

The Determinants of Where Nordic Private Equity Funds are Domiciled

An Empirical Analysis

by

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Abstract

The objective of this thesis is to analyze the determinants of the choice of where Nordic Private Equity funds are domiciled. I show that there is a strong link between a country's tax and legal environment and its ability to facilitate for international Private Equity investors. Further, I show that the Nordic countries' tax and legal environments are misaligned with international private equity investor's expectations.

I introduce a unique data set of 122 Nordic Private Equity funds and distinguish between whether the funds are domiciled within or outside the Nordic countries. I find that there is a significant higher probability of a fund being domiciled in a foreign jurisdiction when the fund has international investors. The results are robust regardless of how foreign investor is defined. To be more precise, as soon as a Nordic Private Equity fund is considering raising capital from non-domestic investors, the fund has a significant higher probability of being domiciled outside the Nordic countries, where the Channel Islands are the preferred jurisdictions.

Preface

This master thesis was written as a part of my degree at the Norwegian School of Economics and Business Administration (NHH). The thesis amounts to 30 credits, which corresponds to one semester full-time studies.

My experience is that one of the most challenging parts of writing a master thesis is to settle on a topic. During my studies at NHH I have taken a vast number of interesting courses which all have provided me with good starting points for deciding on a research question. At the same time, I believe that writing a master thesis is an excellent opportunity to explore new areas of research and learn something new. Although I had some knowledge of Private Equity before I started working on this thesis, this thesis allowed me to explore a very interesting industry from a new and unknown angle. This combined with the fact that I find Private Equity to be very interesting, led me to choose this as my topic for research.

Writing this thesis has been challenging, but also very interesting. I have had to venture into new research areas such as econometrics and advanced corporate law, which has been a challenge for me as a student of financial economics. In addition, empirical research on Private equity is always a challenge due to poor data availability. Despite this, I am very satisfied with the end result, and I believe the thesis can contribute to the existing research on Private Equity.

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1 Introduction

Private Equity as an asset class has experienced a phenomenal growth in Europe and the Nordics in the last 10-15 years (EVCA, 2010a). Yet, the Private Equity industry is relatively unknown to the general public and the regulators. As an asset class, Private Equity is very different to Public Equity with different needs for regulation. 25 January 2011, the major Norwegian newspaper, VG, presented an article showing that the Norwegian state-owned Private Equity fund-of-funds manager Argentum had a majority of its investments in funds domiciled on the Channel Islands Jersey and Guernsey (Tjernsland, Landre, Haugan, & Vågenes, 2011). Also in Sweden, the Private Equity industry has been under media scrutiny for the same reason (Nordic Innovation Centre, 2009). The Channel Islands are low tax jurisdictions with light regulation and for people unfamiliar with the specifics of the Private Equity industry, the unveiling of these investment practices could be interpreted as being suspect.

However, the fact that the Channel Islands are the preferred jurisdictions for European Private Equity managers is not a secret. The European Venture Capital and Private Equity Association (EVCA) have pointed out the fact that many European Private Equity fund managers establish their funds on the Channel Islands Jersey or Guernsey (EVCA, 2010b). The reason stated for why funds are set up in such jurisdictions is that many European countries lack a tax and legal environment that can accommodate international investors on a tax transparent basis. The legal environment in many countries also limits the ability to govern the funds through partnership agreements because of mandatory legal requirements. A report on the obstacles to Nordic venture capital funds by Nordic Innovation Centre also points to the lack of trust in the Nordic countries' tax and legal environment as a determining factor (Nordic Innovation Centre, 2009).

Too my knowledge, there has been no previous academic research on the determinants of where Private Equity fund managers choose to establish their funds. The purpose of this thesis is to fill that gap by analyzing the different theories for where Private Equity fund managers domicile their funds with empirical data. I assume the reader is somewhat familiar with the basics Private Equity and how Private Equity funds are normally structured (for background information on Private equity structures see, for example DVCA (2008), p. 12-16).

I analyze the Nordic countries tax and legal environment in the context of Private Equity. The Nordic tax and legal environments are specifically benchmarked with the tax and legal environment faced by funds domiciled on the Channel Islands. The results show that most of the Nordic countries' tax and legal environments are misaligned with international Private Equity investors' expectations and requirements. From this I formulate a hypothesis stating that Nordic Private Equity funds with a larger fraction of foreign investors are more likely to be domiciled in jurisdictions outside the Nordic countries. The hypothesis is tested empirically on a unique data set containing extensive information on 122 Nordic Private Equity funds, provided to me by a Nordic limited partner (LP) under confidentiality. I show that funds targeting international investors have a significant higher probability of being domiciled outside the Nordic countries. The results are robust regardless of how I define "foreign investor", i.e. as long as the investor is not from the same country as the fund manager, my finding show that the fund is significantly more likely to be domiciled outside the Nordic countries. My findings are thus in line with the issues presented by the European Private Equity and Venture Capital Association (EVCA).

Further, I attempt to determine whether the main obstacle for attracting international investors to Nordic domiciled funds is based on the tax and legal system per se or a lack of trust in Nordic fund structures in general. By analyzing a positive shift in the Finish Tax Law in 2006, I find no significant change in the fraction of foreign to domestic investors in Finish domiciled funds before and after the policy change. The results may indicate that lack of trust is a significant obstacle, that the positive change in the tax law did not go far enough, or a combination of the two explanations.

1.1 Limitations

The analysis is limited to the Nordic countries Finland, Sweden, Norway and Denmark. Even though Iceland is technically also a Nordic country, the Private Equity industry on Iceland is too small to be included. I will only be referring to the four above mentioned countries when I refer to the Nordic countries in the thesis.

In addition to limiting this thesis to the Nordic countries, I have also had to make some limitations with regards to the scope of the thesis. As a result of the recent financial crisis, the European Commission is currently in its final stage of introducing the Alterative Investment Fund Manager Directive (AIFM directive). The AIFM directive is meant to tighten

the regulation of alternative investment fund managers, including managers of Private Equity funds. To which extent it will affect the Nordic Private Equity industry is still not clear as it is currently out for hearing in several EU member countries. I will not address the directive in this thesis as my analysis is focused on historical data. Although it would be interesting to analyze the effect the directive will have on the Private Equity industry, it would not have any effect on the data used in this thesis.

1.2 Structure

This thesis is structured as follows. Section 2 provides a theoretical background, while section 3 is a qualitative analysis of the Nordic countries tax and legal environment. The analysis benchmarks the Nordic tax and legal environment against international investors' expectations, and I formulate my hypothesis. Section 4 explains the data set and the variables used to test the hypothesis empirically, while section 5 explains the methodology used and the empirical strategy. The results are explained in section 6 and I test for robustness and extensions in section 7. Section 8 concludes. Tables and Appendices are found in the back of this thesis.

2 Theoretical background

In this section, I will present the main theories for the determinants of where Private Equity fund managers incorporate their funds.

Too my knowledge, there has been little academic research on why European and Nordic Private Equity funds often are incorporated in foreign jurisdictions. Textbooks on venture capital and private equity usually mention that Private Equity funds are normally structured as limited partnerships and often domiciled in jurisdictions such as Jersey, Guernsey, Delaware or other areas with favorable tax and legal environments (Metrick & Yasuda, 2010). Yet, little is said on why this is so. However, a study by Lerner, Shepherd and Moore on the venture capital market in New Zealand commissioned by the New Zealand Ministry of Research Science and Technology establishes a clear link between the country's tax and legal environment and the venture capital industry's ability to raise foreign capital (Lerner, Moore, & Shepherd, 2005). They suggest several public policy initiatives in order to attract international investors to the country's venture capital funds.

Several reports have been written on the importance of a favorable tax and legal environment for the European and Nordic Private Equity industry and how this affects domestic funds ability to attract international investors (see, for example, EVCA, 2010c; Nordic Innovation Centre, 2009; BA-HR, 2009). EVCA has since 1994 advocated for a better tax and legal environment for Private Equity and Venture Capital in Europe. In their latest publication Private Equity Fund Structures in Europe from 2010, EVCA (2010c) states that "A country's investment fund structures should accommodate the needs of both domestic and non-domestic investors. Any failing in this area could lead to investors seeking out foreign fund structures (incurring significant set-up and transaction costs) and, therefore, fewer domestic investors committing funds in that country" (p.4). EVCA claims that the effect of an unfavorable tax and legal environment will thus not only lead to funds being established in foreign jurisdiction, but also that the entire Private Equity industry in that country will operate below potential capacity. The benefits of a well-functioning Private Equity industry is a more competitive, entrepreneurial, innovative and dynamic economy. Thus, the tax and legal environment may not only have negative effects on the industry, but on also on the society as a whole.

The importance of the tax and legal environment on a country's Private Equity industry has also been investigated on a Nordic level (Nordic Innovation Centre, 2009). Nordic Innovation Center set up the "Nordic Legal Project" in 2006 with a mandate to investigate the main problems encountered by international investors seeking to invest in Nordic venture capital funds. This initiative resulted in the publication "Obstacles to Nordic Venture Capital Funds" which was released in 2006 and has later been revised and updated in 2007 and 2009. In Nordic Innovation Centre (2009), the report states that "Most Nordic countries have today no structures that can compete successfully with foreign fund structures as they lack either of two important criteria for venture capital funds, namely favorable tax treatment and trust" (p. 13).

A report on the legal framework for the Norwegian Private Equity and Venture Capital industry by the Norwegian law firm BA-HR (BA-HR, 2009) also gives further insight to the importance of the tax and legal environment for the Private Equity industry. The law firm states that the most important determinant of the fund structure managed by Norwegian Private Equity fund managers is whether the fund is targeting national or international

investors. The report states that if the fund is targeting international investors, the fund is most likely to be established as a foreign Limited Partnership in a foreign jurisdiction with a regulatory and legal environment that is well adapted and has long traditions with Private Equity funds.

The above mentioned reports describe certain conditions for a favorable tax and legal framework for the Private Equity industry. The conditions are largely based on what investors expect with regards to tax and legal environment in the country. The importance of an attractive tax and legal environment for attracting international Private Equity investors has also been studied in other countries. Lerner, Moore and Shepherd state in the 2005 report on the New Zealand venture capital industry that tax and regulatory features need to be in compliance with international norms in order to create a an attractive venture capital investment environment, and that even an appearance of difference can be enough to deter international investors (Lerner et al., 2005). New Zealand is a small and open economy with many similar characteristics to the Nordic countries, and it is likely that the author's views are relevant also for the Nordic Private Equity industry.

There are several reasons why international capital is important for Nordic Private Equity funds. The Nordic countries are small which in itself limits the Private Equity industry's ability to raise sufficient capital from only domestic investors. In addition, in many countries institutional investors such as pension funds and insurance companies have restrictions on how much of their assets that can be allocated to alternative investment classes such as Private Equity. For this reason, many Private Equity fund managers need to attract international investors when raising capital (EVCA, 2008).

2.1 Tax and legal environment - investor expectations

In the following section I will present the main tax and legal obstacles to attracting foreign investors to Private Equity. The obstacles are largely based on the expectations international investors have on the tax and legal environment the Private Equity fund operates in.

2.1.1 Tax transparency

Investors expect Private Equity funds to be fully tax transparent (EVCA, 2010b). When a fund is tax transparent, the fund itself is not treated as separate entity for tax purposes. Instead, all profits are taxed on the LPs' hands directly which prevents double taxation. If the fund

itself was a separate entity for tax purposes, profits may be taxed twice; first at the fund level when the fund realizes an investment in a portfolio company and second when the profits are distributed to the partners, unless prevented by a double tax convention between the countries involved. Private Equity investors are predominantly corporate institutional investors such as banks, insurance companies, pension funds and similar (Venture Capital Tax Expert Group, 2010). Thus, the profits from the underlying portfolio company would often also be subject to a third tax layer when the profits are finally passed on the individual customer, client or retirement saver. It is clear that this puts Private Equity as an asset class at a disadvantage to other asset classes where double taxation would not be an issue.

Tax transparency ensures that investors are not worse of investing through a fund than if they had invested in the portfolio companies directly. Another advantage is that the investors need only consider the tax laws in their home country. This is especially important for investors that are tax exempt such as certain pension funds (Nordic Innovation Centre, 2009). Tax transparency ensures that these investors remain fully tax exempt.

Most European countries offer fund structures or vehicles that are generally considered to be tax transparent such as limited partnerships and funds for joint accounts (EVCA, 2010b). Suitable tax transparent fund structures in the Nordics are the Kommanditselskab (K/S) in Denmark, Kommandittiyhtiö (Ky) in Finland, Kommandittselskap (KS) or Indre Selskap (IS) in Norway and Kommanditbolag (KS) in Sweden (EVCA, 2008).

2.1.2 Prevent permanent establishment

Tax transparent fund structures generally provide full tax transparency for domestic investors. However, foreign investors may often still be liable for tax in the country were the fund is established. In some countries, investing in a certain fund structure leads to the investor for tax purposes being considered as participating in a business carried out in that country. This will lead to the investor being taxed upon distributions from the fund in the country where the fund is established and in the investors' home country.

In 2007, the European Commission established the Venture Capital Tax Expert Group as a part of trying to improve cross-border Venture Capital investments within the EU. In their report, the Venture Capital Tax Expert Group (2010) uses the OECD Model Definition of permanent establishment and it is defined as:

"A permanent establishment is, according to the OECD Model definition, a fixed place of business through which the business of an enterprise is wholly or partly carried on in another jurisdiction. It can take a structural form, such as a branch, or it can just be created by the activities of the enterprise in that other jurisdiction. This concept also applies to the cases where an enterprise carries on its activities in a foreign state through a person acting on its behalf, provided that that person is not an agent of independent status acting in the ordinary course of his/her business" (p. 35).

The concept of permanent establishment is important for countries to protect their tax base. It ensures that foreign companies conducting business in the country are subject to tax. However, the legislation is often not adapted to account for the differences between a company actually conducting business in a country and a Private Equity fund facilitating investments in companies for passive investors. In some countries, the sole act of investing in a certain company structure is deemed to constitute permanent establishment as the investors are considered to be participating in business conducting in that country. Often the reason for this is the last sentence in the above definition. The LPs may be deemed to have permanent establishment as the management company or the general partner (GP) is not considered to be an independent agent of the fund.

The Venture Capital Tax Expert Group argues that the management company or GP indeed should be viewed as an independent partner, and therefore avoid creating permanent establishment for the fund and the LPs (Venture Capital Tax Expert Group, 2010). The main arguments are that the management company is paid an arm's-length fee for its services, it is not subject to detailed instructions or controls by the LPs and that it bears the risk of its investment activities in the way that a poor performance will make it more difficult to raise successive funds. The Venture Capital Tax Expert Group argues that the activities of a Private Equity management company or GP are not substantially different to a fund manager of a public equity fund. However, the latter is not creating permanent establishment for its investors.

The Venture Capital Tax Expert Group defines the risk of the Private Equity fund or the investors being deemed permanent establishment as one of the main obstacles to cross-border Private Equity investing. Although the fund structure in itself may be tax transparent,

being considered to have permanent establishment results in the LPs having to pay taxes in the jurisdiction where the fund is established. As a result, International investors generally require that its investments do not create permanent establishment in the host country of the fund (EVCA, 2010b).

2.1.3 VAT on Management Fees

The GPs' remuneration is made up of an annual management fee and performance based variable fees (carried interests). The management fee is meant to cover all the running expenses of managing the fund and the industry standard is to charge 2 % of the funds committed capital annually (Metrick & Yasuda, 2010). In some countries, this management fee is subject to Value Added Tax (VAT). Since Private Equity funds are generally not registered for VAT (as its activities are not subject to VAT), the VAT charged on management fees will be irrecoverable for the management company (Nordic Innovation Centre, 2009). Thus, the VAT ends up as an extra cost that either has to be passed on to the LPs or covered by the management team in the form of a lower net fee.

International investors do not expect to pay VAT on top of the management fees which in many cases already may be excessive. Imagine that the investors have committed MEUR 100 to a Private Equity fund. If the fund is set up with a 10 year duration and is charged an annual management fee of 2 %, only MEUR 80 will actually be invested in the portfolio companies (assuming 2 % constant management fees). Thus, the investments are required to return at least 25 % in order for the investments to break even for the investors. Adding VAT to the management fees will increase the required return even further. A VAT of 25 % will increase the required return to 33 % as a quarter of the committed capital is used to cover management fees and VAT.

