenhagen; and Stockholm has still been the biggest player. Technology sector underwent two critical plunges in its number of listings: during the financial crisis in 2007 – 2008 and in 2012. However, the decline in 2012 was possibly the result of NASDAQ's modifying sector classification. In the new classification, Technology sector includes both software and hardware companies while some activities such as business support services or business-training agencies now belong to Industrial sector. Generally, IT companies have not been so interested in the Main Market and there have been only one new listing in each stock exchange since 2014. At the end of October 2015, there were 31 IT public companies listed on the Main Market in Stockholm, 18 in Helsinki, and 7 in Copenhagen.

Most of the public companies in Technology sector belongs to Small Cap category, which has accounted for more than half of the listings in all three exchanges. As a result, these Small Cap companies are vulnerable to the instability of economic situation and it is easy for them to be taken over by larger companies. This is one explanation for the decline in the number of Technology listings. Other main reasons are that the company goes bankrupt and

has to leave the exchange and that the company intentionally asks to delist its shares because of financial restructuring or moving from Main Market to First North. As reported by NASDAQ OMX Nordic Surveillance Reports (2008, 15; 2009, 14; 2010, 6; 2011, 6; 2012, 6; 2013, 6; 2014, 8), on Helsinki's Main Market from 2008 to 2014, five (5) public technology companies decided to leave the stock exchange: four (4) of which were acquired by other companies, and another one was delisted by the exchange because the company had not fulfilled the listing requirements. All companies that delisted their shares were Small Cap and Mid Cap. Furthermore, during the same period, there were no IPO on Helsinki's Main Market and there were two technology IPO on Helsinki's First North: one started its trading in October 2012 and the other began floating in December 2014. In fact, they are the only two technology players out of the total 15 companies that are trading their stocks on Helsinki's First North.

To sum up, Helsinki's Main Market has been a less active player as compared to Stockholm's and Copenhagen's. However, First North in Helsinki is developing and there has been more companies start to trade their stocks there. Considering that more than 99% of Finnish enterprises is SMEs, there are a lot of potential for them to look for financial sources from public equity market. Additionally, IPO Task Force Finland is going to support the development of Finnish IPO and capital market so that companies will be able to enter the public market more willingly and efficiently.

6 Case studies

There are two case studies described in this chapter: the first one concerns the latest listing Finnish IT company (not SME) in Helsinki Main Market, and the second one presents the listing of one Finnish IT SME in First North in Helsinki. These two case studies take many aspects discussed in previous chapters into consideration: the products and services provided by these companies, the companies' international presence, its purposes of the IPO, and share price development in the year of the IPO. Furthermore, the case studies also go into detail about how companies used the cash generated through public offerings and how they operated in a couple of years following their floating.

6.1 Affecto

Affecto is the most recently listed company on Main Market in NASDAQ Helsinki. The company started its listing on 27 May 2005 on the Pre-list and its shares moved to the Main List on 1 June 2005. Since then, no other IT company has listed its stock on the Main Market. As an IT company, Affecto provides different services and solutions to its customers. Most of those services and solutions relate to Business Intelligence (BI) and Data Management. Generally, Affecto helps its clients to maintain, organize, and manage their data smoothly and effectively. Now, Affecto has offices and operations in many European countries, especially in the Baltic regions: Finland, Sweden, Norway, Denmark, Estonia, Latvia, Lithuania, and Poland. This subchapter will go into detail about Affecto's operations at the time of its IPO and compare with that of two other public IT companies: Basware and QPR Software. Basware has entered the public equity market since February 2000 and QPR has done it since March 2002.

Products and international presence

The history of Affecto dates back to the 1999, when it was established and funded by Eqvitec and Fenno Management. In 2004, the company acquired Genimap, a Finnish company specialized in geographic system, initiating Affecto's expansion. At that time, Affecto's owners and executives had already developed and crystallized the idea of entering the public equity market. The acquisition of Genimap helped Affecto to consolidate its strategy, which was to focus on supplying extended business intelligence (XBI) that consisted of Business Intelligence, Geographic Information System, and Data Management. Before 2005, Affecto had operations in Finland and Baltic countries: the company started its operation in Latvia in 2003 and in Lithuania in 2004. The company planned to start its business in Estonia in 2005. (Affecto Plc 2006, 11.) Evidently, Affecto had developed a mission to grow bigger through international expansion, firstly to Baltic region.

Before transforming to a public company, Affecto was a private technology enterprise funded by two main shareholders: Eqvitec and Fenno Management. Eqvitec was one of the largest VC firms in Europe and Fenno Management was a fund managed by CapMan Group, a Finnish private equity fund. Managing directors of Eqvitec Partners Ltd. and Fenno Management Ltd. had been members of Affecto's board for four or five years prior to the company's IPO. (Affecto Plc 2006, 54.) Apparently, these two owners did not only have strong knowledge as regards Affecto, the company's industry, and market conditions but also have capabilities to utilize financial markets.

Furthermore, Going Global Inc. (2006) reported that IT services sector in Finland would continue to grow rapidly through 2008 with many Finnish IT companies being able to take advantage of the developing trend, and Affecto was not an exception. Overall, in the year 2004, with a bright future ahead for IT companies in Finland, strong and trusted solutions, and a talented management team, it was plausible for Affecto to think of widening its operation and receiving more attention from the public equity market.

Purposes of Affecto's IPO – advantages and disadvantages

Affecto's CEO mentioned in the company's annual report (2006, 3) that the purposes of the IPO was to improve promotion and potential growth as well as to gain more capital in order to grow bigger through international acquisitions. This IPO could result in many benefits as well as drawbacks to the company. On one hand, the IPO would enhance liquidity, diversify shareholders, improve promotion and public image, and expand operation through more acquisitions by using the capital generated. On the other hand, the IPO would force Affecto to disclose much more information and require additional expenses as well as time and effort to modify ownership structure, tax plan, and other operational strategies that would be altered by the floating.

Initial subscriptions, offering price, and the first trading day

Before the actual listing in the stock exchange, Affecto conducted initial offerings to institutional investors and retail investors. Institutional offering aimed at different institutions that could be potential shareholders while retail offering aimed at individual or household shareholders. The price set in these two offerings was €4.80/share. At this price, 4.7 times of the number of the offered shares was subscribed by institutions and 2.1 times was subscribed by retail investors. As the result of the initial offerings, Affecto decided to allocate about 91% of its shares to institutional investors and the rest to retail investors. (Kauppalehti 26 May 2005.) Initial offering, together with valuation process, helped Affecto to determine the opening price for its share on first trading day. Based on the subscriptions of institution and retail investors,

Affecto was able to determine how large the demand for its shares was and how much the reasonable price should be.

After recognizing the demand and setting the price, Affecto's shares were ready to be traded in Helsinki stock exchange; the first trading day was Friday 27 May 2005 and the shares were listed on the Pre-list. On this day, the highest price was €4.98, the lowest was €4.76, and price closed at €4.81, a little bit higher than offering price. On Tuesday, 1 June^t 2005, the shares were moved from Pre-list to Main List but share price decreased considerably from €4.74 to €4.61. (Affecto Plc.) Not long after its IPO, Affecto's share price decreased, which demonstrated that there were fewer buyers than sellers. In other word, instead of buying Affecto's shares, stock market's players tended to sell them.

Price development and stock exchange releases in following periods

In the year 2005, Affecto's share price varied considerably. The closing price on 27 May 2005 was €4.81 and the closing price on 30 December 2005 (last trading day of the year) was €3.56. During that period, the highest closing price was €5.05 and the lowest closing price was €3.06. Apparently, Affecto's share price had decreased by more than €1.00 since its IPO and that was not a good outcome for the company. The figure below demonstrates price development of Affecto's shares after its floating.

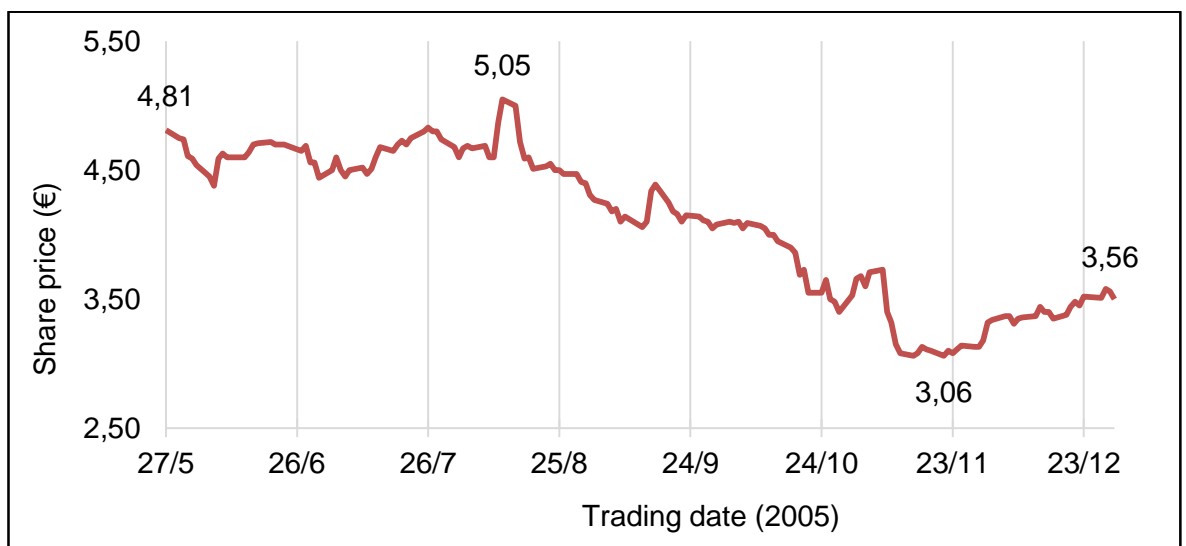


Figure 6. Price development of Affecto's shares from 27 May to 30 December in 2005 (Affecto Plc)