If the VAT is to be covered by the GP, the net annual management fee after VAT has been deducted is 1.6 %. As a result, the GP has fewer resources to manage the fund.

2.1.4 Capital mobility

Good capital mobility is an important requirement for international Private Equity investors. When Private Equity investors subscribe to a fund, they are required to commit a certain amount of capital that can be invested in the fund. The committed capital is not paid to the fund in full immediately. Rather the funds are called upon over time when the fund manager

has identified an investment opportunity (Metrick & Yasuda, 2010). Similarly, when the fund realizes investments, the proceeds are not held by the fund until it liquidates. The LPs generally require that the proceeds are distributed as soon as possible. As a result, the investors require that the fund is structured in a way that provides good capital mobility.

Capital mobility in this context is defined as capital flowing between the fund and the investors without significant obstacles or delays (BA-HR, 2009). Investors want their invested capital at all times to be employed in the actual investments. They wish to avoid lengthy periods of time when funds are idle on bank accounts, earning low returns waiting either to be invested or distributed. The GP will usually invest in portfolio companies and draw down capital over the first five years. The portfolio companies are usually held for 5-6 years, but can be exited over the entire duration of the fund (Strömberg, 2009). Thus, a Private Equity fund needs to be able to operate on a variable capital basis with funds flowing between the fund and the investors as smoothly as possible.

The GP also has incentives to achieve maximum capital mobility. The performance of a Private Equity fund is often measured by its internal rate of return (IRR) (Phalippou, 2007). Delayed distributions will depress the investments IRR.

National legislation may restrict the mobility of capital between the fund and the funds investors. Examples of this are requirements that a certain amount of capital is invested in the fund when it is established and additional capital within a certain time frame, causing the investors to provide capital to the fund before the fund manager has identified investment opportunities. There may also be requirements that a certain minimum amount of capital is held in the fund, which may restrict or delay distributions (Nordic Innovation Centre, 2009).

2.1.5 Tailor made structures

International Private Equity investors expect that the fund can be governed by a tailor made partnership agreement. Tailor made partnership agreements ensure that the fund can be governed by customary decision making according to the Private Equity industry standard. The ability to do so can be limited by national mandatory legal requirements. Thus, it is expected that there are a minimum of mandatory legal requirements that cannot be set aside by the partnership agreements. (Nordic Innovation Centre, 2009).

The relationship between the GP and the LPs poses various agency problems (Metrick & Yasuda, 2010). The GP manages large sums of money on behalf of the LPs that are generally tied up in highly illiquid investments. In limited partnerships, the LPs are generally not allowed to participate in the management of the fund (although what is allowed varies from jurisdiction to jurisdiction). This has resulted in industry standards of how Private Equity funds are governed and a strong sense of self-regulation (Metrick & Yasuda, 2010). Detailed provisions are set out in the partnership agreement which is used for fund governance and overcoming agency problems. International investors therefore expect that there are no statutory laws that cannot be set aside by the partnership agreement. This could restrict the ability of the investors to govern the fund according to industry standards. Therefore, it is expected that there should be basically no restrictions on how the business of limited partnership is organized (Nordic Innovation Centre, 2009).

2.1.6 Stability, trust and experience

In addition to the above mentioned tax and legal obstacles, international investors often just lack trust in Nordic incorporated funds (Nordic Innovation Centre, 2009). Private Equity funds are usually set up for a period of 10 years. In this period, the invested capital is illiquid and there are often provisions in the partnership agreement that restricts the ability to sell fund shares to third parties (Metrick & Yasuda, 2010). For this reason, international investors prefer jurisdictions with little risk of unfavorable changes in the tax and legal environment over the duration of the fund. Nordic fund structures are often regarded as unknown and complex, which creates an obstacle for attracting international investors.

Another important factor is that foreign investors prefer well-known jurisdictions, with which the international investors and their legal advisors are familiar. As mentioned above, the way Private Equity funds are usually structures poses several agency problems. For this reason, the industry has developed a strong sense of self-regulation. Private Equity funds are governed though the partnership agreement which over the years has developed to include certain standard provisions to minimize potential agency problems. Thus, international investors expect that the partnership agreement can be made according to the prevailing norms in the industry. More importantly, they expect to be familiar with the tax and legal environment in which the partnership agreement is made. Thus, regardless of how well suited a country's tax and legal environment is to Private Equity, if the country is unfamiliar

to the international investors it is likely to pose an obstacle for international investment. International investors do not wish to use large resources to familiarize with an unknown tax and legal environment in a new country or jurisdiction (personal communication with Arne Trondsen, Partner at Hitecvision, 7 June, 2011).

3 Comparing the jurisdictions

In the previous section I established the link between a country's tax and legal environment and the ability of that country's Private Equity industry to attract international investors to domestically incorporated funds. As discussed, international Private Equity investors have specific expectations with regards to the tax and legal environment in which funds operate in. If the tax and legal environment is misaligned, or even perceived to be misaligned with these expectations, international investors will often prefer foreign fund structures in known jurisdictions such as Jersey or Guernsey.

In this section I will compare the Nordic countries with the Channel Islands Jersey and Guernsey with respect to the main tax and legal requirements discussed in section 2. The Channel Islands are by far the most used jurisdiction when Nordic and European Private Equity companies decide to establish funds abroad as discussed below. I will show in this section that while the Nordic countries only to a varying degree fulfill investor's expectations with regards to tax and legal environment, the Channel Islands are well suited and adapted for Private Equity funds.

Please note that many of the issues and topics discussed below are demanding even for leading practitioners in corporate law. Many of the issues are not clarified and are subject to disagreement. Thus, my aim is not to provide the reader with a comprehensive explanation of the countries' tax and legal environment, but rather highlight the main points and the most important details. However, the complexity and to some degree unresolved issues in the Nordic tax and legal environment is in itself an interesting observation in this context. International Private Equity investors value funds established in stable and known tax and legal environments. Thus, the perception of the Nordic tax and legal environment, with complex and partly unresolved tax and legal issues, is likely to be an obstacle for Nordic incorporated Private Equity funds.

3.1 The Channel Islands: Guernsey and Jersey

From a perception and cost point of view, establishing a Private Equity fund domestically is preferred to creating an off-shore structure in a tax haven (EVCA, 2010b). Yet, many Private Equity fund managers chose to establish their funds abroad, were Jersey and Guernsey are the preferred jurisdictions.

The Channel Islands Jersey and Guernsey are the most favored jurisdiction for Private Equity in Europe. Private Equity News conducted a survey on CFO's in the Private Equity industry preferred location for fund administration. Guernsey and Jersey received 60 % and 15 % of the votes, a totaling of 85 % (Guernsey International Finance Centre, 2011). Statistics from the Guernsey Financial Services Commission reports that the total value of Private Equity funds under management in Guernsey was over £65 billion in December 2010, and that this amount had grown by around 50 % from the year before. In this section, I will look at the tax and legal environment for Private Equity funds set up on the Channel Islands.

3.1.1 Tax transparency and permanent establishment

Both Jersey and Guernsey offer the Limited Partnership structure, which is the most favored fund structure for Private Equity funds (Carey Olsen 2010a, 2010b). A Limited Partnership is not a separate taxable entity. The structure is tax transparent as instead of the profits being taxed on the partnership level, the profits are distributed to each partner according to his relative share in the fund, and is then taxed on the investor level in each investor's home jurisdiction.

Investing in a Jersey or Guernsey limited partnership does not create permanent establishment for the investors. Foreign investors are not liable for any Jersey or Guernsey taxation on income derived from the Limited Partnership as long as the Limited Partnerships income is derived from business outside of Jersey and Guernsey. In other words, as long as the fund's portfolio companies are not Jersey or Guernsey companies, the investors will not be taxed on Jersey or Guernsey. This enables investors in Private Equity funds domiciled on the Channel Islands to be solely taxed according to the tax laws in their own jurisdiction (Nordic Innovation Centre, 2009).

3.1.2 VAT

There is no VAT on management fees paid by the fund to the GP on Jersey or Guernsey.

3.1.3 Capital mobility

There are no statutory laws that restrict capital mobility in a Jersey or Guernsey limited partnership. The Partnership agreement between the GP and the LPs of a Jersey or a Guernsey limited Partnership governs the rules of contribution and distribution of capital to and from the partnership. The only legal requirement is that the partnership is subject to a simple solvency test when the distributions are made and with a 6 month claw back period following the time of distribution (Appleby 2011a, 2011b). Other than that, the limited partnership is free to operate on a variable capital basis, and may tailor the rules of contribution and distribution in the partnership agreement.

3.1.4 Tailor made structure

Limited partnerships in Jersey are regulated by the Limited Partnership Jersey law of 1994 and Guernsey Limited Partnerships are regulated by the Limited Partnership Guernsey law of 1995. There are no significant statutory laws that cannot be set aside by a partnership agreement. Both Jersey and Guernsey Limited Partnership laws provide for very flexible regulations with regards to investment and distributions, dissolution of the partnership and too what extent the LPs may participate in the management of the limited partnership. (Appleby 2011a, 2011b)

3.1.5 Stability, experience and trust

The Channel Islands have been developing experience with servicing funds for more than four decades and Private Equity has been steadily growing on the Islands for the last 20 years (Gray, 2008). As a result, the Channel Islands has become the market standard for European and Nordic Private Equity funds looking to attract foreign investors (DVCA, 2008). The Channel Islands are known for being very stable with regards to the tax and legal environment for Private Equity. There have not been any significant changes in the Jersey or Guernsey law over the past two decades (Personal communication with Arne Trondsen, Partner Hitecvision, 7June 2011). In addition, international investors are very familiar with Jersey and Guernsey law. Most international investors use lawyers that are experts on these jurisdictions and they will on a general level be familiar with the prospectus and partnership agreement presented by funds domiciled on Jersey and Guernsey.

3.2 Norway

3.2.1 Tax transparency and permanent establishment

Historically, Norwegian Private Equity funds have been structured as either limited liability companies (AS or ASA), Norwegian Limited Partnerships (KS) or Silent Partnerships (IS) (BA-HR, 2009). The Norwegian Limited Partnership and Silent Partnership structures have the most resemblance with a foreign Limited Partnership structure. I will focus the discussion on the Norwegian limited partnership structure (KS). Where there are significant differences in the tax or legal treatments between a KS structure and a IS structure, I will point that out.

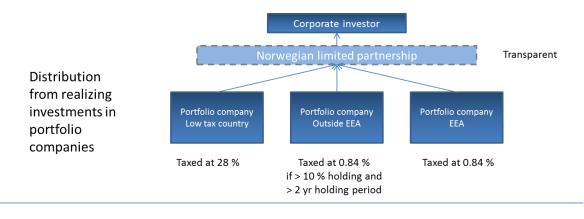
A Norwegian Limited Partnership is not a separate taxable entity. As a result, no tax is paid on the fund level on income from the fund. The taxable income of the Limited Partnership is divided among the LPs and taxed on the investor level. Whether foreign investors are subject to Norwegian taxation depends on whether the Limited Partnership is deemed to constitute a permanent establishment in Norway. According to EVCA (2008), a foreign investor with shares in a Norwegian Limited Partnership is considered to be participating in business carried out in Norway, and the investor will thus for tax purposes be treated as if he or she has a permanent establishment in Norway. Nordic Innovation Centre (2009) states that no Norwegian venture capital fund has been set up with the aim of not creating permanent establishment and thereby challenging the assumption that participation in a Norwegian limited partnership constitutes a Permanent establishment.

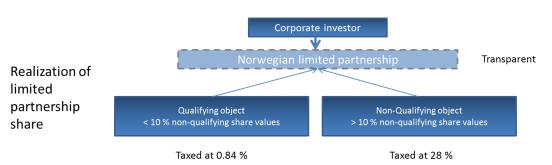
International investors in Norwegian Private Equity funds are thus subject to taxation according to Norwegian taxation laws. However, corporate investors will in most cases be exempt from Norwegian taxation through the Norwegian Exemption Method (Nordic Innovation Centre, 2009). When a foreign investor is deemed to have permanent establishment in Norway, the investor is faced with the same rules for taxation and exemption as Norwegian investors. This implies, amongst other things, that withholding tax is not an issue (Norwegian Ministry of Finance, 2011). However, the exemption method requires that the foreign corporate investor is structurally equivalent to a Norwegian corporate investor. This implies that the foreign corporate investors' type of company or company structure is similar to the type of companies in which Norwegian corporate investors organize. It is also required that the foreign corporate investor is subject to income tax in his resident country. If these requirements are fulfilled, the foreign corporate investor

will be subject to the same treatment as Norwegian corporate investors with regards to taxation and exemption.

It is worth mentioning that since 2008, the Norwegian Exemption Method does no longer provide a full exemption from Norwegian taxation. In 2008 the Norwegian Ministry of Finance (NMOF) introduced a tightening of the exemption method by making 3 % of the net gains on shares and dividends subject to tax (Norwegian Ministry of Finance, 2008). The rationale for this tightening was that certain transaction costs of investing are tax deductible and the taxation is meant to compensate for the fact that the gains are not taxable. As a result of this, only 97 % of the capital gains and dividends are now fully tax exempt, and the remaining 3 % will be taxed at 28 %, yielding an effective tax rate of 0.84 %. However, NMOF recently announced that the rule will be changed from tax on 3 % of all gains to only comprise dividends. The reason for the change is to make the intention of the tax more precise. For example can a realization of a large and long term investment trigger a tax charge that is much larger than the presumed tax deductibility of the costs of the investment (BA-HR, 2011)

In general, the conditions for whether the exemption method applies for an investor in a Norwegian Limited Partnership depends on where the portfolio companies are resident, not the partnership itself. At this point it is important to separate between gains from the realization of a limited partnership share and distributions paid out from the partnership as a result of the partnership realizing investments. Distributions made from the fund from realizing investments in Portfolio Company's resident within the EEA are not subject to tax for the investors (except for 3 % which is currently taxed at 28 %). The only requirement is that the company is genuinely established and performs genuine economic activities. For the distribution made from realized investments located outside the EEA, corporate investors will be exempt from taxation as long as the portfolio company has been held by the partnership for at least 2 years and with a minimum ownership of 10 %. For income derived from portfolio companies resident in low tax countries, the corporate investors are always taxed at 28 %. (Nordic Innovation Centre, 2009). The top part of the figure below gives an overview of the tax rules for distributions, while the bottom part explains the rules for taxation when an investor sells his or her partnership share.





If a LP sells his share in the partnership, the conditions for the exemption method are somewhat different. The limited partnership is said to be a qualifying object as long as no more than 10 % of the share values of the partnership is derived from companies resident in low tax countries. Gains from selling the partnership share is thus taxed at the marginal tax rate of 0.84 %. Otherwise, the gains are taxed in full at 28 % (Nordic Innovation Centre, 2009). Whether the foreign investor is actually taxed at 28 % in practice depends on the double tax treaty with the foreign investors' resident country and further interpretation of the Norwegian tax laws. From what I have been explained by a leading Norwegian tax lawyer, these issues are difficult and too some extent still not clarified (personal communication with Anders Myklebust, Wikborg Rein, May 5, 2011)

Certain of the conditions set out by the NMOF for the Norwegian exemption method to apply have recently been challenged in the European Court of Justice (ECJ) in the wake of what has been known as the Aberdeen case. In short, the ECJ judged that European countries cannot discriminate between domestic and other European countries with regards to tax treatment. Until 2009, Norwegian Authorities required that for a company to be comprised by the Norwegian exemption method it had to be subject to income tax in its

resident country (Nordic Innovation Centre, 2009). Another requirement was that the foreign corporate investors' company had a company structure that was comparable to a Norwegian company structure that is comprised by the exemption method. These conditions reduced the attractiveness of the Norwegian tax regime from a foreign investor's point of view. However, the new statements from NMOF after the EJC ruling may contribute to make the Norwegian tax climate more attractive. The Aberdeen case is presented more in detail in Appendix I. The consequences of the Aberdeen case have been that the NMOF has had to lower its requirements for EEA based companies to be comprised by the Norwegian exemption method. It is no longer a requirement that the company must be liable to income tax in its country of residency, and the requirements that the company structure has to be equivalent have been moderated (PWC, 2009).

Nordic Innovation Centre (2009) states that the unclear situation on the application of the exemption method for foreign investors reduces the interest in investing in a Norwegian fund. Foreign corporate investors seem to be reluctant to invest in funds incorporated in Norway, due to the risk of changes in the Norwegian tax regime. Since this is a perceived risk, gaining the trust from international investors it is not only a matter of refraining from (negative) amendments to the tax legislation but also of communicating stability over time.

To summarize, foreign investors in Norwegian Private Equity funds are likely to have permanent establishment in Norway. However, the Norwegian exemption method will in many cases exempt the foreign investors from Norwegian taxation. Yet, the fact that many issues surrounding the Norwegian Exemption method are not clarified is an obstacle for Norwegian Private Equity funds.

3.2.2 VAT

Financial services are exempted from VAT in Norway, according to the Norwegian Trading Securities Act. Services provided to a Private Equity fund from a management company are considered to be financial services given that the services relate to genuine investment activities. The determination of whether a service is deemed to be a financial service and thus exempt from VAT may be difficult, and could thus be a potential risk and an obstacle for setting up a Private Equity fund in Norway (Nordic Innovation Centre, 2009).

3.2.3 Regulatory considerations

In this section I will discuss the regulatory conditions faced by Norwegian Private Equity funds such as capital mobility and the ability to make customary decisions in the funds partnership agreement.

Norwegian Limited Partnerships are regulated by the Norwegian Partnership act of 1985 and the partnership agreement. As mentioned earlier, investors expect no regulatory limitations with regards to capital mobility, investment restrictions and customary decision making. Generally, there are no regulations in Norway that prohibits implementation of customary decision making in Norwegian Private Equity funds. However, the Norwegian Partnership Act of 1985 does contain certain limitations (Nordic Innovation Centre, 2009):

- At least 20 % of the partnership's equity must be paid in before the Limited Partnership is registered, and 40 % must be paid in within two years. Private Equity fund investors commit to a certain amount of capital when the fund is set up, but the capital is invested in tranches when called upon by the GP. This requirement may therefore force the investors to invest the capital more quickly than desired, which may lead to idle capital earning low returns and thus depress the funds IRR. This may be an obstacle for foreign investors when investing in a Private Equity fund set up as a Norwegian Limited Partnership.
- The law also requires that 40 % of the equity invested in the fund is restricted capital.

 This may delay distributions from the fund, and thus depress the IRR.
- At least 10 % of the equity must at all times be owned by the GP. Usually, the management company acts as the GP and the investors as LPs. The management company will seldom have the financial strength to have a 10 % equity stake in the fund, and the usual way to solve this is for the LPs to also invest in the GP. While this is possible, it makes the structure more complex. The management is usually entitled to a carry if the funds' profits exceed a predefined hurdle rate. The industry standard is that above this hurdle rate, the LPs receive 80 % of the profits and the GP 20 % of the profits. If both the management company and the LPs are invested in the GP, this will complicate the compensation scheme.

The above mentioned limitations will not apply to a Private Equity fund structured as a silent partnership. However, also silent partnerships have certain legal obstacles for Private Equity purposes (Nordic Innovation Centre, 2009):

- In a silent partnership, the GP has the exclusive rights in exercising management and control. Thus, there LPs are not entitled to exercise their ownership rights in the Limited Partnership.

3.3 Sweden

3.3.1 Tax

A Swedish Limited Partnership is not a separate taxable entity. However, commercial partnerships with business of its own will be considered to have permanent establishments in Sweden, making foreign investors in a Swedish Limited Partnership subject to Swedish taxation. This is generally assumed to be the case for Swedish Private Equity funds organized as limited partnerships. As opposed to Norway, Swedish Limited Partnerships were until recently excluded from the participation exemption (Nordic Innovation Centre, 2009) and gains on shares and dividends were thus taxed at a rate of 30 %.

The fact that foreign investors in Swedish Limited Partnerships are likely to have permanent establishment, is an obstacle for setting up Private Equity funds in Sweden. The issue has been raised within the Swedish Tax Agency and the Swedish Government, and it has been expected that actions will be taken to resolve this issue (Nordic Innovation Centre, 2009; EVCA, 2008). In 2009, the Swedish law was changed making Swedish limited partnerships tax transparent for corporate investors within the EEA. There are still certain obstacles for Private Equity funds organized as Swedish Limited Partnerships, however, according to Martin Nilsson, Partner at Mannheimer Swartling, the change is a step in the right direction (personal communication with Martin Nilsson, Partner at Mannheimer Swartling, May 5 2011). Too what extent the new law will affect Swedish domiciled Private Equity funds ability to attract international investor's remains to be seen. As the change was made in 2009, it is not reflected in this thesis. However, it is likely that the issue of trust and habit will still affect the decision on where Swedish Private Equity funds should be domiciled.

Swedish limited liability companies are included in the participation exemption regime, and thus corporate Swedish and foreign investors may omit taxation on fund level with this

structure. However, the participation exemption only applies for investors from an EU or EEA country. Even though the tax conditions are more favorably for foreign investors if the Private Equity fund is set up as a limited liability company, very few funds in Sweden are set up this way. The most probable reason for this is that foreign investors perceive this structure as uncommon and complex, and thus lacks trust in the fund structure (Nordic Innovation Centre, 2009).

3.3.2 VAT

Management services are not subject to VAT as long as the management company is the GP of the fund, and the services fall within the scope of the Limited Partnership agreement (Nordic Innovation Centre, 2009). Management services provided by an advisory company that is not a partner in the partnership will be subject to VAT.

3.3.3 Regulatory considerations

There are no significant legal obstacles with regards to a Private Equity fund set up as a Swedish Limited Partnership. Only very few statutory provisions apply for Limited Partnerships, and they can all be set aside by the partnership agreement (Nordic Innovation Centre, 2009).

3.4 Finland

3.4.1 Tax

Finnish Limited Partnerships are not separate tax subjects and are thus tax transparent for both domestic and foreign investors. Foreign LPs can also, since 2006, avoid having permanent establishment in Finland. If there is a tax treaty between Finland and the foreign LPs home country, the LP is only liable to finish taxation to the extent the partner would have been taxed if he invested directly in the portfolio company. Thus only income derived from Finish portfolio companies are taxed in Finland (EVCA, 2008; Venture Capital Tax Expert Group, 2010). As a result, most of the dividends and capital gains are taxed on the LP level only in accordance with the tax rules in the investor's home country.

However, the law does not state explicitly that foreign investors will not be subject to a permanent establishment in Finland. The Finnish legislation does not contain many special provisions concerning private equity. Instead, the general corporate law and tax law provisions are applied, with only few exceptions. Thus, a foreign investor may require legal assistance to ensure that he/she is not taxed in Finland on returns from Finnish Limited

Partnerships. The fact that the issue of permanent establishment is not explicitly stated in the finish law may also pose a risk that there will be future unfavorable changes in the finish tax code on this issue (Nordic Innovation Centre, 2009).

Summarized, under current legislation, Finland provides full tax transparency in accordance with the requirements of the Private Equity industry.

3.4.2 VAT

According to a 2007 court ruling in Finland, VAT exemption applies to management fees paid by private equity funds to management or advisory companies. It was also possible to avoid VAT before 2007 by establishing a VAT group, but the recent court ruling has simplified this matter (Nordic Innovation Centre, 2009).

3.4.3 Regulatory considerations

Finish Limited Partnerships are regulated by the Finish Partnership Act of 1989. Most of the regulations can be set aside by the partnership agreement, but there are some mandatory issues that create an obstacle for Finish Private Equity funds structured as Limited Partnerships (Nordic Innovation Centre, 2009):

- Each partner in the Limited Partnership has the right to terminate the partnership agreement after the agreement has been in force for over 10 years. Although the standard duration of a Private Equity fund is 10 years, the life of the fund may in some cases be extended. Thus, partners may terminate the agreement before the investments have been realized. This statutory provision is mandatory, and cannot be set aside by the partnership agreement.
- There are quite stringent rules with regards to trade register registrations for Limited Partnerships. This creates an unnecessary workload for the partners, restricts the transferability of partnership interests, and may act as an entry barrier for foreign management companies who are interested in establishing Private Equity funds in Finland.

3.5 Denmark

3.5.1 Tax

Danish Limited Partnerships are tax transparent and generally do not create a permanent establishment for foreign investors (EVCA, 2008). Nordic Innovation Centre (2009) state that

"under the current legislation neither Danish nor foreign investors will be taxed on the income derived from the limited partnership in Denmark" (p. 32). According to a 2001 ruling from the Danish National Tax Assessment Board, if the only activity of the Limited Partnership is to invest in companies by acquiring shares, this does not in itself qualify as "carrying on business" and thus does not create a permanent establishment for the fund. Thus, dividends and capital gains from the Danish Limited Partnership are only taxed on the investor level in the investor's home jurisdiction, as if the investor had invested in the portfolio companies directly.

However, Denmark has enacted rules that imply that the partnership may lose its tax transparency if a majority of the investors for local reasons treat the partnership as a tax subject. The Limited Partnership may also lose its tax transparency if the majority of the investors are resident in non-treaty states (Nordic Innovation Centre, 2009).

To summarize, the Danish tax situation should not be an obstacle for foreign investors when investing in a Private Equity fund set up as a Danish Limited Partnership. This is also the general findings of a report made by the Nordic Innovation Centre (2010). They state that "In Denmark, the role of foreign investors has been generally stronger than in the other [Nordic] countries" (p. 10). The Danish Venture capital Association, (DVCA, 2008), also states that "The Danish limited partnership is also very similar to the investment vehicles used abroad, with which investors are familiar and therefore feel more comfortable." (p. 14).

3.5.2 VAT

Management services to Private Equity funds in Denmark are exempt from VAT. According to the EEC VAT Directive, exemptions from VAT apply for "transactions, including negotiations, excluding management and safekeeping, in shares, interests in companies or associations, debentures and other securities". According to Nordic Innovation Centre (2009), management services provided to Private Equity funds will most likely be considered as "negotiating in shares" and cannot be characterized as management. Thus, the management fees paid by the Private Equity fund are exempt from VAT.

3.5.3 Regulatory considerations

There are no significant legal obstacles for Danish Private Equity funds structured as Limited Partnerships. Most Danish Limited Partnerships are regulated by common law and not by the Danish Companies Act. Thus, there are no regulations that cannot be set aside by the

partnership act (Nordic Innovation Centre, 2009). However, Nordic Innovation Centre (2009) points out that the fact that the Limited Partnerships are regulated by common law, may present an uncertainty for foreign investors.

3.6 Changes in the Nordic tax and legal environment

The comparison of the Nordic countries and the Channel Islands above is largely based on the current situation in the countries' tax and legal environment. In this section I will present the most significant changes in the tax and legal environment with regards to Private Equity that has occurred over the last 10-15 years.

In Norway, the most significant change occurred in 2004 as the Norwegian exemption method was introduced with the new tax reform. This allowed foreign investors to be exempt from Norwegian taxation (as discussed above). In addition, other minor changes have been made. As mentioned, the exemption method was changed in 2008 making 3 % of the gains and dividends from shares taxable at 28 %. The Norwegian Ministry of Finance recently announced that it would again amend this rule to only apply for dividends. This new amendment expected to enter into force in 2012 at the earliest (BA-HR, 2011).

In Finland, the Income Tax Act was amended in 2006. This amendment secured that Finish limited partnerships carrying on venture capital investments no longer constituted permanent establishment for the investors (Nordic Innovation Centre, 2009).

As mentioned, the Swedish authorities have recently amended the legislation that makes Swedish limited partnerships tax transparent for corporate investors within the EEA. Before this change, there have been few changes with significant impact for the Private Equity industry. In 2003/2004 gains from the sale of unquoted shares was exempted from taxation for Swedish limited liability companies enabling Private Equity funds to be established as Swedish limited liability companies (personal communication with Martin Nilsson, Partner Mannheimer Swartling, May 5, 2011).

3.7 Other explanations

From the above analysis, it is apparent that most of the Nordic countries do not have a tax and legal environment that is well suited for accommodating international Private Equity

investors. This supports the theory presented in section 2 that the decision to domicile Private Equity funds outside the Nordics depends on whether or not the Fund Managers are targeting international investors. In order to attract international investors, Nordic fund managers must use well known and suitable jurisdictions. This is due to the risk of double taxation, aversion for unknown and untested tax and legal environments and unknown fund structures.

Before I can formulate a hypothesis that can be tested with the empirical data, I will discuss whether Nordic Fund Managers may have other incentives to domicile Private Equity funds in foreign jurisdictions apart from facilitating for international investors.

3.7.1 Is tax planning an issue?

The fact that Jersey and Guernsey are low tax jurisdictions with light regulation may raise the question whether Nordic Fund managers have other incentives to domicile funds in these jurisdictions, apart from fulfilling the needs of international investors. According to Nordic Innovation Centre (2009), the Swedish Private Equity industry has been under media scrutiny for this reason. The "popular belief" is that the funds are domiciled in these jurisdictions for tax planning reasons (Nordic Innovation Centre, 2009). In this section I will explain why this is not a valid explanation, as the fund managers have no tax incentives per se to incorporate Nordic Private Equity funds in these jurisdictions.

Private Equity funds are usually set up as tax transparent structures which mean that the fund itself is not a separate entity for tax purposes. Thus, for the domestic investor (e.g. the fund manager), it is irrelevant for tax purposes where the fund is incorporated. Profits realized from the portfolio companies are passed through the fund to the funds partners and taxed on the partner level. Since the domestic fund manager or LP is not paying any taxes on the fund level, the fund manager has no personal tax incentives of incorporating the fund in a foreign jurisdiction such as the Channel Islands. The fundamental difference for a foreign investor is that if the foreign investor is deemed having permanent establishment in the country were the fund is domiciled, he will be taxed according to that country's tax laws in addition to the tax law of his home country.

To clarify, consider the following hypothetical example. A Norwegian fund manager manages a Private Equity fund incorporated in Norway. The fund's assets consist of shares in portfolio

companies located in Norway, Germany and on the Cayman Island. As the fund realizes the investments and distributes the proceeds to its Norwegian partners, the profits derived from the Norwegian and German portfolio company are not subject to tax due to the Norwegian exemption method. The proceeds from the Cayman Island based company are taxed at 28 % at the partner level, as Cayman Island is regarded as a low tax country in the Norwegian tax law and is thus not comprised by the Norwegian exemption method. If the fund manager had domiciled the fund on the Channel Islands instead, the taxation of the profits would be exactly the same. Whether the Norwegian exemption method applies is determined by where the company from which the profits are derived is located. Domiciling the fund on the Channel Islands does not change this.

Thus, from a domestic point of view, there are no tax incentives to use foreign jurisdictions as the fund itself is not a separate taxable entity. The same would also apply for domestic funds in Sweden, Finland and Denmark (personal communication with Martin Nilsson, Saana Lindqvist and Anders Endicott Pedersen, 20 - 31 May, 2011).

3.7.2 Administrative support functions

The fact that the Private Equity industry is not very developed in the Nordic countries may also be an obstacle for setting up Private Equity funds in the Nordic countries. This is partly due to the fact that the Nordic countries are regarded as immature and unknown as discussed earlier. However, it is also due to the lack of experienced and specialized administration and support functions such as fund administrators, accountants and lawyers. The actual administration of the fund is usually done by a professional board to which the Private Equity Company provides investment advice. According to BA-HR (2009), these specialized administrative support functions are almost non-existent in Norway.

BA-HR (2009) emphasizes that this is mainly a concern for international investors. In jurisdictions such as Jersey and Guernsey, these fund administrators are subject to regulatory oversight by the authorities which provides international investors with added safety when investing in funds domiciled in these jurisdictions. However, a Nordic Private Equity Fund with solely domestic investors would usually not incorporate in these jurisdictions just to gain access to these administrative support functions as it alone would not justify the added costs of foreign incorporation (personal communication with Arne Trondsen, Partner Hitecvision, 7 June, 2011).

3.8 Summary

To which extent the Nordic countries fulfill international investor's expectations with regards to tax and legal requirements are summarized in table 1. In the table, the Channel Islands Jersey and Guernsey and the Nordic countries are benchmarked against the four most important criteria's for international Private Equity investors.

It is clear that the Norwegian, Swedish and Finish tax and legal environment does not fulfill the expectations of international Private Equity investors. We can also see that Denmark is a clear exception from the other Nordic countries. While the other Nordic countries have limitations on at least one requirement, there are no material misalignments between the requirements of international Private Equity investors and the Danish tax and legal environment.

Regardless of the extent the Nordic countries fulfill international investors' expectations with regards to the tax and legal treatment of Nordic Private Equity fund, the lack of trust and the habit for using foreign jurisdictions such as the Channel Islands remains a major obstacle for Nordic domiciled Private Equity funds (Nordic Innovation Centre, 2009).