While researching, the author recognized that in the year 2005, most of Affecto's significant share price's movement had connection with its press releases published on the same day or in the same period. Additionally, Affecto's share price sometimes followed the movements of

OMX Helsinki Technology sector index⁵. However, many significant changes were apparently in accordance with the company's press releases. The list below describes those movements:

- after its IPO, Affecto's share price had fluctuated, remaining below the initial offering price for the next month;
- on 9 August 2005, the company released the date in which it would publish interim report for the first half of 2005, on following days, Affecto's share price increased significantly from €4.60 on August 10 to €5.05 on August 12;
- however, right after the interim report was published on August 16, share price decreased to €4.72 because of below-expectation figures;
- after the release of interim report, share price tended to continuously go downward and closed at €4.06 on September 13;
- on September 14, Affecto released two news concerned its positive operation development; that resulted in increasing in share price and it closed at €4.39 on September 16; however, investors could not be happy for a long time because after that, price continued to go down;
- once again, on November 1, when Affecto announced the release date of its interim report for the first three quarters of the year 2005, share price increased slightly; unfortunately, because of unsatisfied results published on November 8, the company continued to lose value and price decreased notably: from €3.73 on November 7 to €3.40 on November 8 and to €3.08 on November 11;
- after that, share price remained around €3.00 and only started to increase on November 30 when the company announced news regarding acquisitions.
(Kauppalehti.)

Besides, Basware's and QPR Software's share price development during their first year of IPO followed the quite similar trend: gradually decreasing. Basware ended its first trading date (29 February 2000) with extraordinarily high share price: €24.00 per share (its opening price was around €5.00 to €7.00), resulting from amazingly strong demand from investors and shareholders. Price continued to increase in a couple of following days and reached its peak of €25.30 on March 2. After that, price moved downward and ended at €4.70 at the end of the year. (Basware Plc.) Similarly, although not as satisfactorily, QPR Software's share price also declined after first trading dates and ended the year with severely low price. After the initial offerings to institution and retail investors, QPR Software realized that the demand for its stock was not strong and determined the initial subscription share price for the first trading date (8 March 2002) to be €3.30. Investors' reaction was still not as good as expected and that resulted in a closing price of €2.23 at the end of the IPO date. On the following months, price continued to move around the value of €2.00 per share. After that, because of difficult market situation and not-promising results published in interim reports, QPR Software's share price experienced serious decline and ended the year 2002 at €0.44. (Investing.com.) Basware's and QPR Software's share price movements are presented in two figures below.

⁵ Detailed figure is presented in Attachment 3.

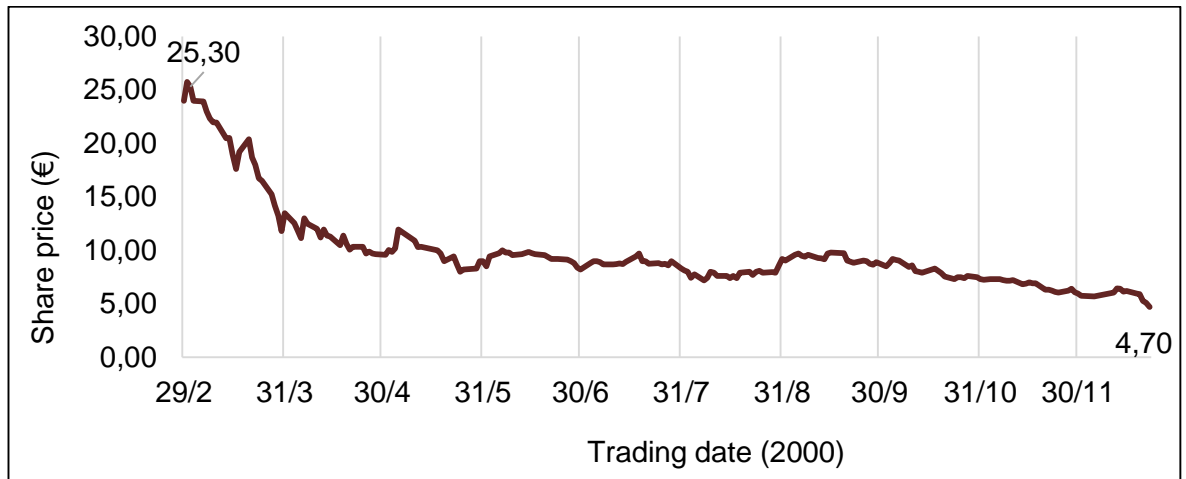


Figure 7. Basware's share price development from 29 February 2000 to 22 December 2000 (Basware Plc)



Figure 8. QPR Software's share price development from 11 March 2002 to 30 December 2002 (Investing.com)

Overall, after IPO, Affecto's share price experienced more obvious ups and downs than Basware's and QPR Software's. Basware had exceptional strong demand for its shares, which resulted in surprisingly high closing price at the end of first trading date. After that, Basware's price continuously declined and ended the year with price that was lower than IPO price. On the other hand, QPR Software's IPO was not successful and was hit by challenging market situation for company's business; that difficult condition also caused serious problems to QPR Software's operations (which will be discussed later). Accordingly, QPR Software's share price continuously declined and remained at a very low level, especially in the second half of the year 2002. Next, we will move on to see how those enterprises used the capital generated from IPO and how they grew bigger after becoming a public company.

Post-IPO operations

Table 6. Capital generated through IPO and amount of shares offered to public of Affecto, Basware, and QPR Software (Affecto Plc. 2006; Basware Plc. 2001; QPR Software Plc. 2004)

	Shares offered	% of total shares	Capital generated (€ 000)
Affecto	9,160,000	59.49 %	8,671
Basware	2,625,000	30.70 %	8,196
QPR Software	1,875,000	18.07 %	1,276

After deducting all listing expenses, which were approximately €1.1 million, Affecto collected more than €8.5 million from the IPO, below expectation of €9.7 million when the offering price was set (Kauppalehti 26 May 2005). As demonstrated in Table 6, Affecto offered more than 59% of its ownership to the public, much higher than Basware and QPR Software did when they managed the IPO in 2000 and 2002 respectively: Basware offered only 30% of its ownership and QPR Software only sold a very little part of its ownership to outside investors. Consistent with its purposes of the IPO, in the years following the public offering, Affecto did accomplish many acquisitions of different companies in Baltic and Northern European region. In 2006, it completed three acquisitions, one of which was the acquisition of Intellibis AB, a Swedish company, which resulted in expansion into Sweden. In 2007, Affecto completed another strategic acquisition of a Norwegian company: Component Software ASA. These two acquisitions together doubled Affecto's net sales significantly from €47 million in 2005 to €97 million in 2007. (Affecto Plc. 2007; Affecto Plc. 2008.)

The capital structure of Affecto could be examined by using two ratios: equity ratio and gearing. Before the year 2005, Affecto's equity ratio had been less than 50% but it had gradually increased. After IPO, at the end of 2005, this ratio equaled 56.9% mainly because shareholders' equity was increased considerably by the proceeds from share issue. In addition, gearing ratio and interest-bearing net debt also decreased significantly after the IPO. However, in following years, the company took more loans to finance its acquisitions and that resulted in equity ratio decreasing to below 50%, gearing ratio and interest-bearing net debt increasing considerably. Although Affecto's managers said that capital generated by IPO would be used to finance further acquisitions of Affecto, the amount was somehow not enough. Both in 2006 and 2007, Affecto continued to issue more share capital as partial payment for new acquisitions and the rest was financed through long-term loans. Table 7 below presents equity ratio, gearing, and interest-bearing net debt of Affecto.

Table 7. Some financial ratios that represent Affecto's capital structure from 2004 to 2007 (Affecto Plc. 2008)

Affecto	2004	2005	2006	2007
----------------	-------------	-------------	-------------	-------------

Equity ratio	41.50%	56.90%	52.00%	41.90%
Gearing	52.20%	9.90%	35.20%	53.90%
Interest-bearing net debt (€ 000)	11,434	3,340	13,743	33,933

Different from Affecto's capital structure, that of Basware had consisted of more equity than debt; with equity ratio prior to the IPO (in 1999) was 66.5% and that after the IPO (in 2000) was 85.9%. Although in the following years this figure had decreased, it remained above 70%. Distinctively, QPR Software had another story. Because unsuccessful IPO and difficult market situation, the company faced severe loss at the end of 2002 (the year of IPO). This loss was the result of low revenues, higher costs, and inefficient operation. Net profit of QPR Software at the end of 2002 was a loss of more than €5.5 million, which was so serious that its shareholder's equity as well as equity ratio turned into negative figures. Fortunately, in 2003 and 2004, the company managed to be profitable again. Equity ratio remained at low level but still showed signs of improvement. Table 8 below presents the detailed numbers; these figures came from Basware's 2002 annual report and QPR Software's 2005 financial statements and 2006 annual report.