3.8.1 Hypothesis

The theory presented in section 2 showed that international Private Equity investors have clear requirements and expectations with regards to the tax and legal environment in which a Private Equity fund operates. The subsequent analysis in this section showed that most Nordic countries' tax and legal environment do not fulfill these requirements. In addition, international investors value stable and known jurisdictions with a well experienced administrative support industry. These requirements are generally not satisfied by the Nordic countries. I also showed that Nordic Private Equity funds that are not targeting international investors have no significant incentives to use foreign fund structures.

Thus, the conclusion from the qualitative analysis is that the determinant of the choice of where a Nordic Private Equity fund is to be domiciled is mainly based on whether the fund is targeting international investors or not.

To test the conclusion from the qualitative analysis above, I thus formulate the following hypothesis to be tested using empirical data:

Hypothesis 1: Nordic Private Equity funds with an international investor base is more likely to be domiciled in a foreign jurisdiction than in a Nordic country

4 Data

In this section I will explain the data set used to test the hypothesis empirically. I will explain how the data was obtained and check whether it is representative for the Nordic Private Equity industry. Then I will define the dependent, independent and control variables. This section concludes with a presentation of the summary statistics.

4.1 Data sources and sampling

One of the virtues of being a private company compared to a public company is that there are fewer requirements for disclosing information to the public. For this reason, obtaining sufficient data on Private Equity funds for research is challenging.

To establish a data set for this thesis, I was granted access to an internal data base of a Nordic LP (hereafter referred to as "Source LP") under strict confidentiality containing information on Nordic Private Equity funds. Close to 300 Nordic Private Equity funds were examined, of which over half were discarded as they lacked too much information. The funds that were included in the data set either had sufficient information or I was able to find the missing fund data by combining the information with publicly available information from fund managers web sites, company and trade registers and other sources. In total I was able to build a data set with 122 Private Equity funds managed by Nordic fund managers.

Thus, the data sample was not drawn completely at random from the Nordic Private Equity funds population, as the availability of information determined whether a fund was included in the data set or not. For this reason, I will start by checking the representativeness of the data set and possible selection biases.

4.2 Representativeness and possible selection biases

To check for representativeness of my data set and detect possible selection biases, I have compared my data set with the Argentum Market Database, which is a publicly available Private Equity database (Argentum, 2011a). Argentum is a Norwegian state owned asset manager specializing in Private Equity funds, and has about 6.5 billion NOK (about MEUR 800) in assets under management (Argentum, 2011b). The Argentum Market Database has a

good coverage of the Nordic Private Equity industry and lists 148 fund managers managing 426 Nordic Private Equity funds at the time of writing. Too see whether my data set is representative, I have compared my data set with the Argentum Database on several key metrics. The comparison is summarized in table 2.

In my data set, 20 % of the fund managers are from Finland, 20 % from Denmark, 26 % from Norway and 35 % from Sweden. In the Argentum database, the distribution is 16 %, 20 %, 31 % and 34 % for Finland, Denmark, Norway and Sweden respectively. Apart from a higher number of Finish fund managers and a lower fraction of Norwegian fund managers, my data set closely resembles the Nordic geographic distribution of fund managers.

With respect to fund vintage, my data set also closely resembles the Argentum database. My data set has fewer observations of fund vintages between 1995 and 1999, and somewhat more observations of vintage funds between 2000 and 2004.

With respect to fund size, my data set deviates more from the Nordic Private Equity environment. While about 43 % of the Nordic funds are smaller than MEUR 50, these funds only account for 15 % of my data set. Fund sizes MEUR 100 to MEUR 999 and larger than MEUR 1000 accounts for 52 % and 8 % of my data set, while they only account for 31 % and 3 % in the Nordic Private Equity industry. Note, however, that only about 75 % of the funds in the Argentum database have disclosed their fund size, and thus 102 observations are blank.

I have also checked my data sets representativeness with respect to fund category. My data set has a higher number of buyout funds relative to venture capital funds, while the opposite is true for the Nordic industry.

My data set seems to be somewhat biased towards larger funds and as a result of this towards buyout funds which tend to be larger. The most likely explanation for this is that larger funds tend to be subject to more scrutiny which makes it easier to find more information about these funds. There also seems to be a small bias towards more recent funds, as my data set includes a smaller proportion of old vintage funds. Again, the most likely explanation is that it's more difficult to fund information on older funds, and thus a larger proportion of older funds are excluded from my data set.

4.3 Definition of jurisdiction

JURISDICTION is the variable for where the fund is incorporated and is also the dependent variable. This was also the information that was the most difficult to obtain for each fund. For some funds, information about jurisdiction was available in the data provided by the source LP, while for the majority of the funds I had to investigate alternative sources. Often this information was also undisclosed on the fund managers web site, but the fund name abbreviation would give a further hint on where it was established. For example the abbreviation "K/S" would indicate that the fund was a Danish limited partnership (Kommandittselskab) and the abbreviation LP suggested that it was a foreign limited partnership. For confirmation I searched the public company registers of the different countries and cross checked the date the fund was established with these registers.

A total of 9 different jurisdictions were identified among the 122 funds. 69 of the funds were established in a Nordic country, while the remaining 53 were established outside of the Nordics. The five jurisdictions identified outside the Nordic countries were Jersey, Guernsey, Delaware (US), the Netherlands and UK. Out of the 53 funds not established in the Nordics, 47 of the funds were either established on Jersey or Guernsey.

To simplify the analysis, I will limit the distinction in jurisdiction between Nordic and non-Nordic funds. As the foreign jurisdictions are not significantly different from each other, I do not believe that grouping them together will weaken the analysis. An article published in a special report on the Channel Islands from Private Equity News Wire (Gray, 2008) states that there are only small differences between Jersey and Guernsey with regards to the tax and legal environment for Private Equity funds. In addition, most fund administration firms such as custodians, administrators and law firms are usually located on both islands, providing the same service. Thus, the distinction between Jersey and Guernsey is most likely a matter of taste, habit and other qualitative factors that are difficult to quantify. 6 funds out of the sample of 122 funds are not established in either the Nordics or on the Channel Islands. However, as the fund managers of these funds have decided to establish the funds in a foreign jurisdiction, they most likely share common features with Jersey and Guernsey, and I will therefore not explore this matter further.

By distinguishing only between whether a fund is established within or outside the Nordics, the variable JURISDICTION is a dichotomous variable that can assume two outcomes. Funds

established outside the Nordics will take the value 1, and funds established within the Nordics will take the value 0.

4.4 International investors

My hypothesis states that whether a fund is established within or outside the Nordics is determined by whether the fund is targeting international investors or not. To capture this, I calculate the percentage of foreign limited partners out of the total LPs in each fund. However, getting information on LPs has been challenging as this information is often strictly confidential. There are certain weaknesses in the data that I need to point out.

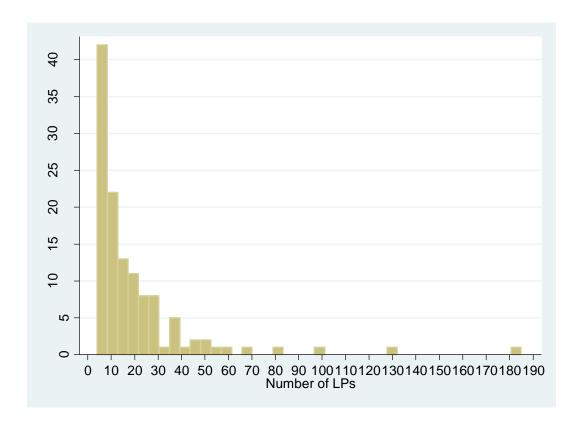
As mentioned, my data set contains extensive fund data on 122 Nordic Private Equity funds, provided by the source LP under confidentiality. However, as information about the LPs is very sensitive, the data provided to me was incomplete for many funds and there were large variations in how many LPs that were disclosed for each fund.

The varying degree of information on the LPs is a challenge. I was able to obtain the names of 2776 LPs invested in the 122 funds in the data set, from which I was able to determine the country of residence of 2445 LPs. Some funds had information on hundreds of LPs while for other funds, only a single LP was disclosed. There is no information on how many LPs that are invested in each fund. In other words, I do not know how large the fraction of the 2776 LPs is of the total investor population of the 122 funds.

The source LP that provided me with the fund data informed me that for the funds in which it was itself a LP, the disclosed LPs should constitute the entire LP base for that fund. My source LP is or has been an investor in 33 of the 122 funds in the data set. Out of these funds, the fund with the smallest investor base had 11 LPs while the fund with the largest investor base had 252 LPs. The average and median number of LPs in the funds where the source LP has invested is 45.75 and 30 LPs respectively. Thus, there is a very large spread in the number of LPs invested in each fund.

In order to get a somewhat meaningful fraction of foreign LPs in each fund, I had to decide on a minimum number of LPs needed in order for the fund to be included in the data set. Obviously stating that the fund has a 100 % foreign or domestic investors based on the information on a single LP would not be meaningful. As a result of this, there was a trade off in choosing how many funds to include in the data set based on where to set the threshold

for minimum number of LPs to be included for each fund. I set the limit to at least 4 LPs with known country of residency for each fund which resulted in 122 funds. In order to test the robustness of the empirical results, I will also increase the threshold to 10 LPs per fund, which reduces the sample size to 75 funds. The histogram below illustrates the trade-off between the number of funds and choosing the minimum number of LPs per fund. The horizontal axis shows the number of LPs in each fund. Each bar shows how many funds (frequency) that have the respective number of LPs disclosed. As seen from the figure, raising the minimum requirement from 4 LPs to 10 LPs reduces the sample size considerably.



As mentioned, the theory presented earlier states that Nordic Private Equity funds targeting international investors are more likely to be established outside the Nordics. However, the term "foreign" or "international" is not defined. With regards to taxation, investors within the EU/EEA should in theory be treated equally even though they are from different member countries. Free movement of capital is one of the EU/EEA's four ground pillars and discriminating tax treatment is prohibited. Thus, one should not expect taxation to be an obstacle for at least pan-European Private Equity investment. Yet, as discussed in section 2, several reports states that this only holds in theory and that there are in fact significant obstacles for pan-European investment. As mentioned, countries have different practices

with regards to when a fund is considered to have permanent establishment in the country, which is a source for double taxation of Private Equity investors (Venture Capital Tax Expert Group, 2010). Also, other obstacles to transnational Private Equity investment such as legal issues and trust often make locally established funds unattractive, even for investors within the EU/EEA.

I have created two variables that measure the fraction of foreign LPs in each fund. The variable LPE treats only investors residing outside the EU/EEA as foreign investors, while the variable LPL treats all investors who are not from the same country as the fund manager as foreigners. The variables measure the percentage of foreign investors in 10 % increments.

4.5 Control variables

I control for fund characteristics such as funds size, the funds geographical investment strategy and fund category, in addition to time controls. These are variables that indirectly may affect the decision on where the funds are domiciled, and thus they need to be controlled for to infer the effect of foreign investors on where the funds are domiciled.

4.5.1 Fund size

Fund size measures the committed capital of a fund. All fund commitments have been converted to millions of Euros. It is likely that larger funds have more international investors than smaller funds, which again should have an effect on the jurisdiction decision. To make the results more robust, I will therefore control for fund size.

4.5.2 Location focus

Fund managers have different focus with regards to in which geographical areas they intend to invest. There are several reasons why we need to control for this. First, as mentioned in section 3, the conditions for the Norwegian exemption method depend on where the portfolio companies are located. A fund investing in companies located outside the EEA or in low tax countries will lead to investors not being exempt from taxation when these investments are realized. Second, the Venture Capital Expert Group (2010) state that as investing in foreign securities requires research, advisory and managerial activities carried out by the fund manager, these activities could lead to the host country deeming the fund and its investor having permanent establishment in the country. Thus, funds with cross-border investment activities could be expected to be more often established in foreign jurisdictions in order to mitigate this problem (Venture Capital Tax Expert Group, 2010).

To control for this I have created two variables, LEUR and LNORDIC. LEUR is a wider variable than LNORDIC in the sense that it takes the value 1 if the fund is investing in companies outside the EU/EEA and 0 if not. LNORDIC takes the value 1 if the fund is investing in companies outside of the Nordics. There are very few funds that only invest in the fund managers' home country and the distinction is therefore made at the Nordic level.

4.5.3 Fund category

I will also control for fund category. There are many forms of Private Equity, and the distinction is often made with regards to the characteristics of the companies in which the fund invests. The most predominant categories are Venture capital and Buyout, and these categories also make up the majority of my data set. There are a few other types of fund categories such as mezzanine capital and turnaround-funds in my data set. However, they make up such a small fraction of the sample that it is not meaningful to analyze these separately. These funds have been classified as buyout funds as this is the category with which they have the most resemblance.

4.5.4 Vintage

I will also control for the time period. Controlling for different time periods is important, as changes in policies, market sentiment and similar can bias comparisons. As discussed in section 2, there have been some changes in the tax and legal environment in the Nordic countries in the last decade. However, the changes do not appear to have affected the Private Equity industry significantly, neither positive nor negative, as they generally have not solved the inconsistency with regards to international investors expectations. Instead I will control for time periods with different demand for Private Equity. When market conditions change, comparisons between funds may not be meaningful without controlling for when the funds were established. The hypothesis states that the decision on where the fund should be incorporated is based on investor's expectations and preferences. However, the investor's ability to dictate terms is likely to vary with the investment climate. Several authors have pointed out that the Private Equity indeed is very cyclical with clear booms and busts (Kaplan & Stromberg, 2009). To control for these differences, I have created 5 time period dummy variables. TIME1 takes the value 1 if the fund is established before 1999. This was a period when the Nordic Private Equity industry was relatively young and with little activity compared to the last decade. TIME2 takes the value 1 if the fund is established during the boom years of 1999 and 2000. TIME3 takes the value 1 if the fund is established in the bust period of 2001 to 2004. TIME4 takes the value 1 if the fund is established during the boom years of 2005 and 2006, while TIME5 takes the value 1 if the fund is established in 2007 or later, when the Private Equity industry again was in decline. The time variables take the value 0 if the fund is not established within the specified time period.

4.6 Summary statistics

Table 5 presents the summary statistics of the sample and provides a first look at the distribution of incorporation and the independent variables vary with the dependent variable.

Panel A shows the data set contains 122 fund managed by 46 different fund managers and Panel B shows the home country of the fund managers. Sweden has the highest fraction of fund managers (36 %), which is expected as Sweden is the largest Private Equity environment in the Nordics (EVCA, 2010c).

Panel C breaks the funds down into whether a fund is incorporated in a Nordic country or outside the Nordics (labeled as foreign). We see that 43 % of the funds are not incorporated in a Nordic country. Another interesting observation is that there are quite large differences between the Nordic countries. The majority (76 %) of funds managed by Swedish fund managers are incorporated outside the Nordics, while all of the Danish funds are incorporated in a Nordic country. This observation strengthens the plausibility of my hypothesis. As discussed in section 3, the Danish tax and legal environment is well aligned with international investors' expectations. The Swedish tax and legal system has several characteristics that make it less attractive for international Private Equity funds. In addition, the Swedish Private Equity industry is more mature compared to the other Nordic countries. Thus, the Swedish Private Equity industry may have had a longer time to adapt to the market standard of using foreign jurisdictions such as the Channel Islands.

Panel D shows the percentage the funds LPs that are foreigners. What constitutes a foreigner is defined in two different ways. Non-local investors are all LPs that are not from the same country as the fund manager. Non-EU/EEA investors are all LPs from countries outside the EU/EEA. Aggregated, we see that on average 39 % of the LPs are not from the

same country as the fund manager, while an average of 12 % of the LPs are from countries outside the EU/EEA. The median for the aggregated numbers is 33 % and 0 % respectively.

Again, I break the numbers down to whether the fund is established within or outside the Nordics. There are notable differences. The percentage of foreign investors on both metrics is considerably larger for foreign funds than for funds established in the Nordics. The average and median non-local investors for funds established outside the Nordics is 64 % and 70 % respectively, compared to 21 % and 14 % for funds established in the Nordics. When measuring foreign investors as investors from countries outside the EU/EEA, the average and median foreign investors is 24 % and 16 % for funds established outside the Nordics. For funds established within the Nordics, the average and median is only 3 % and 0 % respectively.

Panel E provides statistics on fund size. All fund sizes have been converted to millions of Euros to make the numbers comparable. The panel consists of three columns which provide fund size statistics for the full sample, all funds established in Nordic countries and all funds established in non-Nordic countries respectively. From the aggregated numbers, we can see that the median fund size is MEUR 126 and the average fund size is MEUR 353. There is also a large difference between the smallest and the largest fund. The largest fund in the sample is MEUR 4300 while the smallest is MEUR 5.

When breaking down the numbers to where the funds are established, there are notable differences. The funds established outside the Nordics are considerably larger both measured by average, median and maximum fund size. The minimum fund size is roughly equal for both Nordic and non-Nordic funds.

Panel E Location focus shows the geographic focus of the funds, i.e. in which geographical areas the fund managers have announced that the fund will make investments. The Areas are divided into Nordic, EU/EEA and Worldwide. Funds in the Nordic category only invest in Nordic companies, while funds in the EU/EEA or World Wide category also invests in these areas. The number of funds is higher than the total number of funds in the sample, as some funds are double counted (for example investing in both the EU/EEA and outside the EU/EEA).

Panel E shows the number of funds in each category. The number is also broken down to show the same statistics for funds established within and outside the Nordics respectively. The panel shows that the majority of the funds in the data set are focused on investments in the Nordic countries exclusively. 59 % of the funds are placed in the Nordic category, while funds also investing within the EU/EEA and worldwide account for 32 % and 10 % of the data set.

The statistics also show that whether a fund is investing outside the Nordic countries is positively correlated with foreign incorporation and vice versa. 69 % of the funds that are investing worldwide are established outside the Nordics, while 65 % of the funds that are only investing within the Nordics are established within the Nordics.

Panel D shows the vintage statistics of the data set. We see that the fraction of funds incorporated outside the Nordics increases with the time periods from 33 % in Time1 to 57 % in Time5. We also see that the oldest fund in the data set was established in 1989 while the youngest fund was established in 2009.

5 Methodology

In this section, I will discuss the methodology and the empirical strategy used in the upcoming analysis.

5.1 Binary logistic regression

I have defined the dependent variable, JURISDICTION, as a binary variable that takes the value 1 if the fund is incorporated outside the Nordics and 0 if incorporated within the Nordics. When the dependent variable is discrete, linear models such as OLS regression have certain drawbacks (Wooldridge, 2009). First, the predicted probabilities can take values greater than one or less than zero. Second, the marginal partial effects of the coefficients are constant.

To overcome these shortcomings, I will use a binary response model as explained in Wooldridge (2009). A binary response model estimates the probability of an outcome, given the explanatory variables. The estimated probability of the outcome is known as the response probability:

(1)
$$P(y = 1|x) = G(\beta_0 + \beta_1 x_1 + \dots + \beta_k x_k)$$

P is the response probability of the outcome "1" given the explanatory variables x_k with coefficients β_k , and G is a function that always takes values between 0 and 1 for all real numbers z.

To ensure that the predicted probabilities are always between 0 and 1, the function G in the logit model is

$$G(z) = \frac{e^z}{1 + e^z}$$

where z is a real number.

For the analysis, we are interested in the effect a change in an independent variable, x, has on the probability of Y. However, the logit coefficients cannot be interpreted in the same way as in OLS regression due to the non-linearity of G. The result of G not being linear is that the marginal partial effects of the coefficients are not constant. Thus, the marginal effect caused by a change in one independent variable has on Y depends on the level of all the other independent variables. According to Wooldridge (2009), two different approaches are usually used when reporting logit model coefficients; the partial effect of the average (PEA) or the average partial effect (APE).

PEA is computed by setting all independent variables at their sample average. The idea is that we now have the "average" observation in the sample, and the reported coefficients are the marginal effects of the independent variables around this average. However, if the model includes discrete or dummy variables, this approach is not ideal. By setting a dummy variable at its average leads to an observation in the sample that does not exist, as all dummies are either 0 or 1.

To remedy this, we can use the APE approach instead. The APE approach calculates the average marginal effect across the sample. Thus, the coefficients presented are the average coefficients for all sample values of x. I will use the APE approach when I present the marginal effects in the upcoming analysis.

A benefit of logistic regression is that conditions such as normally distributed data and equal variance and covariance do not need to be fulfilled for the regression to be valid. The only

assumption underlying logistic regression is that the data is binominal distributed, implying that the same probability is maintained across the range of predictors (Peng, Lee, & Ingersoll, 2002). The assumption is generally robust as long as the data is random, i.e. the observations are independent and the sample is large enough.

Due to the fact that several of the funds in the data set are managed by the same fund manager, the assumption that the observations are independent may be violated. A closer investigation of the sample reveals that there is significant intra-group correlation in the data set, were a group is defined as funds managed by the same fund manager. This is not surprising, as it is natural to assume that the decision of where to domicile a fund will be affected by where the fund manager has domiciled previous funds. For example, if previous funds were domiciled in a foreign jurisdiction, the start-up costs for using this jurisdiction, such as familiarizing with the tax and legal environment, establishing contact with support functions, the regulators and so on, will to a large extent already have been made. It is natural to assume that the marginal cost of establishing a second fund in a foreign jurisdiction is lower than for the first fund. To remedy this, I will run the regression with standard errors clustered at fund manager level. Thus, all funds managed by the same fund manager will be considered to be within the same group. Funds managed by different fund managers are assumed to be independent of each other.

5.2 The model

I run the following logit regression with standard errors clustered at fund manager:

$$JUR. = \alpha + \beta_1 * FOREIGN LP + \beta_2 * FSIZE + \beta_3 * LOCATION FOCUS + \beta_4$$

$$* FCATEGORY + \beta_5 * TIME2 + \beta_6 * TIME3 + \beta_7 * TIME4 + \beta_8$$

$$* TIME5$$

JURISDICTION, (shortened as JUR. above), is a binary variable, taking the value 1 if the fund is incorporated outside the Nordics, and the value 0 if incorporated within the Nordics. FOREIGN LP is the percentage of the LPs that are classified as foreign, and the variable used to test the hypothesis. I will test two different definitions of FOREIGN LP; a strict definition where the LP is determined to be foreign if he or she is not from the same country as the fund manager measured by the variable LPL, and a wider definition were only LPs not from within the EU/EEA are classified as foreigners measured by the variable LPE.

In addition, I will control for fund size, the funds geographical strategy with regards to investments, fund category and different time controls. FCATEGORY is measured by the variables LNORDIC and LEUR.

5.3 Empirical strategy

In this section, I will present the empirical strategy of the analysis. There are two issues that need to be discussed before I run the model; whether all the Nordic countries should be analyzed together and how to handle the different definitions of a foreign LP and Location focus.

The qualitative analysis in section 3 showed that Denmark has a well suited tax and legal environment for Private Equity compared to the other Nordic countries. In addition, from the summary statistics, we saw that none of the funds in the data set managed by Danish fund managers are incorporated outside of the Nordics. Thus, none of the independent variables will be able to explain the decision of where these funds are incorporated. This is by itself an interesting observation for several reasons. The hypothesis is based on the assumption that the tax and legal environment, in addition to lack of trust, creates an obstacle for attracting international investors to funds established in the Nordic countries. The analysis of the Nordic countries showed that the Finish, Norwegian and Swedish tax and legal environments were not aligned with the expectations of international investors. The Danish system, however, was a clear exception. In addition, the Danish tax & legal system has been relatively stable over the years (DVCA, 2008), and Danish Private Equity funds may have gained more trust among the international investors compared to the other Nordic countries. This goes a long way in supporting the hypothesis that the absence of a favorable and stable tax and legal environment is the main obstacle for attracting international investors, and fund managers from these countries have to resort to foreign fund structures.

In the further empirical analysis of the hypothesis, it will make sense to exclude the funds managed by Danish fund managers in order to get focused results. However, in order to check for robustness of the findings, with regards to significance and sign of the coefficients, I will show the results when using both data sets; with and without funds managed by Danish fund managers.

For both data sets, I will test for both definitions of foreign investor. As mentioned, I have defined a foreign investor in two ways. In the variable LPL, which measures the percentage of foreign investors in the fund, foreign investors are defined as all investors who are not from the same country as the fund manager. The variable LPE is a similar measure, but here an investor is only regarded as foreign if he or she is from a country outside the EU/EEA. As the variables LPL and LPE are heavily correlated (see the correlation table provided in table 4), I will run three different applications of the model. In model 1 and 2, LPL and LPE are included separately. In model 3, both variables are included.

A similar distinction is made for the funds geographical investment strategy. LNORDIC is a dummy variable taking the value 1 if the fund is investing in companies outside the Nordics and 0 if the fund is only making investments within the Nordics. LEUR takes the value 1 if the fund is making investments outside the EU/EEA and the value 0 if the fund is investing only within the EU/EEA. In the same way as the variables LPL and LPE, I will include LNORDIC and LEUR separately in model 1 and 2. In model 3, both variables are included.

6 Results

In this section I will present the empirical results and the analysis of the hypothesis.

Before I run the logit model, I will test each variable independently against the dependent variable JURISDICTION. This is to see the effect on each variable independently before applying them all together. The summary statistics of the independent variables for different jurisdictions of incorporation is presented in table 6. Panel A shows the summary statistics when the entire data set is being used, while in Panel B, the funds managed by Danish investors have been removed. In both panels, the first column shows the number of funds, the variable mean and standard error for the full sample. In the second and third column, the funds are broken down into whether they are incorporated in the Nordics or outside the Nordics. The fourth column shows the results of a variance-comparison test and a mean-comparison test.

The results in both panels are similar, but the differences are more magnified when the Danish funds are excluded. This is as expected, as the Danish funds, being solely domestically incorporated, dilute the results. First we note that the mean percentage of non-local LPs in

funds incorporated outside the Nordics compared to Nordic incorporated funds is roughly 40 percentage points higher. The LPL mean increases from about 20 % to 60 % when funds are incorporated in a foreign jurisdiction. This result is strongly significant at the 1 % level and applies for both data sets. Second, non-EU/EEA investor's increases from almost zero for Nordic incorporated funds to a mean of almost 25 % for foreign incorporated funds. This difference is also significant at the 1 % level, regardless if we exclude the Danish funds or not.

We also note that the control variables FSIZE, LNORDIC, LEUR and FCATEGORY are significant for both data sets. Funds incorporated outside the Nordics are on average 6 times larger than Nordic incorporated funds. The probability of investing in companies located outside the Nordics increases from about 25 % to about 47 %, while the probability of investing in companies outside the EU/EEA increases from about 7 % to 17 %. Also, the fraction of buyout funds to venture capital funds increases from 45 % to 75 % when incorporated outside the Nordics.

The time variables TIME2 and TIME5 are significant at the 10 % level and 5 % level when the Danish funds are excluded. If we include the Danish funds then only TIME5 is significant and now only at the 10 % level. This tells us that 20 % of the Nordic incorporated funds are established in the time period 1999-2000, while only 9 % of the foreign incorporated funds are established within the same time period. 30 % of the foreign incorporated funds are established in 2007 or later, while for Nordic incorporated funds the fraction is only 14 %. These findings are interesting as they may indicate that period's with especially high and low demand for private equity may affect the relative number of funds incorporated in the Nordics relative to outside the Nordics. The period 1999-2000 were the peak years before the dot-com bubble, while in 2007-2009 we experienced one of the most severe downturns after World War II due to the financial crisis. From this we might infer how the relative bargaining power of the fund managers relative to the investors shifts with the business cycle and how this affects the ability to raise capital from foreign investors for Nordic incorporated funds. When demand for private equity is high, Nordic incorporated funds may have a higher ability to raise funds from foreign investors despite unfavorable tax and legal environments and vice versa.

The results presented in table 6 provide a first look how the fund characteristics interact with the dependent variable jurisdiction. As a next step, I have run the logit model specified in section 4. This allows us to see how the percentage of foreign LPs in a fund interacts with jurisdiction while controlling for all other variables that are likely to affect the location of incorporation. The results are summarized in table 7. In Panel A, all the funds managed by Danish fund managers have been excluded, while in Panel B the entire data set is used. The table presents the marginal effects and the standard deviation of each variable. Significance is indicated by stars where one, two and three stars indicate significance at the 10 %, 5 % and 1 % level respectively. Three different applications of the model are run for each data set, as explained in section 4, and presented in the three columns labeled as Model 1, Model 2 and Model 3.

The results show that the measure of foreign investors is positive and significant at the 1 % level, regardless of how foreign investor is defined. The results are not changed if we include the Danish funds in the data set. This implies that incorporating a Nordic Private Equity fund in a foreign jurisdiction is more likely when the fund is targeting international LPs. Thus, the hypothesis is confirmed.

Looking at the marginal effects gives us more information on the magnitude. We can see that the average marginal effect of a 10 % increase in non-local LPs increases the probability of a fund being incorporated outside the Nordics by 6.7 % in Model 1 and 6.4 % in Model 3. The effect of a 10 % increase in non-EU/EEA investors increases the probability by 11.8 % in Model 2 and 1.2 % in model 3 where the effect of increases in non-local investors is already accounted for. The results are robust when we increase the data set to include the Danish Funds as well. The marginal effects are as expected lower, but in most cases only by a few decimal points.

There are several interesting issues to point out from these results. First, LPL, the most stringent definition of what constitutes a foreign investor, is significant and positive. Second, when both LPL and LPE are included together in model 3, the marginal effect of LPE is only 1.2 %. This tells us that as soon as the fund manager is targeting investors outside his home country, the probability of the fund being incorporated in a foreign jurisdiction increases significantly. This probability is only marginally higher if the targeted investors are from

outside the EU/EEA. There may be two different ways of interpreting this result. First, the free movement of capital, which is one of the corner stones of the EU/EEA, has not had a significant effect on European Private Equity investment. This supports the issue stressed by the ECVA and the EU Venture Capital Tax Expert Group, that there exist significant obstacles for pan-European Private Equity investment today (EVCA, 2010b; Venture Capital Tax Expert Group, 2010). Second, if a Private Equity fund is trying to raise international capital, it may find it most beneficial to use a foreign structure regardless of which investors it is targeting. This way, the door is left open for investors outside the EU/EEA as well. These two interpretations do not have to be mutually exclusive.

To conclude, I have found a significant relationship between Nordic Private Equity funds fraction of foreign investors and were the funds are incorporated. A higher percentage of foreign investors increase the likelihood of the fund being incorporated in a foreign jurisdiction. How we define the investor to be foreign has little effect on the findings.

7 Robustness and extensions

In this section I will test for the robustness of the results presented in the previous section. I will also investigate the effect a positive tax change in Finland has on Finish funds ability to attract foreign investors.

7.1 Increasing the number of LPs

The way the percentage of foreign LPs is measured in the variables LPL and LPE may have an effect on the results. As discussed in section 4, there are several weaknesses in the data on the LPs. Except for the 33 funds in which the source LP itself is or has been an LP, the total number of LPs in each fund is unknown. Out of the sample with a known size of the LP population, the median number in each fund was estimated to be 30 LPs.

Due to the varying number of LPs disclosed per fund, I was faced with a trade-off between getting a sufficiently large sample size and setting the limit on how many LPs that should at the minimum be disclosed per fund. Ideally, I would use only funds in which the source LP is invested. In these funds, I have been confirmed that the LP information is complete. However, as these funds only account for 33 out of the 122 funds in the sample, the sample size would be too small. The sample size of 122 funds was obtained by setting the limit to 4 LPs per fund.

Too check the robustness of the results presented in section 6, I try increasing the limit to 10 LPs per fund. This reduces the sample size to 75 or 69 funds depending on whether the Danish funds are excluded or not. The logit model with standard errors clustered at fund manager is employed on the two reduced data sets and the results are presented in table 8. Panel A and Panel B shows the results without and with the Danish funds respectively. The dependent variable is still JURISDICTION which takes the value 1 if the fund is incorporated outside the Nordics and the value 0 otherwise.

From the results we see that the variables LPL and LPE are still significant and positive when the number of LPs in each sample is increased from 4 to 10. The results are not significantly different whether we include the Danish funds or not. The marginal effects of LPL are somewhat lower, ranging from 4.5 % to 5.5 % for a 10 % increase in non-local LPs, depending on whether LPL is tested alone or together with LPE. LPE is now no longer significant together with LPL. Thus, it is unclear whether there is any added probability of foreign incorporation if the LPs are from outside the EU/EEA.

We may conclude that the results are robust when we increase the number of LPs from 4 to 10 LPs and the hypothesis is still confirmed.