Table 8. Financial figures of Basware, from 1999 to 2002, and QPR Software, from 2001 to 2004 (Basware Plc. 2003; QPR Software Plc. 2006; QPR Software Plc. 2007)

Basware	1999	2000	2001	2002
Equity ratio	66.50 %	85.90 %	76.90 %	74.30 %
Gearing	-63.40 %	-75.30 %	-53.30 %	-22.70 %
Interest-bearing net debt (€ 000)	-272	-992	-1,464	-1,745
QPR Software	2001	2002	2003	2004
Equity ratio	49.70 %	-12.30 %	20.70 %	36.70 %
Gearing	21.20 %	-3687.30 %	78.80 %	53.80 %
Interest-bearing net debt (€ 000)	1,004	1,581	996	786

In addition to equity ratio and gearing, interest-bearing net debt is also an important financial figure to look at. Negative value means that the company has more cash in-hand than the amount of interest-bearing liabilities; that represents good level of liquidity and low risk of default. As can be seen from Table 7 and Table 8, Affecto did not manage its liquidity well after the IPO with extremely high amount of interest-bearing net debt, a result of continuously borrowing money from financial institutions to afford international acquisitions. As compared to Affecto, Basware had increased its liquidity after IPO; interest-bearing net debt continuously decreased and gearing ratio remained negative. On the other hand, the decrease in interest-bearing net debt was partly offset by the increase in shareholders' equity; that resulted in

gearing ratio increasing from -63% (in 1999) to -23% (in 2002). QPR Software had also managed well by decreasing the amount of interest-bearing liabilities net debt and gearing ratio after their peak in 2002 which caused by serious low profit. Specifically, the extremely negative gearing ratio in 2002 was a result of negative equity.

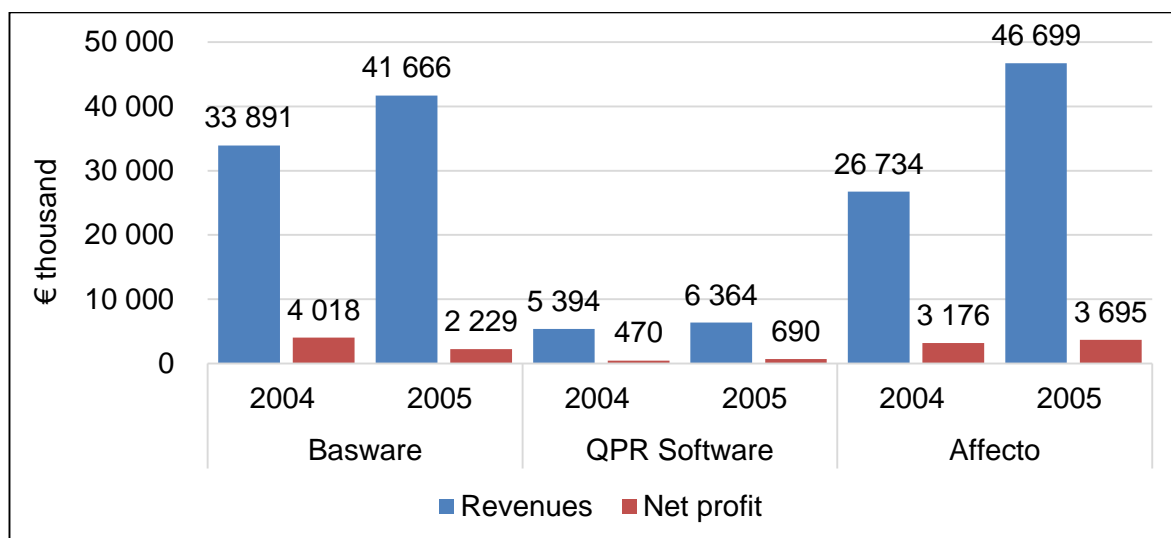


Figure 9. Revenues and Net profit of Basware, QPR Software, and Affecto in 2004 and 2005 (Affecto Plc. 2006; Basware Plc. 2006; QPR Software Plc. 2006)

At the time when Affecto was preparing the IPO, Basware had been continuing growing and being an attractive company for investors while QPR Software had been struggling to re-structure the business, to increase both revenues and profit, and to recover from the serious loss in 2002. In 2004, Affecto's revenues and profit were lower than that of Basware but in 2005, Affecto's revenues were able to beat Basware's (mainly because of the consolidation of financial results from many Affecto's subsidiaries). Figure 9 also shows that during period 2004 – 2005, both QPR's revenues and profit were much lower than those of the other two companies were. Table 9 below compares some financial figures and ratios of three companies in 2004 and 2005. Basware was still the best players with same capital structure that focused on utilizing equity financing, having negative gearing that demonstrated good liquidity level, and having high P/E. QPR Software were trying to recover with improvement in gearing, increased EPS and ROE but slightly decreased P/E, and dividend being paid to shareholders. At the same time, partly because of the IPO, during 2004 and 2005, Affecto increased equity ratio and decreased gearing, but EPS and ROE went downward (because there were more shareholders and shareholders' equity). Affecto's P/E was not available prior to 2005 (before Affecto's IPO) but its P/E at the end of 2005 was quite good; although it was not as charming as that of Basware, it was better than that of QPR Software.

Table 9. Financial figures and ratios of Basware, QPR Software, and Affecto in 2004 and 2005 (Affecto Plc. 2006; Basware Plc. 2006; QPR Software Plc. 2006)

	Basware		QPR Software		Affecto	
	2004	2005	2004	2005	2004	2005
Equity ratio	58.58 %	77.34 %	41.25 %	38.51 %	39.32 %	53.81 %
Gearing	-34.05 %	-41.12 %	53.84 %	-36.87 %	52.16 %	9.95 %
EPS	0.33	0.24	0.04	0.06	0.32	0.25
P/E	23.78	53.55	13.07	10.33	N/A	13.79
ROE	25.17 %	13.32 %	34.57 %	38.83 %	22.53 %	13.33 %
Dividend per share	0.12	0.10	0.00	0.02	0.06	0.10

Ownership structure at Affecto also changed after the IPO. We already know that becoming public is also an exit strategy for angel investors or VC firms to get out of their investment; and Affecto's case clearly presented that approach. CapMan reported on its stock exchange release that its Fenno Fund would like to sell parts of its 33.7% ownership at Affecto during the IPO (CapMan Group 12 May 2005); this resulted in only 12.4% ownership left at the end of 2005. Eventually, in 2007, both Eqvitec and Fenno Fund sold all of their Affecto's shares and completely exited the investment. In addition to the decrease of private equity firms' ownership, Affecto's IPO also resulted in the diversification of its shareholders: 1,258 shareholders from different sectors. Besides two biggest shareholders, Eqvitec and Fenno Fund, other biggest shareholders of Affecto at the end of 2005 were funds managed by insurance companies (e.g. Varma) and by financial institutions (e.g. Alfred Berg Small Cap, Alfred Berg Finland, and Nordea Nordic Small Cap). (Affecto Plc. 2006, 50.) Recent researches showed that most of the biggest shareholders at Affecto have been with the company for more than five years. This and the fact that Affecto has annually paid dividends to its shareholders seems to suggest that the company is a worthy investment.

In order to become a public company, Affecto should have a board of directors that consists of people that are independent of the company and its shareholders. Its 2005 annual report (Affecto Plc. 2006, 54) stated that two of the board members, one of which was the chairperson, were managing directors of Eqvitec and of Fenno Fund. The board was in charge of managing and supervising the CEO and other executives in order to make sure that the company was following the right track. In Affecto's case, the CEO was not even member of the board. Moreover, Affecto also followed Finnish Corporate Governance Code by having no board members employed at Affecto and the majority of the board did not own any Affecto's shares. On the other hand, the managing executives of Affecto had admirable knowledge and experiences in economy/business and/or technology. Furthermore, some executive

members held a small number of company's shares, which was an incentive for them to contribute their effort to Affecto.

Conclusion

Affecto is the company that most recently listed its stock on the Main Market of NASDAQ OMX Helsinki. The floating was an exit strategy for two VC firms, two biggest shareholders of Affecto before the company went public, diversifying shareholders base, and improving its international image. Affecto's IPO to institution and retail investors on May 2005 was successful and generated more than €8 million to finance company's expansion through international acquisitions. However, share price development towards the end of the year 2005 was not as good as the company expected, with share price closing at a lower price than its IPO's. As regards Affecto's operation after going public, the company did utilize the cash generated through IPO to grow bigger and completed many acquisitions in the years following its public floating. Between 2004 and 2005, its equity ratio increased and the company had more cash available and lower risk of default. However, in 2006 and 2007, Affecto had to borrow continually from financial institutions to support its expansion plan, which resulted in higher gearing, lower equity ratio, and lower level of liquidity. There were two other companies whose IPOs were compared with that of Affecto: Basware and QPR Software. Basware's IPO was an outstandingly successful one with strong demand and very high price at the end of first trading date while that of QPR Software was not as satisfactory with low demand and share price decreasing quickly after IPO, remaining at low level towards the end of the IPO-year. Overall, Affecto completed IPO successfully and was able to utilize the capital generated to support its expansion strategy.

6.2 Siili Solutions

In addition to the Main Market, NASDAQ OMX Nordic also provides another platform that concentrates on growing companies: First North. Siili Solutions Plc. is one of the two Finnish technology companies that are currently listing their shares on First North in Helsinki; the company started its trading on 15 October 2012. Because of economic difficulties and financial market's uncertainties that were caused by the financial crisis in 2007 – 2008, there were no new listings took place on First North Helsinki during 2009 and 2011. The fact that Siili Solutions entered the Finnish public equity market initiated the improvement of not only First North in Helsinki but also Finnish stock market as a whole. This subchapter examines Siili Solutions's business, its decision of pursuing an IPO, price development, as well as the company's operations after becoming a public entity.