7.2 Effects of a policy change

In this section I will test for whether a positive change in the tax and legal environment has an effect on the fund manager's decision on where to incorporate their private equity funds. As stated in section 2, the main reason for why foreign investors are unwilling to invest in Nordic incorporated private equity funds is the tax and legal environment and lack of trust. By examining a positive shift in the tax and legal environment in Finland in 2006, we might infer whether it is the tax and legal system per se or the lack of trust that is the main obstacle for international investors.

As mentioned in section 3, the tax and legal environment affecting Private Equity in the Nordic countries has been subject to some changes in the period we are looking at. However, most the changes have not significantly improved the tax and legal environment for Private Equity. Often the changes have solved one problem only to cause new obstacles for international Private Equity investments. Thus, the changes may even have been

counterproductive as they add to the perception of instability and complexity of the Nordic tax and legal environment.

However, the change in the Finish Income Tax Act was an exception. When the Finish tax Income Tax Act was amended it resulted in Finish Limited Partnerships conducting venture capital investments no longer constituted permanent establishment for its investors from tax treaty countries (Nordic Innovation Centre, 2009). This resulted in foreign LPs no longer being liable for Finish taxation on gains from Finish Private Equity fund.

The change in the Finish Income Tax act should thus provide the highest potential with regards to improving the environment for Nordic incorporated Private Equity funds. To test the effect the policy change has had on incorporation, I will use the difference in difference methodology presented in (Wooldridge, 2009). The methodology is well suited for testing the effect a change in policy has on the dependent variable JURISDICTION.

Calculating the difference in difference is done in the following way. I calculate the mean number of funds incorporated outside the Nordics before and after the policy change for all Finish funds. The Finish funds are defined as the treatment group, as these are the funds that are subject to the policy change. I also calculate the mean number of Norwegian and Swedish funds that are incorporated outside the Nordics before and after the policy change. I do not include the Danish funds as they are all domestically incorporated. As the Norwegian and Swedish funds are not subject to the policy change, these funds are defined as the control group. The estimator is calculated by subtracting the difference in mean of the treatment group and the control group before the policy change (treatment), from the difference in the mean of the treatment group and control group after the policy change (treatment). The period before the policy change is all funds established before 2006 and the period after the policy change are all funds established after 2006.

$$\delta_{1} = \left(\overline{JURISDICTION_{A,T}} - \overline{JURISDICTION_{A,C}}\right) - \left(\overline{JURISDICTION_{B,T}}\right) - \overline{JURISDICTION_{B,C}}$$

$$(4)$$

The difference in difference estimator is δ in equation 4. A stands for "after treatment", B stands for "before treatment", T stands for "Treatment group" while C stands for "control group".

In order to assess whether δ is significantly different from zero, we need the standard deviation of δ . Also, control variables have to be included to control for other issues that have an effect on the decision on where the funds are incorporated. This is done by estimating δ with regression analysis. Equation 4 is effectively included in the following regression model:

(5)
$$JUR. = \alpha + \beta_1 * FINLAND + \beta_2 * TREATMENT + \delta FT + CONTROLS$$

The dummy variable FINLAND will take the value 1 if the fund is managed by a Finish fund manager¹. A second dummy TREATMENT will take the value 1 if the fund is established in 2006 or later, and is otherwise 0. A third variable FT is an interaction term multiplying TREATMENT with FINLAND. Thus equation 4 can be rewritten as:

(6)
$$[(\alpha + \beta_1 + \beta_2 + \delta + CONTROLS) - (\alpha + \beta_2 + CONTROLS)] - [(\alpha + \beta_1 + CONTROLS) - (\alpha + CONTROLS)] = \delta$$

by inserting the coefficients from the model in equation 5 into equation 4. As we see, all terms cancel out except δ . If δ is significant, we can determine that the policy has had a significant effect on Finish fund managers' ability to incorporate in Finland.

The control variables include the variables on foreign LPs, fund size, location focus, fund category and the time control variables.

The results of the regression are summarized in table 9. As Jurisdiction is a binary variable, using OLS regression will not create meaningful coefficients. However, we are still able to interpret the sign and significance of the variables. From the results we see that the FT variable is positive. As the policy change has a positive effect on Finland's tax and legal environment we would assume the variable to be negative, indicating a reduced probability of foreign incorporation. However, the variable is strongly insignificant (P-value = 0.723). Thus, we cannot claim that the variable is not 0.

To test for the robustness of the difference in difference results I have also run the regression where the policy date is set one year before and one year after it came into effect in 2006. This is to account for the possibility that the policy change was anticipated or came

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¹ All the funds incorporated in Finland are managed by Finish fund managers in my data set.

unexpectedly. However, as seen in in table 9, the results are fairly unchanged by these modifications. The difference in difference estimator is still positive and insignificant.

Thus, the difference in difference test does not indicate that the policy change has had an impact on Finish funds ability to incorporate Private Equity funds in Finland. Thus, we might interpret that lack of trust from international investors is also an obstacle for Nordic funds. As mentioned earlier, perceived risks of instability is an obstacle for international investors, and policy makes need to communicate stability over time in order to gain the trust of the investors. Another explanation may be that the policy shift does not go far enough to improve the tax and legal environment for international Private Equity investors in Finland. As discussed in section 3 there are still issues in the Finish tax and legal environment that are misaligned with the requirements of the international private equity investors.

However, the result should be interpreted with caution. The data sample of funds managed by Finish fund managers is very small. There are 39 funds managed by Finish fund managers in the data set, and only 8 of these are established after 2006.

Another reason to be cautious with this result is that it only indicates that there has not been a significant change in the fraction of Finish funds domiciled in Finland compared to foreign domiciled funds. Whether this is due to inability or unwillingness to do so is not clear. As stated earlier, there is a significant intra-group correlation among the funds managed by the same fund manager, meaning that the probability of where consecutive funds managed by the same fund managers are domiciled is not random. Thus, the ability to use Finish fund structures with international investors may have improved, but Finish fund managers may still use foreign structures because of habit. Thus, it may take some years before we can see any significant changes. Since this change in the Finish tax law occurred as late as in 2006, the effect may not be reflected in the data set.

8 Conclusion

In this thesis, I show that the choice of where Nordic Private Equity funds are domiciled depends primarily on whether the fund is targeting international investors or not.

I show that international private equity investors have specific requirements with regards to the tax and legal environment in which a Private Equity fund operates in. By benchmarking these requirements with the environment in the Nordic countries, I find that the Nordic countries' (with except to Denmark) are not adapted to facilitate the needs of international Private Equity investors. This is mainly due to the tax and legal environment not being able to facilitate the requirements of international Private Equity investors, but also because international Private Equity investors lack trust in Nordic Private Equity fund structures. In addition the Nordic countries are viewed as immature and unknown in a Private Equity context. Further, I show that a Nordic Private Equity fund with solely domestic investors have little incentives to use foreign fund structures. From this I formulate a hypothesis stating that the determinant of whether a Nordic Private Equity fund is domiciled in a foreign jurisdiction is primarily based on whether the fund is targeting international investors or not.

The hypothesis is analyzed empirically by using a unique data set of 122 Nordic Private Equity funds. I find that the probability of a fund being domiciled in a foreign jurisdiction is significantly higher when the fund has a larger fraction of foreign investors. How I define foreign investor does not have a significant impact on the results. By defining a foreign investor as not being from the same country as the fund manager the results show a significant increase in the probability of using a foreign jurisdiction.

Further, I analyze a positive change in the Finish Tax and Legal environment to determine whether lack of trust is an obstacle for attracting international investors to Nordic Private Equity funds. The results show that the positive change has no significant impact on the number of foreign investors invested in Finish domiciled funds. The results can be interpreted as international investors lacking trust in the Finish tax and legal environment and Finish Private Equity funds, the change in the tax and legal environment going far enough to remove obstacles to attracting international investors or a combination of these explanations.

Tables

Table 1: Benchmark of the Tax and Legal Environment against International Private Equity investors expectations

	Tax transparency	Avoid permanent establishment	No VAT on management fees	Tailormade fund structure
Jersey & Guernsey	YES	YES	YES	YES
Norway	YES^a	NO^b	YES	NO^c
Sweden	YES	NO	YES^d	YES
Finland	YES	YES^e	YES	NO
Denmark	YES	YES	YES	YES

^aFrom 2008, 3 % of gains on shares and dividends are taxed at 28 %.

 $[^]b$ Due to the Exemption Method, foreign investors will still in most cases be exempt from Norwegian taxation

^cStructuring the fund as a silent partnership will remove certain regulatory limitations.

^dVAT on management fees are exempt if the management company is a partner in the fund.

^eAs long as there exists a tax treaty between Finland and the investors home jurisdiction.

Table 2: Representativeness of the data set

The data set is compared to the Argentum Market Data Base to check for representativeness and detect possible selection biases. The Argentum Market Data Base is a publicly available data base covering the Nordic Private Equity industry. Panel A compares geographical distribution of the fund managers. Panel B compares the funds vintage. Panel C compares the fund size measured in MEUR, and Panel D compares the fund categories.

Panel A: Fund managers		Denmark	Finland	Norway	Sweden	Total	Missing data
Dataset	Count	6	6	12	16	46	0
	8	20 %	20 %	% 97	35 %	100 %	% 0
Argentum	Count	25	31	48	53	157	0
	%	16 %	20 %	31 %	34 %	100 %	% 0
Panel B: Vintage		<1995	1995 - 1999	2000 - 2004	2005 <	Total	Missing data
Dataset	Count	33	22	42	55	122	0
	8%	2 %	18 %	34 %	45 %	100 %	% 0
Argentum	Count	18	81	113	153	365	61
	%	5 %	22 %	31 %	42 %	100 %	14 %
Panel C: Fund size (MEUR)		< 50	50 - 99	100 - 999	> 0001	Total	Missing data
Dataset	Count	18	31	63	10	122	0
	%	15 %	25 %	52 %	%	100 %	% 0
Argentum	Count	140	75	66	10	324	102
	%	43 %	23 %	31 %	3 %	100 %	24 %
Panel D: Fund category		Venture (incl. Seed)	Buyout	Total	Missing data		
Dataset	Count	51	7.1	122	0		
	%	42 %	58 %	100 %	% 0		
Argentum	Count	260	166	426	0		
	%	% 19	39 %	100 %	% 0		

Table 3: Description of the independent variables

Variable	Description
LPL	Percent of the funds limited partners that are not from the same country as the fund manager Measured in 10 % increments, e.g. $2 = 20$ %.
LPE	Percent of the funds limited partners that are not from outside the EU/EEA Measured in 10 % increments, e.g. $2 = 20$ %.
FSIZE	The funds committed capital (MEUR). Measured in increments of 100 MEUR.
LNORDIC	Dummy variable indicating whether the fund is investing in companies located outside the Nordic countries. Takes the value 1 the funds strategy is to invest in companies located outside of the Nordics
LEUR	Dummy variable indicating whether the fund is investing in companies located outside the EU/EEA Takes the value 1 the funds strategy is to invest in companies located outside of the EU/EEA
FCATEGORY	Dummy variable indicating the the fund category. Takes the value 1 if the fund is a buyout fund, and 0 if the fund is a venture capital fund
TIME1	Dummy variable that indicates whether the fund was established before 1999
TIME2	Dummy variable that indicates whether the fund was established between 1999 and 2000
TIME3	Dummy variable that indicates whether the fund was established between 2001 and 2004
TIME4	Dummy variable that indicates whether the fund was established between 2005 and 2006
TIME5	Dummy variable that indicates whether the fund was established after 2007

Table 4: Correlations

country as the fund manager. LPE defines a foreign investor if the investor is from outside the EU/EEA. FSIZE is the funds committed capital measured in MEUR. LNORDIC is a dummy variable taking the value 1 if the fund is investing in companies located outside the Nordics. LEUR is a dummy taking the value 1 if the fund is investing in companies outside the EU/EEA. FCATEGORY is a dummy taking the value 1 if the fund is a buyout fund, and 0 if the fund is a venture capital fund. TIME1 takes the value 1 if the fund was established between 1999 and 2000. TIME3 takes the value 1 if the fund was established between 2001 and 2004. This table presents the pairwise correlation of the independent variables. In Panel A, the entire data set is included with a sample size of 122 funds. In Panel B, the funds managed by Danish fund managers have been excluded, and the sample size is reduced to 109 funds. Significance is indicated by (*, **, ***, ***) for the 10 %, 5 % and 1 % level resprectively. LPL and LPE measure the percentage of foreign investors in a fund in 10 percent increments, where the variable LPL defines foreign investor as all investors not from the same

TIME4 takes the value 1 if the fund was established between 2005 and 2006. TIME5 takes the value 1 if the fund was established between 2007 and 2009.

PANEL A		(1)	(2)	(3)	(4)	(2)	(9)	E	(8)	(6)	(10)	(11)
LPL	E83	0.7595*	I	P								
FSIZE	£ (£	0.4891*	0.3154*	0.2628*	=							
LEUR	(5)	-0.1118	-0.0322	-0.0377	0.4681*	-						
FCATEGORY TIME 1	@E	0.2320*	0.2935*	0.3010*	-0.0704	-0.1382	$\frac{1}{0.2120^*}$	-				
TIME 2	8	0.1143	-0.0327	-0.0581	-0.0833	0.0232	-0.1138	-0.1616	1			
TIME 3	(6)	0.0529	0.0282	-0.0085	0.0142	0.0887	-0.1199	-0.2533*	-0.2366*	1		
TIME 4	(10)	-0.1234	-0.031	0.043	0.0613	0.0079	-0.1086	-0.2218*	-0.2071*	-0.3246*	г	
TIME 5	(II)	0.0733	0.1121	0.0871	-0.0354	0.001	0.1464	-0.2271*	-0.2120*	-0.3323*	-0.2910*	-
PANEL B		(3)	(2)	(3)	(4)	(5)	(9)	(7)	(8)	(6)	(10)	(11)
LPL	3	0.7546*	1	ä								
FSIZE	(3)	0.4889*	0.5907*	-								

PANEL B		(1)	(2)	(3)	(4)	(2)	(9)	(7)	(8)	(6)	(10)
PL	(1)	1									
PE	(2)	0.7546*	1								
SIZE	(3)	0.4889*	0.5907*	-							
NORDIC	(4)	0.1215	0.3044*	0.2719*	-						
EUR	(5)	-0.1342	-0.0499	-0.05	0.4930*	-					
CATEGORY	(9)	0.2685*	0.2881*	0.2997*	-0.127	-0.1588	-				
TME 1	2	-0.1172	-0.1097	-0.1002	-0.0044	-0.1582	0.1475	1			
TME 2	(8)	0.0979	-0.0527	-0.0723	-0.0933	0.0073	-0.0814	-0.1783	1		
TME 3	(6)	0.0707	0.0564	0.0027	0.0703	0.0987	-0.0547	-0.2588*	-0.2497*	1	
TME 4	(10)	-0.1438	-0.0418	0.0476	0.0361	0.0178	-0.1245	-0.2223*	-0.2145*	-0.3114*	1
TIME 5	(11)	0.0852	0.1221	0.0997	-0.0271	0.0094	0.1213	-0.2284*	-0.2204*	-0.3199*	-0.2748*

Table 5: Summary statistics

Summary statistics for 122 Nordic Private Equity finds managed by 46 fund managers. Panel B shows the geographical distribution of the fund managers. Panel C shows the number and percentage of funds domiciled in the Nordics and in foreign jurisdictions. Panel B shows the average and median fraction of foreign investors in the funds. Panel E shows statistics on the funds committed capital. Panel F shows the geographical investment focus of the funds. Panel G shows statistics on the different fund categories, and Panel H shows the vintage statistics, where the time periods are equivalent to those explained in table 1.