Products and operations

Founded in 2005, Siili Solutions Plc. is a Finnish IT company that specializes in offering critical IT services to customers in varied sectors. At the time of IPO, their main operation was to tailor their business solutions into customers' existing information system. As a result, it was important for Siili Solutions to gather professional insight of many different business activities so that the company could have the competencies to develop required solutions and make them applicable to customers. Because of that reason, after its establishment, Siili Solutions has continually acquired other smaller companies to gain the necessary capabilities:

- Solagem, acquired in 2007, added financial project business skills,
 - Complit, acquired in 2009, increased project management and information management capabilities,
 - DevTrain, acquired in 2010, contributed to the agile acts and public administration,
 - Fusion, acquired in 2012, strengthened Siili Solutions's competencies in working with user interfaces and online services.
- (Siili Solutions Plc.)

Prior to the IPO, Finland was the main market of Siili Solutions. At the end of 2011, international sales accounted for only 0.51% of total revenues; additionally, at that time, the company had only 106 employees (Siili Solutions Plc. 2013, 27). In general, at the time in which it decided to go public, Siili Solutions was a Finnish IT SME with no significant international presence. However, it had been growing and widening its fields of expertise through many acquisitions since its establishment.

Purposes of Siili Solutions's IPO

What made Siili Solutions's executive management think of an IPO? Its CEO said in one news (Siili Solutions Plc. 14 November 2014) that the company decided to go public because of increasing trust from both its customers and its employees. Becoming a public company resulted in higher transparency and more capital available to boost up growth through acquisitions and to make customers and employees more satisfied. Nevertheless, Siili Solutions was still a young company; its personnel still needed to spend time and effort on growing and earning profit. Therefore, the company chose First North as the platform for its floating. Besides many advantages such as increasing capital, enhancing public image and reputation, and attracting potential investors, the IPO also challenged Siili Solutions with specific regulations, though not as strict as those required by the Main Market, and eventually high expectations from investors, customers, and employees. Siili Solutions's business activities would be closely observed and mistakes could result in the company losing value. In general, being a public company could be a strategic decision and a motivation for Siili Solutions to strengthen its services.

Initial subscription, offering price, and the first trading date

Similar to the IPOs in Main Market, prior to the first trading date on First North, Siili Solutions conducted its initial offerings to investors, issuing and entering 240,000 new shares into circulation. According to Siili Solutions's prospectus (Siili Solutions Plc. 2012, 15), the initial offerings took place from 2 October to 9 October in 2012 in which the shares were offered to personnel, institution and retail investors at a subscription price of €7.00 per share. The new issuing increased company's number of shares from 1,351,575 to 1,565,575. In other words, about 15% of company's shares were offered through initial offerings. The initial offerings ended successfully with oversubscription of nearly 2 times the number of shares offered (Siili Solutions Plc. 10 October 2012). On 15 October 2012, Siili Solutions's shares were official traded on First North in Helsinki. NASDAQ OMX Nordic-b reported that on its first trading date, share price opened at €7.35 per share and closed at €7.70, which was also the highest share price during the day.

Price development in following period

After its high price of €7.70 on the first day, Siili Solutions's share price tended to move downwards, with the lowest share price in the year, €7.10, took place on 16 November. However, this was not a bad situation since Siili Solutions's share price was able to remain higher than its initial subscription price throughout 2012. This possibly represented a sign of investors' confidence in Siili Solutions's development in the future. Moreover, this could also show that Siili Solutions had carried out its valuation properly, or at least its value seemed to be reasonable from the point of view of investors. Additionally, Siili Solutions's share price movement is graphically described in the figure below.

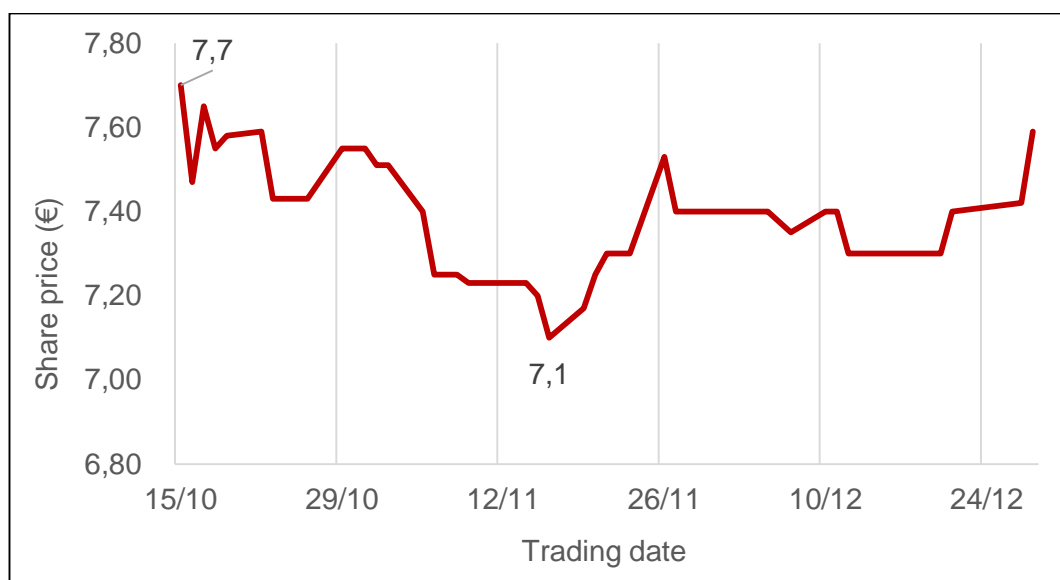


Figure 10. Siili Solutions's share price development from 15 October 2012 to 28 December 2012 (NASDAQ OMX Nordic-b)

Post-IPO operations

Siili Solutions's strategy was to expand its field of expertise through acquisitions and generating more capital in order to afford growing was one of the purposes of going public. As expected, the company continued its acquisitions in following years. In 2013, it acquired Comvise Oy, adding more capabilities concerns user interfaces to the company's portfolio. In 2014, Siili Solutions continued its expansion through acquisitions of Codebakers and Avas Consulting Group, strengthening its competencies in working with Microsoft technology and in providing satisfying business services to customers. (Siili Solutions Plc.)

IPO played an important role in completing those acquisitions since it had generated more than €1.6 million for Siili Solutions, advancing cash flow from financing activities, increasing the total amount of dividends paid to shareholders, and paying back all interest-bearing liabilities at the end of 2012 (Siili Solutions Plc. 2013). Moreover, company's capital structure has also changed significantly after the IPO: equity ratio increased from 26.41% (2011) to 46.78% (2012). Especially, the company did not have any interest-bearing liabilities at the end of 2012 and 2013, resulting in highly satisfying gearing ratio. In 2014, because of strong investment on subsidiaries, Siili Solutions had to borrow from financial institutions a total amount of €1,950,000 interest-bearing liabilities. This significant amount was offset by increasing share issues (as well as equity) so that equity ratio was not strongly affected. On the other hand, on-going expansion has intensified Siili Solutions's revenue as well as net profit. The company's reported revenues for 2014 nearly doubled that of 2012. Detailed numbers can be found in the table below.

Table 10. Financial figures and ratios of Siili Solutions from 2011 to 2014 (Siili Solutions Plc. 2015)

	Siili			
	2011	2012	2013	2014
Revenues (€000)	13,156	16,065	18,798	29,497
Operating profit (€000)	1,437	1,290	1,374	1,765
Net profit (€000)	1,012	760	1,042	1,271
Interest-bearing net debt	-808	-2,127	-2,584	-1,920
Equity ratio	26.41 %	46.78 %	53.97 %	47.17 %
Gearing	-61.93 %	-74.91 %	-56.18 %	-20.75 %
EPS	0.80	0.54	0.63	0.70
P/E	N/A	14.13	20.20	19.41
ROE	79.92 %	36.69 %	28.01 %	18.35 %

Because of strong increasing in equity, Siili Solutions's ROE has not been as high as that in 2011. However, the company has tried to improve its EPS figures, satisfying its investors and

shareholders. In addition, P/E ratio has shown significant and promising development. In 2013 and 2014, its P/E ratio outperformed that of Affecto and QPR Software, two technology companies listed on the Main Market in Helsinki.

The next thing to examine is Siili Solutions's corporate governance. Listing its stock on First North still requires the company to have a board of directors to control and manage company's progress and a managing director, i.e. CEO, to actually handle daily operations. Before completing the IPO, Siili Solutions established a board with six members: five of which owned, directly and indirectly, 739,050 shares, accounting for 54.7% of ownership. All members of the board have had professional knowledge in business and technology sector and have been board members in many technology companies and financial institutions. On the other hand, executive management team consisted of eight persons; all the executives owned companies' shares, representing 16% of ownership. (Siili Solutions Plc. 2012, 43-46.) At the end of 2012, after successfully entering Finnish public equity market, the company had altogether 245 shareholders. Top ten shareholders at that time consisted of private companies managed by either member of the board or executives, other individual investors, and a fund managed by insurance institution. (Siili Solutions Plc. 2013, 31.) Two biggest shareholders were GTW Group Oy and Baltic Sailing Oy, two companies provided business consulting services. Apparently, Siili Solutions followed its initial strategy of building up synergy by combining different smaller companies. Until 2014, these two companies have still been the biggest shareholders (with Baltic Sailing Oy's name changed into Erina Oy) but their proportions have slightly decreased (Siili Solutions Plc. 2015, 42). Overall, Siili Solutions Plc.'s IPO really diversified shareholders base and decreased insiders' ownership, i.e. ownership owned by company's executives and board members.