Panel B Fund Managers Panel C Jurisdiction Panel D LP location Panel E Fund size (MEUR) Panel F Location focus	Funds Fund managers Denmark Finland Norway Sweden Denmark Finland Norway Sweden Total Norway Sweden Total	122 46 Count 9 9 12 12 16 Total 13 39 25 45 122 Average Total 0.39	% 20 % 20 % 26 % 35 % Nordic 13 30 11 69 Average Local 0.21	Foreign 0 0 9 10 34 53 Average Foreign 0.64	Total 11 % 32 % 20 % 37 % 100 % Median Total	Nordic 100 % 77 % 60 % 24 % 57 % Median Local	Foreign 0 % 23 % 40 % 76 % 43 % Median Foreign 0.70
	(B)	Count 9 9 12 12 16 Total 13 39 25 45 122 Average Total 0.39	% 20 % 20 % 26 % 35 % Nordic 13 3 30 15 11 69 Average Local 0.21	Foreign 0 9 10 34 53 Average Foreign 0.64	Total 11 % 32 % 20 % 37 % 100 %	Nordic 100 % 77 % 60 % 24 % 57 % Median Local	Poreign 0 % 23 % 40 % 76 % 43 % Median Foreig
10 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -		9 9 112 16 Total 13 39 25 45 122 Average Total 0.39	20 % 20 % 26 % 35 % Nordic 13 30 11 69 Average Local 0.21	Foreign 0 9 10 34 53 Average Foreign 0.64	Total 11 % 32 % 20 % 37 % 100 % Median Total	Nordic 100 % 77 % 60 % 24 % 57 % Median Local	Foreign 0 % 23 % 40 % 76 % 43 % Median Foreig
33-351		12 16 16 16 13 39 25 45 45 45 45 0.39 0.39	20 % 20 % 35 % 35 % Nordic 13 30 11 69 Average Local 0.21	Foreign 0 0 9 10 34 53 Average Foreign 0.64	Total 11 % 32 % 20 % 37 % 100 %	Nordic 100 % 77 % 60 % 24 % 57 % Median Local	Foreign 0 % 23 % 40 % 76 % 43 % Median Forei
50.000		12 16 Total 13 39 25 45 122 Average Total 0.39 0.12	26 % 35 % Nordic 13 30 11 69 Average Local 0.21	Foreign 0 9 10 34 53 Average Foreign 0.64	Total 11 % 32 % 20 % 37 % 100 % Median Total	Nordic 100 % 77 % 60 % 54 % 57 % Median Local	Foreign 0 % 23 % 40 % 76 % 43 % Median Foreig
		Total 13 39 25 45 122 Average Total 0.39 0.12	Nordic 13 30 15 11 69 Average Local 0.21	Foreign 0 0 9 10 34 53 Average Foreign 0.64	Total 11 % 32 % 20 % 37 % 100 %	Nordic 100 % 77 % 60 % 54 % 57 % Median Local	Foreign 0 % 23 % 40 % 76 % 43 % Median Forei
		13 39 25 45 122 Average Total 0.39 0.12	13 30 15 11 69 Average Local 0.21	0 9 10 34 53 Average Foreign 0.64	11 % 32 % 20 % 37 % 100 % Median Total	100 % 77 % 60 % 24 % 57 % Median Local	0 % 23 % 40 % 76 % 43 % Median Forei 0.70
55-54		13 25 25 45 122 Average Total 0.39 0.12	13 30 15 11 69 Average Local 0.21	0 10 34 53 Average Foreign 0.64	11 % 32 % 20 % 37 % 100 % Median Total	100 % 60 % 24 % 57 % Median Local	23 % 40 % 76 % 43 % Median Forei
3.33		25 45 122 Average Total 0.39 0.12	30 15 11 69 Average Local 0.21	34 53 Average Foreign 0.64	32 % 20 % 37 % 100 % Median Total	60 % 24 % 57 % Median Local	23 % 40 % 76 % 43 % Median Forei
		25 45 122 Average Total 0.39 0.12	15 11 69 Average Local 0.21	10 34 53 Average Foreign 0.64	20 % 37 % 100 % Median Total	60 % 24 % 57 % Median Local	40 % 76 % 43 % Median Forei 0.70
0.000	CONTRACTOR	45 122 Average Total 0.39 0.12	11 69 Average Local 0.21	34 53 Average Foreign 0.64	37 % 100 % Median Total	24 % 57 % Median Local	76 % 43 % Median Forei 0.70
		Average Total 0.39 0.12	Average Local 0.21	Average Foreign 0.64	Median Total	Median Local	Median Forei
	Control Control	0.39	0.21	0.64			0.70
	C-126	0.12			0.33	0.14	200
	Т,	E-1-1	0.03	0.24	0.00	0.00	0.16
		Total	Nordic	Foreign			
	Median	126.15	82.5	259.7			
	Average	353.45	115.31	663.5			
	Max	4300	4300	593			
	Min	5.33	9	್ಷ			
		Total	Local	Foreign	Total	Local	Foreign
	Nordic	79	51	28	29 %	65 %	35 %
	EU/EEA	43	18	25	32 %	42 %	28 %
	World wide	13	4	6	10 %	31 %	% 69
Panel G Fund category		Total	Nordic	Foreign	Total	Nordic	Foreign
	Venture fund	51	38	13	42 %	75 %	25 %
	Buyout fund	71	31	40	28 %	44 %	26 %
Panel H Vintage		Total	Local	Foreign	Total	Local	Foreign
	Time 1	18	12	9	15 %	% 19	33 %
	Time 2	16	11	яĊ	13 %	% 69	31 %
	Time~3	33	18	15	27 %	55 %	45 %
	Time 4	27	16	11	22 %	29 %	41 %
	$Time\ 5$	28	12	16	23 %	43 %	57 %
		Year					
	Oldest	1989					
	Youngest	2009					

Table 6: Summary statistics of the Independent Variables for the Different Jurisdictions

he value 1 if the fund was established between 1999 and 2000. TIME3 takes the value 1 if the fund was established between 2001 and 2004. TIME4 takes the value 1 if the fund was This table shows the summary statistics of the independent variables for the different jurisdictions. The independent variables are first tested for unequal variance with regards to jurisdiction. Mean comparison with equal or unequal variance are then performed by a two-group t-test. Significance is indicated by (*, **, ***, ***) for 10 %, 5 % and 1 % significance foreign investors in a fund in 10 percent increments, where the variable LPL defines foreign investor as all investors not from the same country as the fund manager. LPE defines a dummy taking the value 1 if the fund is a buyout fund, and 0 if the fund is a venture capital fund. TIME1 takes the value 1 if the fund was established before 1999. TIME2 takes level respectively. PANEL A exludes funds managed by Danish fund managers in the sample, while PANEL B includes the full sample. LPL and LPE measure the percentage of foreign investor if the investor is from outside the EU/EEA. FSIZE is the funds committed capital measured in MEUR. LNORDIC is a dummy variable taking the value 1 if the fund is investing in companies located outside the Nordics. LEUR is a dummy taking the value 1 if the fund is investing in companies outside the EU/EEA. FCATEGORY is a established between 2005 and 2006. TIME5 takes the value 1 if the fund was established between 2007 and 2009.

PANEL A		Total	P		Nordic	lic		Foreign	gn	Significance	ance
Variable	Z	Mean	Std.dev	Z	Mean	Std.dev	Z	Mean	Std.dev	Equal var.	Sign. Diff
LPL	109	4.12	3.41	26	2.00	2.36	53	6.36	2.88	NO	***
LPE	109	1.31	1.91	56	0.25	0.63	53	2.43	2.15	NO	* *
FSIZE	109	3.77	7.22	56	1.05	1.06	53	6.63	9.54	NO	* *
LNORDIC	109	0.36	0.48	56	0.25	0.44	53	0.47	0.50	YES	* *
LEUR	109	0.12	0.33	56	0.07	0.26	53	0.17	0.38	ON	*
FCATEGORY	109	9.0	0.49	26	0.45	29.0	53	0.75	0.43	NO	* * *
TIME1	109	0.16	0.36	56	0.20	0.40	53	0.11	0.32	YES	
TIME2	109	0.14	0.36	26	0.20	0.40	53	0.00	0.30	NO	*
TIME3	109	0.27	0.44	26	0.25	0.44	53	0.28	0.45	YES	
TIME4	109	0.21	0.41	26	0.21	0.41	53	0.21	0.41	YES	
TIMES	109	0.22	0.42	99	0.14	0.30	53	0.30	0.46	CN	*

Variable N Mean Std.dev N Mean N Mean N Mean N Mean N Mean Mean N Mean Mean Std.dev N Mean N Mean Mean Std.dev N Mean Std.dev N Mean N Mean Mean Std.dev N Mean N Mean Std.dev N N **** LPL 122 1.22 1.34 69 0.26 0.24 53 0.77 0.43 N N **** FCATEGORY 122 0.15 0.36 0.36 0.16 0.36	PANEL B		Total	TR.		Nordic	lic		Foreign	ng	Significance	nce
122 3.95 3.31 69 2.10 2.28 53 6.36 2.88 NO 122 1.22 1.24 1.84 69 0.29 0.67 53 2.43 2.15 NO 122 3.53 6.87 69 1.15 1.08 53 6.47 0.50 NO 122 0.35 0.48 69 0.24 53 0.17 0.38 NO 122 0.15 0.50 69 0.45 0.5 53 0.17 0.38 NO 122 0.15 0.36 69 0.17 0.38 53 0.11 0.32 NES 122 0.13 0.34 69 0.16 0.37 53 0.99 0.34 NO 122 0.27 0.45 69 0.26 0.44 53 0.28 0.45 NO 122 0.27 0.45 69 0.26 0.44 53 0.28	Variable	Z	Mean	Std.dev	Z	Mean	Std.dev	Z	Mean	Std.dev	Equal variance	Sign. Diff
122 1.22 1.84 69 0.29 0.67 53 2.43 2.15 NO 122 3.53 6.87 69 1.15 1.08 53 6.63 9.54 NO 122 0.35 0.48 69 0.26 0.44 53 0.47 0.50 YES 122 0.11 0.31 69 0.06 0.24 53 0.17 0.38 NO 122 0.15 0.36 69 0.45 0.5 53 0.11 0.32 YES 122 0.13 0.34 69 0.16 0.37 53 0.09 0.34 NO 122 0.27 0.45 69 0.16 0.37 53 0.28 0.45 YES 122 0.22 0.42 69 0.26 0.44 53 0.28 0.45 YES 122 0.23 0.42 69 0.26 0.44 53 0.28	LPL	122	3.95	3.31	69	2.10	2.28	53	6.36	2.88	ON	* *
122 3.53 6.87 69 1.15 1.08 53 6.63 9.54 NO 122 0.35 0.48 69 0.26 0.44 53 0.47 0.50 YES 122 0.11 0.31 69 0.06 0.24 53 0.17 0.38 NO 122 0.15 0.50 69 0.45 0.5 53 0.11 0.32 YES 122 0.13 0.34 69 0.16 0.37 53 0.09 0.34 NO 122 0.27 0.45 69 0.26 0.44 53 0.28 0.45 YES 122 0.27 0.42 69 0.26 0.44 53 0.28 0.45 YES 122 0.23 0.42 69 0.17 0.38 53 0.21 0.43 YES 122 0.23 0.42 69 0.17 0.38 0.30 0.46	LPE	122	1.22	1.84	69	0.29	29.0	53	2.43	2.15	NO	* *
122 0.35 0.48 69 0.26 0.44 53 0.47 0.50 YES 122 0.11 0.31 69 0.06 0.24 53 0.17 0.38 NO 122 0.58 0.50 69 0.45 0.5 53 0.17 0.32 YES 122 0.13 0.34 69 0.17 0.38 53 0.11 0.32 YES 122 0.27 0.45 69 0.16 0.37 53 0.28 0.45 YES 122 0.22 0.42 69 0.26 0.44 53 0.28 0.45 YES 122 0.23 0.42 69 0.23 0.43 53 0.21 0.43 YES 122 0.23 0.42 69 0.17 0.38 53 0.36 0.46 NO	FSIZE	122	3.53	6.87	69	1.15	1.08	53	6.63	9.54	NO	* *
122 0.11 0.31 69 0.06 0.24 53 0.17 0.38 NO 122 0.58 0.50 0.45 0.5 53 0.75 0.43 YES 122 0.15 0.36 69 0.17 0.38 53 0.11 0.32 YES 122 0.13 0.34 69 0.16 0.37 53 0.09 0.34 NO 122 0.27 0.45 69 0.26 0.44 53 0.28 0.45 YES 122 0.22 0.42 69 0.23 0.43 53 0.21 0.43 YES 122 0.23 0.42 69 0.17 0.38 53 0.30 0.46 NO	LNORDIC	122	0.35	0.48	69	0.26	0.44	53	0.47	0.50	YES	* *
122 0.58 0.50 69 0.45 0.5 53 0.75 0.43 YES 3 122 0.15 0.36 69 0.17 0.38 53 0.11 0.32 YES 122 0.13 0.34 69 0.16 0.37 53 0.09 0.34 NO 122 0.27 0.45 69 0.26 0.44 53 0.28 0.45 YES 122 0.22 0.42 69 0.23 0.43 53 0.21 0.43 YES 122 0.23 0.42 69 0.17 0.38 53 0.21 0.46 NO	LEUR	122	0.11	0.31	69	90.0	0.24	53	0.17	0.38	NO	*
122 0.15 0.36 69 0.17 0.38 53 0.11 0.32 122 0.13 0.34 69 0.16 0.37 53 0.09 0.34 122 0.27 0.45 69 0.26 0.44 53 0.28 0.45 122 0.22 0.42 69 0.23 0.43 53 0.21 0.43 122 0.23 0.42 69 0.17 0.38 53 0.30 0.46	FCATEGORY	122	0.58	0.50	69	0.45	0.5	53	0.75	0.43	YES	**
122 0.13 0.34 69 0.16 0.37 53 0.09 0.34 122 0.27 0.45 69 0.26 0.44 53 0.28 0.45 122 0.22 0.42 69 0.23 0.43 53 0.21 0.43 122 0.23 0.42 69 0.17 0.38 53 0.30 0.46	TIME1	122	0.15	0.36	69	0.17	0.38	53	0.11	0.32	YES	
122 0.27 0.45 69 0.26 0.44 53 0.28 0.45 122 0.22 0.42 69 0.23 0.43 53 0.21 0.43 122 0.23 0.42 69 0.17 0.38 53 0.30 0.46	TIME2	122	0.13	0.34	69	0.16	0.37	53	0.00	0.34	NO	
122 0.22 0.42 69 0.23 0.43 53 0.21 0.43 122 0.23 0.42 69 0.17 0.38 53 0.30 0.46	TIME3	122	0.27	0.45	69	0.26	0.44	53	0.28	0.45	YES	
122 0.23 0.42 69 0.17 0.38 53 0.30 0.46	TIME4	122	0.22	0.42	69	0.23	0.43	53	0.21	0.43	YES	
	TIME5	122	0.23	0.42	69	0.17	0.38	53	0.30	0.46	NO	*

Table 7: The Determinants of the Choice of where Nordic Private Equity Funds are Domiciled

Logit regressions are run with standard errors clustered at the fund manager level. The dependent variale JURISDICTION takes the value 1 if a fund is domiciled in a foreign jurisdiction and the value 0 if it is domiciled in a Nordic country. JURISDICTION is regressed on the measures of foreign investors LPL and LPE. LPL and LPE measure the percentage of foreign investors in a fund in 10 percent increments, where the variable LPL defines foreign investor as all investors not from the same country as the fund manager. LPE defines a foreign investor if the investor is from outside the EU/EEA. Because of correlation, model 1 and model 2 includes the variables LPL and LPE separately. Both variables are included in model 3. PANEL A exludes funds managed by Danish fund managers yielding a sample of 109 funds, while PANEL B includes the full sample with 122 funds. Average marginal effects are reported along with significance and standard error. Significance is indicated by (*, **, ***) for 10 %, 5 % and 1 % significance level respectively. Different fund characteristics are used as control variables. FSIZE is the funds committed capital measured in MEUR. LNORDIC is a dummy variable taking the value 1 if the fund is investing in companies located outside the Nordics. LEUR is a dummy taking the value 1 if the fund is investing in companies outside the EU/EEA. Because of strong correlation, LNORDIC and LEUR are also included separately in Model 1 and Model 2, while both are included in Model 3. FCATEGORY is a dummy taking the value 1 if the fund is a buyout fund, and 0 if the fund is a venture capital fund. TIME1 takes the value 1 if the fund was established before 1999. TIME2 takes the value 1 if the fund was established between 1999 and 2000. TIME3 takes the value 1 if the fund was established between 2001 and 2004. TIME4 takes the value 1 if the fund was established between 2005 and 2006. TIME5 takes the value 1 if the fund was established between 2007 and 2009.