Another player in First North

Besides Siili Solutions, another technology company is also listing its stock on First North in Helsinki: Nixu Corporation. Nixu Corporation specializes in providing cybersecurity. This technological aspect has been increasingly critical from the point of view of doing international business. As a result, demand for technological cybersecurity solutions is surely accelerating and Nixu Corporation has had more opportunities for development. The company is not a young one like Siili Solutions but it was established in 1988. However, it is still a SME with 145 personnel at the end of 2014. Nixu Corporation completed its IPO in late November and started trading on First North on 5 December 2014. During the initial offerings, 1,134,091 shares offered to public investors at the price of €4.40, 60% of which was offered to institutional investors and the rest 40% was offered to retail investors. The IPO was successful with more shares subscribed than offered and it had to be suspended because of oversubscription. (Nixu Corporation 27 November 2014.) Strong demand for Nixu Corporation's share

strengthened the ideas that technological cybersecurity was receiving more and more attention and that Nixu Corporation was a strong player in this field. With only a short time of trading, Nixu Corporation's share price closed at €4.15, below its initial price.

Nixu Corporation had prepared for its IPO for more than one year prior to the actual listing. The company stated that the purposes of its IPO were to finance company's strategy of growing bigger, to increase its public image and reputation, and to enhance its capital structure. In addition, IPO would also widen the company's shareholder base, increase liquidity level, and reward personnel with higher remuneration. (Nixu Corporation 17 November 2014.) The public offering generated €4,990,000 for Nixu Corporation and during the year 2014, the company also borrowed €4 million from financial institution, increasing the ending cash balance to more than €8.7 million at the end of the year. On the other hand, borrowing also lowered company's equity ratio, compared to those of previous years. In general, Nixu Corporation is the newest player in the technology sector of Finnish stock market. With a long history and credibility as a strong provider of cybersecurity, Nixu Corporation finished its IPO auspiciously in December 2014 and was looking forward to strategic growth in near future. The victory of Nixu Corporation may encourage other Finnish IT SMEs to increase its capital through the public equity market.

Conclusion

Siili Solutions Plc. is the very first Finnish IT company that engages in public trading in NASDAQ OMX's First North in Helsinki. Its IPO in 2012 prompted a development in public equity market since the financial crisis during 2007 – 2008. The IPO was a successful event, generating cash inflow for Siili Solutions Plc. to finance its plan of expansion, attracting new investors, and improving national image. After the IPO, Siili Solutions Plc. actually completed other acquisitions to strengthen its capabilities. Its revenues and net profit increased significantly. P/E value in 2012 showed promising development and that value has continuously increased in following years suggested that the company has kept on increasing its value and satisfying investors' expectations. In addition to Siili Solutions Plc., Nixu Corporation, a Finnish IT SME that specializes in cybersecurity, also joined First North in Helsinki in December 2014.

6.3 Conclusions

Affecto and Siili Solutions are two Finnish IT companies that have developed their business somehow in similar strategy: using the capital raised by IPO to expand through acquisition. However, while Affecto's aim was to internationally grow bigger, that of Siili Solutions focused more on consolidating necessary technology competencies in order to strengthen its

business competitive advantage. Affecto has listed its shares on the Main Market of NASDAQ OMX Helsinki since June 2005 and Siili Solutions has started its trading on First North in Helsinki since October 2012. Finnish public equity market had been quite inactive during the period from 2007 to 2012 because of the financial crisis and its critical damage in European economy. Both companies completed its IPO successfully with oversubscriptions and more cash inflow: Affecto generated more than €8 million and Siili Solutions raised more than €1.6 million. The cash generated enhanced Affecto's and Siili Solutions's level of liquidity and supported these companies in following their expansion plans. However, both companies still needed to partly use debt financing in its capital structure; especially, Affecto continuously borrowed long-term loans in years following its IPO so that its gearing ratio and interest-bearing net debt were not so attractive. Furthermore, the IPOs also widened the companies' shareholders base, with more institution investors became shareholders, and decreased executives' and board members' ownership. In Affecto's case, the IPO was also an exit strategy for two VC firms that had been two biggest shareholders of Affecto prior to the floating.

Regarding the companies' share price development during the year of IPO, Affecto's share price movement was somehow consistent with the release of news concerning its financial figures or operations. Moreover, after the IPOs, both companies have been required to publish news, press releases, and financial reports (at least a half-year report and an annual report are required) in order to provide sufficient critical information, which can strongly affect share price and companies' value, as soon as possible to shareholders. Obviously, the requirements for Siili Solutions, which has listed on First North, are less strict than for Affecto, which has listed on the Main Market. In general, both companies have turned to a new stage of development when making the IPO decision. Their IPOs have both advantages and disadvantages and they have managed to utilize the generated capital to develop their business as well as to overcome difficult economic situation in order to remain in the exchange until now.

7 Conclusions

Previous chapters in this paper went through a number of topics that relate to IPO as well as its potentiality for Finnish IT SMEs to raise capital. Firstly, the author talked about two types of equity financing: private equity and public equity; and then focus on describing IPO and its critical issues. After that, the author moved on to outline Finnish IT SMEs' activities and NASDAQ OMX Helsinki, the Finnish stock exchange. Finally, two case studies, regarding two Finnish IT companies' IPOs, were presented. This chapter will conclude and clarify the answer for the main research question. In addition, it will also point out the limitations of this research paper, possible future researches, and the author's self-learning and self-assessment.

7.1 An IPO-decision and associated risks

This subchapter gives answer to IQ1 and IQ2: why companies choose IPO and what are the risks that associated with an IPO. As mentioned in chapter 3, IPO is not an appropriate strategy for early-stage enterprises since it requires much effort and time to prepare all the paperwork, to negotiate with the many parties involved, and to formulate company's post-IPO operation. Before making the to-do or not-to-do IPO-decision, Finnish IT SMEs should consider the uniqueness or specialties of their products or services that can attract investors and customers, the competencies of its management team to follow the IPO as well as maintain effective normal operation, and the ongoing market conditions which can strongly affect the demand for company's stocks. As a result, the company needs to conduct a number of researches in order to figure out if the market conditions provides a fertile ground for an IPO. The purposes of an IPO are mainly to generate more capital to finance further operational plans, to improve image and reputation, to diversify shareholders base, and to provide more liquidity to shareholders. Additionally, an IPO is also an exit strategy for private equity firms; the case study of Affecto presented a typical example of this purpose. In general, companies choose IPO as a method to generate capital because they want to **search for more investors and shareholders** and to **strengthen their corporate image**, and because the **current owners**, who are private equity firms, **want to collect returns from their long-term investment in the companies**. In another respect, although equity financing is less favored than debt financing is, European Union are encouraging companies, especially SMEs, to enter the public equity market. Its IPO Task Force suggests necessary procedures that can motivate companies to start publicly trading their stocks.

In addition to the advantages that result from an IPO, this process also brings about many disadvantages and poses different kinds of risk to the company. Some disadvantages, which

were mentioned in chapter 3, are disclosure of different kinds of information, high cost, current shareholders' dilution of ownership, and necessities to satisfy expectations of a variety of shareholders. Furthermore, the IPO also results in different kinds of risk with which the company has to face. The four risk categories suggested by EY are compliance, operational, strategic, and financial risk. Besides preparing risks management for those categories, the company has to pay especially close attention to aspects that will be strongly affected by the IPO-decision: corporate governance and ownership structure, capital structure, financial results, taxation, and plans for post-IPO operation.

To begin, Finnish Corporate Governance Code requires a public company to separate its chairperson of the board and its managing director, i.e. CEO. Furthermore, it is suggested that the board of directors of a public entity should be independent from the company and from the company's shareholders. **Ownership structure** will change after the listing and the company should harmonize the interests of those who directly control the company with the interest of different kinds of shareholders. Secondly, the IPO-decision also affects company's capital structure: more equity finance will be used and that will affect company's cost of capital. An increase in equity usually results in higher cost of capital and that is not a favorable thing for the company. When one wants to see the **capital structure** of one company, he or she usually looks at the equity ratio and gearing ratio. Equity ratio shows how much equity is there in company's assets and gearing ratio displays how much equity is necessary to cover all interest-bearing liabilities. A negative gearing ratio is preferred because it means that the company has more cash than interest-bearing liabilities. In addition to equity ratio and gearing, other **important financial results** are revenues, operating profit, net profit, EPS, ROE, and P/E. Since a public company has to disclose all of these financial results, it needs to perform as good as possible in order to have good results which can satisfy the expectations of shareholders. Thirdly, company should consider changing tax plan since **dividends are taxed differently** when being paid by a public enterprise.

7.2 Finnish IT SMEs and Finnish stock market

This subchapter has the answer for IQ3: How is the current situation of Finnish IT SMEs and Finnish stock market; detailed explanation is available in chapter 4 and chapter 5. As discussed in chapter 5, Finnish stock market has not been so active as compared to its peer in Sweden; however, First North in Helsinki, NASDAQ's non-regulated exchange, has been developing and receiving more new listings since 2014. Since 2006, the total number of listings on the Main Market of NASDAQ OMX Helsinki has not changed dramatically, without any significant ups or downs. In the same period, the total number of technology listings on the

Main Market of Finnish stock exchange changed significantly but partly because of the modification in sector classification. The most recent public technology company that started its floating on the Main Market in Helsinki is Affecto. On the other hand, from 2008 to 2014, there were five public technology enterprises decided to stop trading, mainly because they were acquired by other companies. In another respect, the total number of listings on First North in Helsinki increased from three companies (in 2013) to 10 (in 2014) and to 15 (in October 2015). However, of those 15 companies, there are only two technology companies. In other words, Finnish IT companies are still very wary about the public equity market. It is somehow understandable since the recent economic situation in all over Europe is not so healthy and people prefer saving than investing money in risky investments.

Despite the gloomy situation, the author personally thinks that Finnish IT SMEs, if they decide to pursue an IPO, should consider First North initially because its requirements are less strict than those of the Main Market and it gives more space for the SMEs to focus on its growth and operational developments. Furthermore, based on Selector's database that was extracted on 16 November 2015, there were approximately 51 Finnish IT SMEs that had the potential to pursue an IPO. The author personally suggests only company that had more than 50 employees and more than €2 million revenues should consider an IPO. These two conditions, although not exclusively, are consistent with two questions of which executives should think when considering an IPO: the demand of company's products or services and the possible excellent management team to deal with the whole IPO process. Of those 51 SMEs, some of the most potential entities even had international operations with offices in other European countries, in the US, or in Asia; these companies have also completed many acquisitions to gain synergy and have been backed by private equity firms like Nexit Ventures or Finnish Industry Investment Ltd. Most of the 51 potential SMEs had headquarters in Uusima region, Tampere, and Oulu; and computer-programming activities was the main field of operation of those SMEs.

7.3 Raising capital through an IPO

Two case studies about Affecto and Siili Solutions give answer to IQ4 regarding companies' performance after IPOs. Affecto is listing its stock on the Main Market and Siili Solutions is listing its stock on First North in Helsinki. These two companies share the similar characteristics of growing through acquisitions; at the time of IPO, Affecto was aiming at international expansion and Siili Solutions only focused on strengthening its business capabilities. Both companies had successfully IPOs with shares oversubscribed. However, below-expectation financial figures made Affecto's share price shrank in following months after the IPO in May 2005. After the IPO, both companies utilized generated funds to finance more acquisition and

continued to diversify shareholders base. In two years after the IPO, on one hand, Affecto expanded its operations widely and increased its revenues significantly, partly resulting from new acquisitions. On the other hand, the company needed to ask for more debt financing, increasing the amount of interest-bearing liabilities, and increasing gearing ratio. Siili Solutions, in two years after its IPO in 2012, also completed more acquisitions and nearly doubled its revenues; its gearing ratio remained negative and the company had enough cash to pay back all of its interest-bearing liabilities. Overall, both companies performed adequately after their IPOs and followed their announced plans. Their performances have been carefully reviewed by shareholders and analysts so that critical news can quickly affect companies' share price as well as companies' value. These two case studies point out the significance of information disclosure, of maintaining good business operations, and of satisfying shareholders' expectations, especially short-term ones.

Combining the answers for four IQs supported the author in finding the answer for the main research question about the possibilities for Finnish IT SMEs to raise capital through an IPO. First, only Finnish IT SMEs, which are in later-stage of development with sufficient customers in the market, with unique products or services, and with capable management personnel who will be responsible for the whole IPO process, should consider an IPO. In addition, market conditions should also be taken into account since they strongly influence investors' and shareholders' reactions. Furthermore, an IPO has both advantages and disadvantages, together with many new risks resulting from being a public company. Finnish SMEs can have more capital to finance their operation but they should be careful with post-IPO compliance risks, operational risks, strategic risks, and financial risks. Among those risks, important issues consist of:

- a public company needs new corporate governance and a more diversified ownership structure;
- more equity results in higher cost of capital;
- disclosure of information, especially of below-expectation ones, can cause decrease in share price and company's losing value;
- new dividends policy should be considered because dividends paid by public entity are taxed differently from those paid by a private one.

Second, Finnish IT SMEs should pay more attention to First North trading platform since it is more suitable for a growing company to both take advantage of being a public entity and focus on strengthening business competencies. Although technology sector has not been so active in First North in Helsinki, recent listings of Siili Solutions in 2012 and of Nixu Corporation in 2014, together with support from EU's IPO Task Force, prompted further improvement in the stock exchange. Finally, the two examples of Affecto's and Siili Solutions's IPOs suggested that having strong demand for IPO with oversubscription is a critical, but not exclu-

sively, basis for a successful floating. Post-IPO operations such as new acquisitions and interim financial results strongly play an important role in shareholders' and investors' decisions whether to keep/buy more shares or to sell them. Therefore, a public company should, even more strongly than before, manage to result in as satisfying as possible outcomes in order to be an attractive investment. Being able to do so allows the public company to have high possibilities to generate more capital through following public offerings after IPO.

7.4 Research limitations and further researches

Although the author tried to use a variety of sources and combined them together when making analysis, this research is limited in a way that it comprises of only desk research with the main sources are financial reports of public companies and financial figures of private companies from Selector's database. Another limitation is that there is more information available in Finnish, especially for Finnish IT SMEs, but that information was not utilized very effectively when completing this paper because of the author's limited linguistic ability. However, the author did try to translate some important news and financial information, e.g. which of Siili Solutions and of Nixu Corporation, when writing case studies. As a result, further research on this topic can include interviews with employees of public and private companies in order to understand their points of view towards IPO and have more insight regarding company's actual operations. Other possible research topics are the attitudes of potential Finnish IT SMEs towards generating capital through an IPO and the effectiveness of IPO Task Force. Moreover, transforming into a public company has significant impact on one's tax plan but there are not so many information about that subject reported in financial statements. Therefore, a research paper about this operational aspect can be very interesting.

7.5 Self-assessment and learnings

The author has gained much more knowledge regarding all the topics covered in this paper such as Finnish stock market, Finnish dividends policy, all the theories about IPO and its practice, and analysis of financial statements. Those financial knowledges will be very useful for the author in her future academic life or in her career path. The author finished her thesis plan since May 2014 but had to postpone writing the thesis in order to complete her internship in Germany and finish all compulsory courses; eventually, the author had actually focused on writing this paper since June 2015 and completed it in November 2015. During the process, the author tried to stay on the main track but sometimes very large amount of information from a variety of sources made her very confused; yet she received consultancy from her advisor and managed to get back to the focused topic. In general, the author was able to have the whole writing process under control and finish it in December 2015 in order to complete her study.

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Attachments

Attachment 1. List of 51 potential Finnish IT SMEs

The list in this attachment provides general information regarding the 51 companies mentioned previously in the thesis. The list is presented by activity classifications; international presence and the availability of financial statements will be stated (if any).

Computer programming activities (37)

Company	Municipality	Revenues (€ 000)	Number of employees
Aava Mobile Oy - offices in Finland and Germany - is partly backed by Nexit Ventures	Oulu	2,000 - 10,000	50 - 99
Arcusys Oy - offices in Finland, Russia, and USA	Joensuu	2,000 - 10,000	50 - 99
Aureolis Oy	Espoo	2,000 - 10,000	50 - 99
Bitwise Oy	Tampere	2,000 - 10,000	50 - 99
Dream Broker Oy	Helsinki	2,000 - 10,000	50 - 99
Gofore Oy	Tampere	2,000 - 10,000	50 - 99
Haahtela Oy	Helsinki	2,000 - 10,000	50 - 99
Haltian Oy - offices in Finland and USA	Oulu	2,000 - 10,000	50 - 99
Heeros Systems Oy - offices in Finland and Netherlands - is preparing for listing on First North	Helsinki	2,000 - 10,000	50 - 99
Jolla Oy - offices in Finland and Hong Kong	Helsinki	2,000 - 10,000	50 - 99
Leanware Oy	Tampere	2,000 - 10,000	50 - 99
Mediconsult Oy	Helsinki	2,000 - 10,000	50 - 99
Nord5 Group Oy	Helsinki	2,000 - 10,000	50 - 99
Oscar Software Group Oy	Tampere	2,000 - 10,000	50 - 99
Procomp Solutions Oy	Oulu	2,000 - 10,000	50 - 99
Protaccon Group Oy - offices in many regions in Finland and China	Jyväskylä	2,000 - 10,000	50 - 99
Qentinel Oy - financial statements are available - offices in Finland, Estonia, Germany	Espoo	2,000 - 10,000	50 - 99
Sininen Meteoriitti Oy - offices in Finland and Sweden	Helsinki	2,000 - 10,000	50 - 99
Smilehouse Group Oy	Helsinki	2,000 - 10,000	50 - 99
Sofor Oy	Kauhava	2,000 - 10,000	50 - 99
Tech Consulting Group TCG Oy	Helsinki	2,000 - 10,000	50 - 99

Vaadin Oy - offices in Finland, Germany, USA - has been backed by Finnish Industry Investment Ltd since 2006	Turku	2,000 - 10,000	50 - 99
Vertex Systems Oy - offices in Finland, Australia, Singapore, UK, USA	Tampere	2,000 - 10,000	50 - 99
Anvia Oyj - a part of Elisa and had a plan for IPO	Vaasa	10,000 - 20,000	50 - 99
Attido Group Oy - offices in Finland and Latvia	Espoo	10,000 - 20,000	50 - 99
CDK Global (Finland) Holding Oy	Vantaa	10,000 - 20,000	50 - 99
Finnpos Systems Holding Oy	Tampere	10,000 - 20,000	50 - 99
Qvantel Oy - offices in Finland, Sweden, Estonia, India	Helsinki	10,000 - 20,000	50 - 99
3Step IT Group Oy - financial statements are available - offices in many different countries - has been partly backed by Finnish Industry Investment Ltd since 2010	Helsinki	> 20,000	50 - 99
Unity Technologies Finland Oy	Helsinki	> 20,000	50 - 99
Retail Logistics Excellence - RELEX Oy - offices in Finland and other countries - received equity investment from Summit Partners, an US private equity firm, in 2015	Helsinki	2,000 - 10,000	50 - 99
Mediamaestro Oy	Lappeenranta	2,000 - 10,000	100 - 249
Vincit Oy	Tampere	2,000 - 10,000	100 - 249
M-Files Oy - offices in Finland and USA - has been partly backed by Finnish Industry Investment Ltd since 2013	Tampere	10,000 - 20,000	100 - 249
Talokeskus Yhtiöt Oy	Salo	10,000 - 20,000	100 - 249
Futurice Oy - offices in Finland, Germany, Sweden, UK - has been partly backed by Innofinance Oy, a VC firm	Helsinki	> 20,000	100 - 249

Computer consultancy activities (4)

Company	Municipality	Revenues (€ 000)	Number of employees
Blue Lake Communications Oy - financial statements are available	Espoo	2,000 - 10,000	50 - 99
Efima Oy	Helsinki	2,000 - 10,000	50 - 99

Bilot Oy - offices in Finland and Poland	Helsinki	10,000 - 20,000	50 - 99
Medbit Oy	Turku	> 20,000	100 - 249

Computer facilities management activities (5)

Company	Municipality	Revenues (€ 000)	Number of employees
LapIT Oy	Rovaniemi	2,000 - 10,000	50 - 99
Rongo Cap Oy	Espoo	2,000 - 10,000	50 - 99
YAP Solutions Oy	Vantaa	2,000 - 10,000	50 - 99
Suomen Maatalouden Laskentakeskus Oy	Vantaa	2,000 - 10,000	100 - 249
Nebula Top Oy - financial statements are available	Helsinki	> 20,000	100 - 249

Other information technology and computer service activities (2)

Company	Municipality	Revenues (€ 000)	Number of employees
LeadDesk Oy - offices in many different countries	Helsinki	2,000 - 10,000	50 - 99
Kuntien Tiera Oy	Helsinki	> 20,000	100 - 249

Data processing, hosting, and related activities (1)

Company	Municipality	Revenues (€ 000)	Number of employees
Mediaosakeyhtiö Frantic	Helsinki	2,000 - 10,000	50 - 99

Attachment 2. Listings and de-listings on NASDAQ OMX Nordic and First North

Table 11. Number of listings and de-listings in four Nordic Main Markets from 2006 to 2014 (NASDAQ OMX Nordic Surveillance, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015)

Year	Stockholm		Helsinki		Copenhagen		Iceland		Total		Change
	XSTO		XHEL		XCPH		XICE		Total		
	New listings	De-listings	New listings	De-listings	New listings	De-listings	New listings	De-listings	New listings	De-listings	
2006	25	-21	6	-7	20	-7	5	-4	56	-39	17
2007	13	-12	2	-5	17	-3	5	-3	37	-23	14
2008	11	-22	0	-4	6	-10	1	-13	18	-49	-31
2009	7	-15	0	-3	2	-8	1	-5	10	-31	-21
2010	14	-14	1	-3	4	-10	0	-2	19	-29	-10
2011	11	-10	0	-2	1	-9	1	-1	13	-22	-9
2012	6	-7	2	-3	1	-12	3	0	12	-22	-10
2013	8	-10	5	-3	2	-12	3	0	18	-25	-7
2014	19	-7	3	-3	3	-13	2	-2	27	-25	2

Table 12. Number of listings and de-listings in four Nordic First North from 2006 to 2014 (NASDAQ OMX Nordic Surveillance, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015)

Year	Stockholm		Helsinki		Copenhagen		Iceland		Total		Change
	XSTO		XHEL		XCPH		XICE		Total		
	New listings	De-listings	New listings	De-listings	New listings	De-listings	New listings	De-listings	New listings	De-listings	
2006	38	-6	0	0	9	0	2	0	49	-6	43
2007	39	-8	1	0	15	-2	1	0	56	-10	46
2008	14	-13	2	0	3	0	0	0	19	-13	6
2009	8	-4	0	0	0	-4	0	0	8	-8	0
2010	10	-9	0	0	0	-5	0	0	10	-14	-4
2011	18	-8	0	0	0	-2	0	0	18	-10	8
2012	8	-11	1	-1	1	-1	0	0	10	-13	-3
2013	18	-6	1	0	1	-2	0	0	20	-8	12
2014	45	-10	6	0	0	-2	0	-1	51	-13	38

Attachment 3. Attachments of Affecto's case study

Share price movements of Affecto, Basware, and QPR Software with NASDAQ OMX Helsinki Cap index and NASDAQ OMX Helsinki Technology sector index at time of IPO.

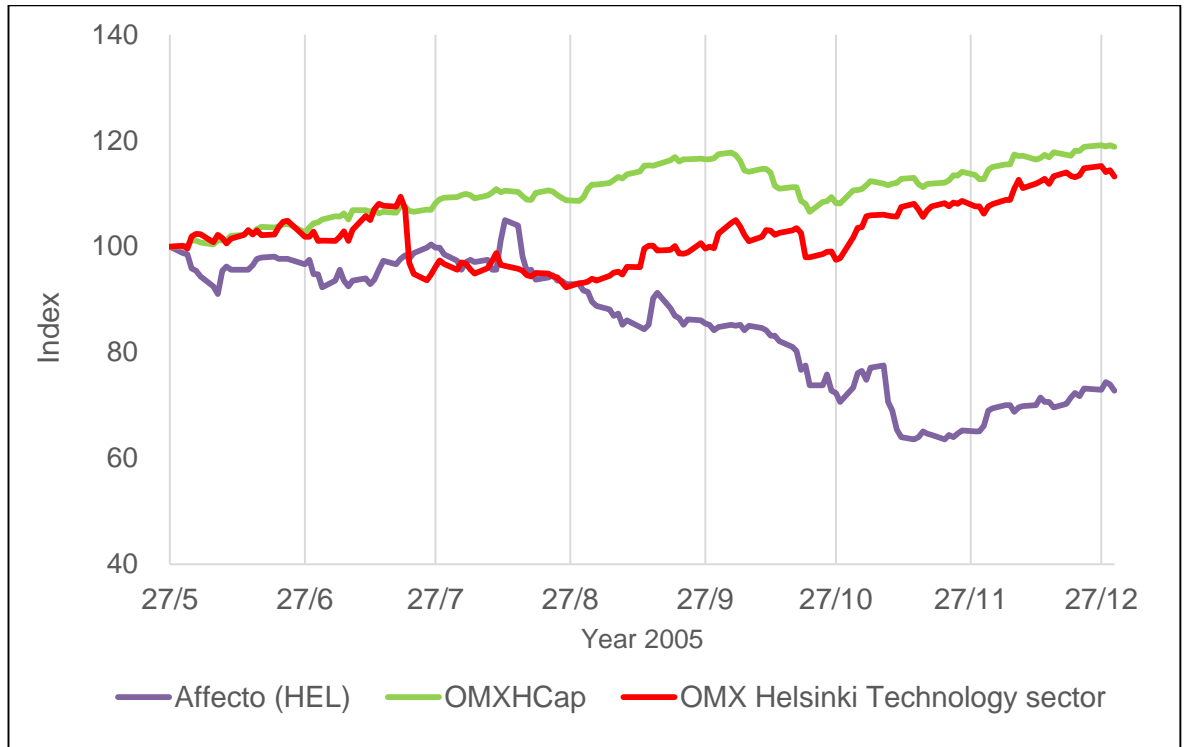


Figure 11. Affecto's share price movement with NASDAQ OMX Helsinki indices from 29 May 2005 to 30 December 2005 (Affecto Plc.; NASDAQ OMX Nordic-c; NASDAQ OMX Nordic-d)

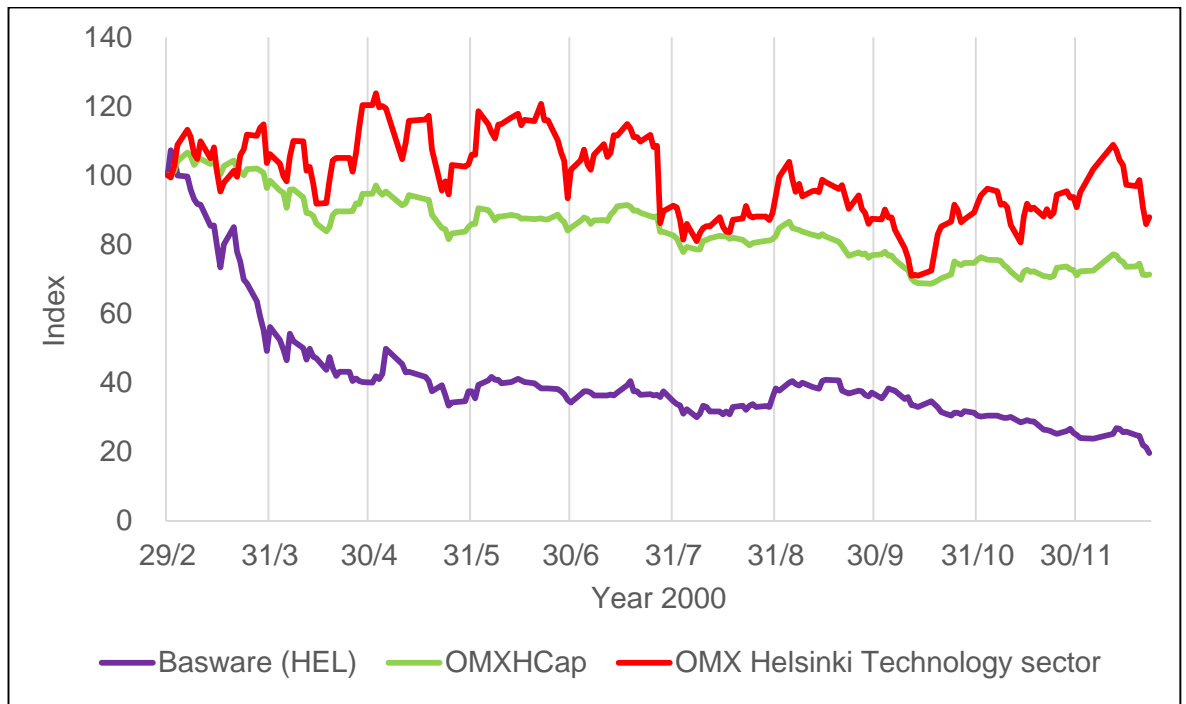


Figure 12. Basware's share price movement with NASDAQ OMX Helsinki indices from 29 February 2000 to 22 December 2000 (Basware Plc.; NASDAQ OMX Nordic-c; NASDAQ OMX Nordic-d)

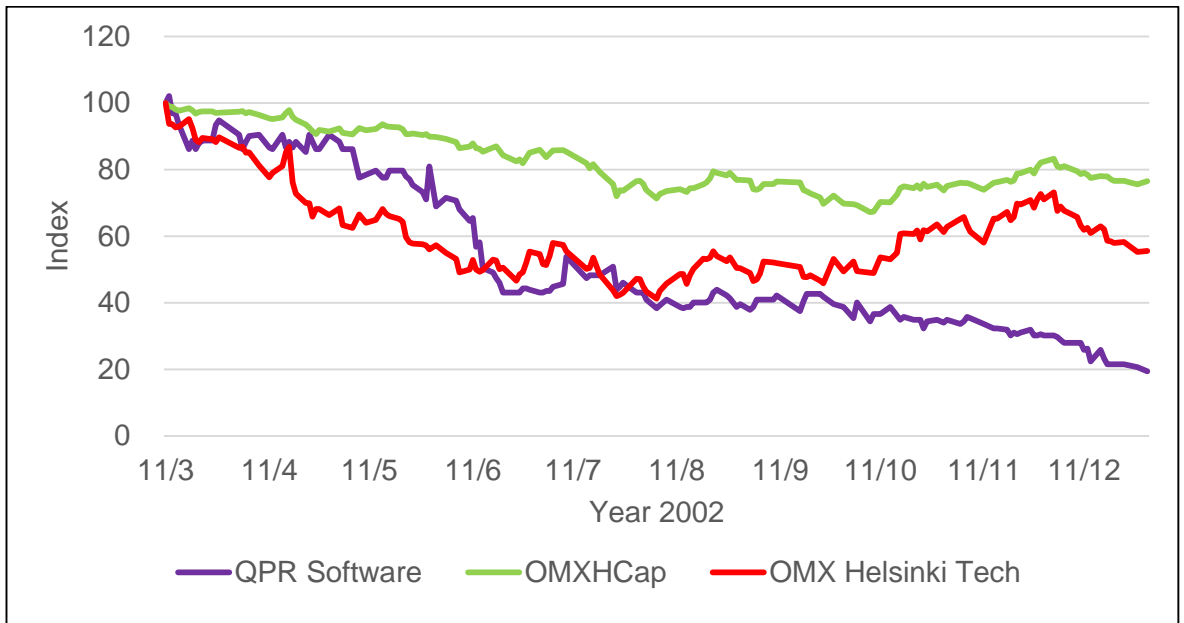


Figure 13. QPR Software's share price movement with NASDAQ OMX Helsinki indices from 11 March 2002 to 30 December 2002 (Investing.com; NASDAQ OMX Nordic-c; NASDAQ OMX Nordic-d)

In all three figures presented above, share price indices of all three companies all moved downward as compared to the NASDAQ OMX Helsinki Cap index and NASDAQ OMX Helsinki Technology index in the years of their IPOs. In Affecto's case, share price movement sometimes followed the same path as NASDAQ OMX Helsinki Technology index, but its price decreased significantly mainly because of losing investors' interest and lower-than-expectation interim results.

Attachment 4. Attachments of Siili Solutions's case study

Siili Solutions's share price development with NASDAQ OMX Helsinki Cap index, NASDAQ OMX Helsinki Technology index, and NASDAQ First North Technology index.

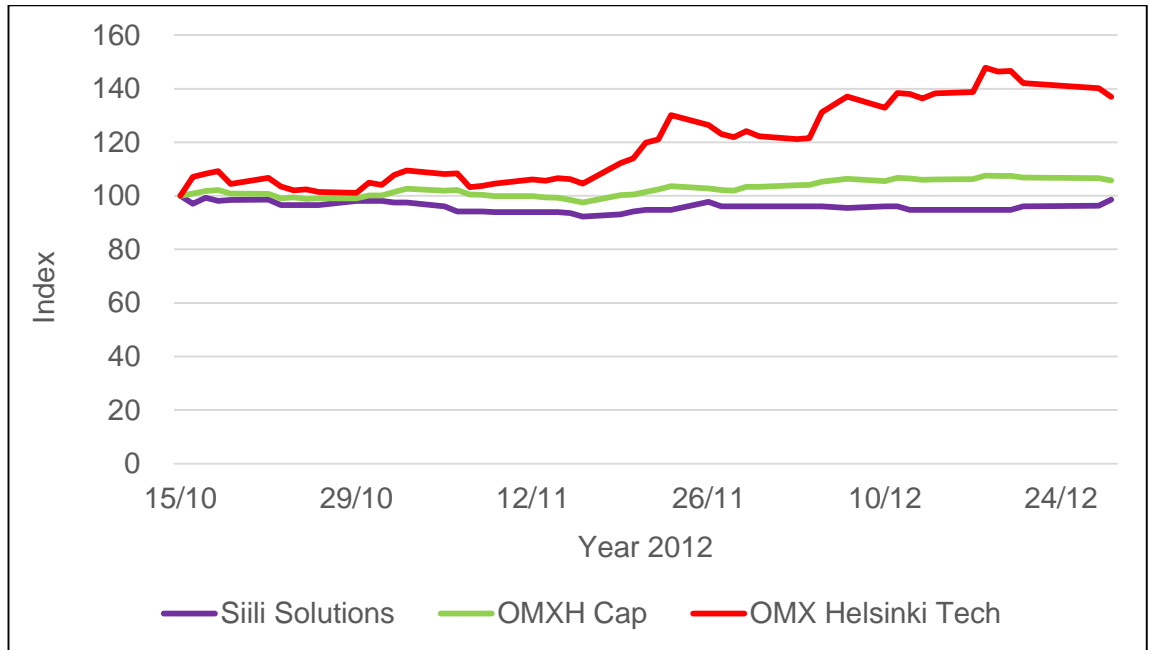


Figure 14. Siili Solutions's share price development with NASDAQ OMX Helsinki indices from 15 October 2012 to 28 December 2012 (NASDAQ OMX Nordic-b; NASDAQ OMX Nordic-c; NASDAQ OMX Nordic-d)

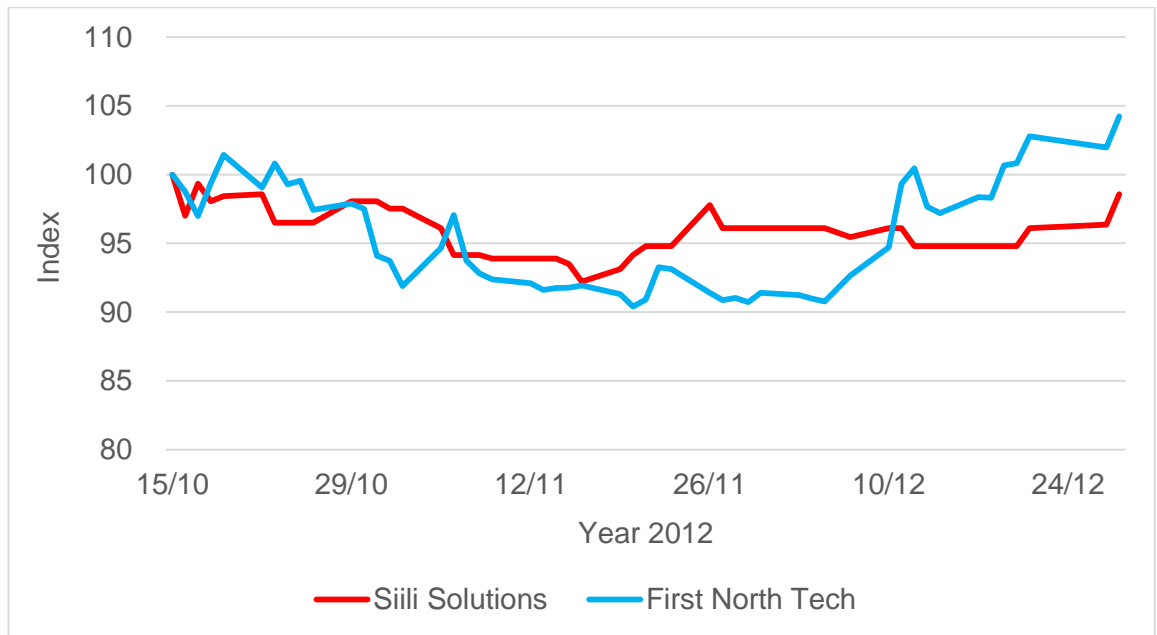


Figure 15. Siili Solutions's share price development with NASDAQ First North Technology index from 15 October 2012 to 28 December 2012 (NASDAQ OMX Nordic-b; NASDAQ OMX Nordic-e)

Attachment 5. NASDAQ OMX Nordic Surveillance Reports References

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Attachment 6. Annual Reports and Financial Statements References

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