PANEL A		${\bf Model}\ 1$			${\rm Model}\ 2$			Model 3	
	dy/dx	Sign.	Std. Err.	dy/dx	Sign.	Std. Err.	dy/dx	Sign.	Std. Err.
LPL	0.067	***	0.008	L SUPER LANGE OF STREET			0.064	***	0.010
LPE				0.118	***	0.024	0.012		0.028
FSIZE	0.038	**	0.016	0.058	**	0.022	0.041	***	0.015
LNORDIC	0.208	**	0.097				0.005		0.107
LEUR				0.249	**	0.103	0.330	***	0.111
FCATEGORY	0.150	**	0.060	0.123		0.084	0.138	**	0.061
TIME2	-0.012		0.159	0.021		0.161	-0.125		0.177
TIME3	0.184	*	0.112	0.082		0.170	0.067		0.153
TIME4	0.257	**	0.108	0.121		0.160	0.147		0.141
TIME5	0.291	**	0.118	0.183		0.164	0.173		0.144
Obs. Prob.		0.49			0.49			0.49	
Pred. Prob.		0.40			0.36			0.39	
No of Obs.		109			109			109	
Wald chi-sq.		39.27			48.3			88.46	
Prob > chi-sq.		0.0000			0.0000			0.0000	
Pseudo R-sq		0.5184			0.4388			0.5761	

PANEL B		${\bf Model}\ 1$			${\rm Model}\ 2$			Model 3	
	dy/dx	Sign.	Std. Err.	dy/dx	Sign.	Std. Err.	dy/dx	Sign.	Std. Err.
LPL	0.062	***	0.007				0.064	***	0.011
LPE				0.104	***	0.020	0.007		0.024
FSIZE	0.028	*	0.017	0.052	***	0.019	0.035	**	0.015
LNORDIC	0.150		0.094				-0.060		0.104
LEUR				0.285	***	0.090	0.411	***	0.097
FCATEGORY	0.121	**	0.062	0.110		0.080	0.123	**	0.059
TIME2	-0.036		0.154	0.024		0.144	-0.157		0.170
TIME3	0.133		0.104	0.072		0.149	0.013		0.144
TIME4	0.143		0.105	0.051		0.143	0.055		0.133
TIME5	0.179		0.111	0.114		0.149	0.065		0.137
Obs. Prob.		0.43			0.49			0.49	
Pred. Prob.		0.32			0.30			0.34	
No of Obs.		122			122			122	
Wald chi-sq.		43.22			50.16			73.59	
Prob > chi-sq.		0.0000			0.0000			0.0000	
Pseudo R-sq		0.4559			0.4094			0.5435	

Table 8: The Determinants of the Choice of where Nordic Private Equity Funds are domiciled (2)

Logit regressions are run with standard errors clustered at the fund manager level. The dependent variale JURISDICTION takes the value 1 if a fund is domiciled in a foreign jurisdiction and the value 0 if it is domiciled in a Nordic country. JURISDICTION is regressed on the measures of foreign investors LPL and LPE. LPL and LPE measure the percentage of foreign investors in a fund in 10 percent increments, where the variable LPL defines foreign investor as all investors not from the same country as the fund manager. LPE defines a foreign investor if the investor is from outside the EU/EEA. The sample size has been reduced to only include funds with a minimum of 10 disclosed LP locations to test for robustness. Because of correlation, model 1 and model 2 includes the variables LPL and LPE separately. Both variables are included in model 3. PANEL A exludes funds managed by Danish fund managers yielding a sample og 69 funds, while PANEL B includes the full sample of 75 funds. Average marginal effects are reported along with significance and standard error. Significance is indicated by (*, **, ***) for 10 %, 5 % and 1 % significance level respectively. Different fund characteristics are used as control variables. FSIZE is the funds committed capital measured in MEUR. LNORDIC is a dummy variable taking the value 1 if the fund is investing in companies located outside the Nordics. LEUR is a dummy taking the value 1 if the fund is investing in companies outside the EU/EEA. Because of strong correlation, LNORDIC and LEUR are also included separately in Model 1 and Model 2, while both are included in Model 3. FCATEGORY is a dummy taking the value 1 if the fund is a buyout fund, and 0 if the fund is a venture capital fund. TIME1 takes the value 1 if the fund was established before 1999. TIME2 takes the value 1 if the fund was established between 1999 and 2000. TIME3 takes the value 1 if the fund was established between 2001 and 2004. TIME4 takes the value 1 if the fund was established between 2005 and 2006. TIME5 takes the value 1 if the fund was established between 2007 and 2009.

PANEL A		Model 1			Model 2			Model 3	
	dy/dx	Sign.	Std. Err.	dy/dx	Sign.	Std. Err.	dy/dx	Sign.	Std. Err.
LPL	0.054	***	0.010				0.045	**	0.021
LPE				0.142	**	0.061	0.043		0.067
FSIZE	0.040	**	0.019	0.043	**	0.017	0.033	**	0.016
LNORDIC	0.246	**	0.107	0.000		0.000	0.060		0.167
LEUR				0.277	***	0.080	0.270	*	0.159
FCATEGORY	0.233	***	0.082	0.196	**	0.079	0.224	**	0.095
TIME2	0.101		0.198	0.010		0.304	-0.013		0.287
TIME3	0.171		0.179	-0.114		0.288	0.026		0.292
TIME4	0.227		0.144	-0.020		0.267	0.114		0.266
TIME5	0.228		0.172	0.081		0.258	0.128		0.257
Obs. Prob.		0.61			0.61			0.61	
Pred. Prob.		0.51			0.51			0.52	
No of Obs.		69			69			69	
Wald chi-sq.		21.27			21.7			39.67	
Prob > chi-sq.		0.0065			0.0055			0.0000	
Pseudo R-sq		0.4959			0.4965			0.554	

PANEL B		Model	I		Model :	2		Model	3
	dy/dx	Sign.	Std. Err.	dy/dx	Sign.	Std. Err.	dy/dx	Sign.	Std. Err.
LPL	0.055	***	0.011				0.055	***	0.019
LPE				0.120	***	0.040	0.021		0.052
FSIZE	0.026		0.018	0.037	**	0.019	0.027		0.017
LNORDIC	0.176	*	0.101				-0.058		0.135
LEUR				0.304	***	0.073	0.419	***	0.126
FCATEGORY	0.165		0.099	0.165	**	0.094	0.195		0.102
TIME2	-0.018		0.219	-0.018		0.293	-0.162		0.272
TIME3	0.073		0.168	-0.138		0.261	-0.077		0.267
TIME4	0.064		0.154	-0.108		0.249	-0.038		0.245
TIME5	0.046		0.162	-0.039		0.248	-0.056		0.233
Obs. Prob.		0.56			0.56			0.56	
Pred. Prob.		0.43			0.45			0.47	
No of Obs.		75			75			75	
Wald chi-sq.		28.62			19.99			38.24	
Prob > chi-sq.		0.0000			0.0104			0.0000	
Pseudo R-sq		0.4083			0.4246			0.493	

Table 9: Difference in Difference estimation of the effect of a positive shift in the Finish Tax Law

capital measured in MEUR. LNORDIC is a dummy variable taking the value 1 if the fund is investing in companies located outside the Nordics. LEUR is a dummy taking the value OLS regressions are run to estimate the difference in difference estimator, FT, for a positive shift in the Finish Tax Law in 2006. FINLAND is a dummy that takes the value 1 for all funds in the treatment group (Finish funds) and value 0 for all funds in the control group (Norwegian and Swedish funds). TREATMENT is a dummy that takes the value 1 if the und is established after the positive shift in the Finish Tax Law occured. I test for three different treatment years, 2006, 2005 and 2007. FT is the interaction term with FINLAND are included in Model 3. FCATEGORY is a dummy taking the value 1 if the fund is a buyout fund, and 0 if the fund is a venture capital fund. TIME1 takes the value 1 if the fund and TREATMENT, which is the difference in difference estimator (highlighted in bold). Different fund characteristics are used as control variables. FSIZE is the funds committed 1 if the fund is investing in companies outside the EU/EEA. Because of strong correlation, LNORDIC and LEUR are also included separately in Model 1 and Model 2, while both was established before 1999. TIME2 takes the value 1 if the fund was established between 1999 and 2000. TIME3 takes the value 1 if the fund was established between 2001 and 2004. TIME4 takes the value 1 if the fund was established between 2005 and 2006. TIME5 takes the value 1 if the fund was established between 2007 and 2009.

$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		3	Treatment: From 200	90	2000	Treatment: From 2005	15	1	Treatment: From 2007	1.1
-0.078 0.130 0.555 -0.080 0.117 0.499 -0.085 0.135 -0.136 0.163 0.467 0.121 0.100 0.234 0.105 0.109 0.030 0.149 0.284 0.105 0.105 0.109 0.109 0.032 0.149 0.086 0.014 0.087 0.014 0.014 0.032 0.032 0.032 0.014 0.087 0.014 0.032 0.012 0.032 0.072 0.004 0.087 0.014 0.032 0.041 0.144 0.720 0.039 0.117 0.043 0.115 0.174 0.079 0.079 0.079 0.079 0.079 0.079 0.174 0.079 0.186 0.186 0.186 0.186 0.186 0.186 0.189 0.166 0.268 0.016 0.034 0.016 0.034 0.112 0.046 0.112 0.050 0.189 0.184 0.016	JUR	Coef.	Robust Std. Err.	P > t	Coef.	Robust Std. Err.	P	Coef.	Robust Std. Err.	P > t
-0.136 0.163 0.407 0.121 0.100 0.234 0.105 0.109 0.030 0.149 0.839 0.045 0.177 0.801 0.113 0.169 0.087 0.014 0.086 0.014 0.000 0.087 0.014 0.012 0.032 0.702 0.014 0.032 0.057 0.014 0.032 0.011 0.003 0.781 -0.002 0.003 0.017 0.033 0.017 0.043 0.015 0.041 0.014 0.039 0.117 0.043 0.015 0.015 0.041 0.079 0.034 0.176 0.043 0.115 0.018 0.174 0.079 0.034 0.176 0.043 0.183 0.016 0.184 0.184 0.079 0.034 0.176 0.043 0.184 0.016 0.184 0.189 0.184 0.016 0.084 0.221 -0.166 0.131 0.189 0.189	FINLAND	-0.078	0.130	0.555	-0.080	0.117	0.499	-0.085	0.135	0.536
0.030 0.149 0.839 0.045 0.177 0.801 0.113 0.169 0.087 0.014 0.006 0.086 0.014 0.007 0.087 0.014 0.012 0.032 0.702 0.014 0.032 0.057 0.014 0.032 0.011 0.003 0.781 -0.002 0.003 0.017 0.043 0.015 0.041 0.014 0.720 0.039 0.117 0.043 0.115 0.041 0.079 0.079 0.017 0.043 0.115 0.174 0.079 0.176 0.043 0.183 0.176 0.079 0.184 0.079 0.176 0.016 0.184 0.016 0.118 0.118 0.189 0.137 0.263 -0.168 0.034 0.011 0.141 0.189 0.184 0.015 0.084 0.862 0.121 0.129 0.261 0.194 0.187 0.046 0.000 0.046	TREATMENT	-0.136	0.163	0.407	0.121	0.100	0.234	0.105	0.109	0.341
0.087 0.014 0.000 0.086 0.014 0.000 0.087 0.014 0.012 0.032 0.772 0.014 0.032 0.057 0.014 0.032 0.001 0.003 0.781 -0.002 0.003 0.043 0.002 0.041 0.014 0.039 0.117 0.043 0.015 0.002 0.041 0.014 0.720 0.039 0.117 0.043 0.115 0.174 0.079 0.071 0.176 0.176 0.079 0.174 0.079 0.176 0.176 0.183 0.116 0.118 0.184 0.010 0.010 0.184 0.010 0.011 0.141 0.189 0.187 0.0145 0.000 0.000 0.010 0.000 0.050 0.194 0.184 0.016 0.000 0.000 0.000 0.0046 0.012 0.046 <t< td=""><td>FT</td><td>0.030</td><td>0.149</td><td>0.839</td><td>0.045</td><td>0.177</td><td>0.801</td><td>0.113</td><td>0.169</td><td>0.507</td></t<>	FT	0.030	0.149	0.839	0.045	0.177	0.801	0.113	0.169	0.507
0.012 0.032 0.702 0.014 0.032 0.044 0.032 0.032 0.002 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.016 0.014 0.016 0.000 0.000 0.000 0.000 0.000 0.000 0.010 0.010 0.010 0.010 0.010 0.010 0.010 0.010 0.010 0.010 <	LPL	0.087	0.014	0.000	0.086	0.014	0.000	0.087	0.014	0.000
-0.001 0.003 0.781 -0.002 0.003 0.568 -0.002 0.002 0.041 0.114 0.720 0.039 0.117 0.741 0.043 0.115 0.342 0.184 0.071 0.351 0.185 0.066 0.342 0.183 0.174 0.079 0.079 0.079 0.079 0.079 0.079 -0.169 0.137 0.226 -0.168 0.135 0.016 0.138 0.010 0.140 0.944 0.010 0.138 0.011 0.141 0.189 0.166 0.263 -0.015 0.084 0.862 0.121 0.129 0.261 0.194 0.187 (omitted) 0.000 (omitted) 0.000 0.000 0.011 0.000 0.261 0.094 0.046 0.1046 0.046 0.012 0.012 0.012	LPE	0.012	0.032	0.702	0.014	0.032	0.657	0.014	0.032	0.671
0.041 0.114 0.720 0.039 0.117 0.741 0.043 0.115 0.342 0.184 0.071 0.351 0.185 0.066 0.342 0.183 0.174 0.079 0.079 0.079 0.079 0.079 0.079 -0.169 0.137 0.226 -0.168 0.135 0.146 0.010 0.138 0.011 0.141 0.180 0.140 0.944 0.010 0.138 0.011 0.141 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0112 0.0112 0.0112 0.0112 0.0112 0.0112 0.000 0.000 0.000 0.000	FSIZE	-0.001	0.003	0.781	-0.002	0.003	0.568	-0.002	0.002	0.516
0.342 0.184 0.071 0.351 0.185 0.066 0.342 0.183 0.174 0.079 0.034 0.176 0.079 0.079 0.079 -0.169 0.137 0.226 -0.168 0.135 0.146 0.140 0.944 0.010 0.138 0.011 0.141 0.180 0.166 0.263 -0.015 0.084 0.862 0.121 0.129 0.261 0.194 0.187 0.0146 0.000 0.000 0.000 0.000 0.050 0.194 0.046 0.046 0.000 0.000 0.000 0.000 0.050 0.109 0.046 0.046 0.046 0.012 0.046 0.012	LNORDIC	0.041	0.114	0.720	0.039	0.117	0.741	0.043	0.115	0.713
0.174 0.079 0.034 0.176 0.079 0.079 0.079 -0.169 0.137 0.226 -0.168 0.135 0.221 -0.166 0.138 0.010 0.140 0.944 0.010 0.138 0.011 0.141 0.189 0.166 0.263 -0.015 0.084 0.862 0.121 0.129 0.261 0.194 0.187 (omitted) 0.000 (omitted) 0.000 -0.050 0.109 0.651 -0.046 0.103 0.046 0.112	LEUR	0.342	0.184	0.071	0.351	0.185	0.066	0.342	0.183	0.069
-0.169 0.137 0.226 -0.168 0.135 0.221 -0.166 0.138 0.010 0.140 0.944 0.010 0.138 0.011 0.141 0.189 0.166 0.263 -0.015 0.084 0.862 0.121 0.129 0.261 0.194 0.187 (omitted) 0.000 (omitted) 0.000 -0.050 0.109 0.651 -0.046 0.103 0.046 0.112	FCATEGORY	0.174	0.079	0.034	0.176	0.079	0.031	0.176	0.079	0.032
0.010 0.140 0.944 0.010 0.138 0.943 0.011 0.141 0.189 0.166 0.263 -0.015 0.084 0.862 0.121 0.129 0.261 0.194 0.187 (omitted) 0.000 (omitted) 0.000 -0.050 0.109 0.651 -0.046 0.103 0.657 -0.046 0.112	TIME2	-0.169	0.137	0.226	-0.168	0.135	0.221	-0.166	0.138	0.234
0.189 0.166 0.263 -0.015 0.084 0.862 0.121 0.129 0.261 0.194 0.187 (omitted) 0.000 (omitted) 0.000 -0.050 0.109 0.651 -0.046 0.112 0.112	TIME3	0.010	0.140	0.944	0.010	0.138	0.943	0.011	0.141	0.940
0.261 0.194 0.187 (omitted) 0.000 0.000 (omitted) 0.000 0.00	TIME4	0.189	0.166	0.263	-0.015	0.084	0.862	0.121	0.129	0.354
-0.050 0.109 0.651 -0.046 0.103 0.657 -0.046 0.112	TIME5	0.261	0.194	0.187	(omitted)	0.000	0.000	(omitted)	0.000	0.000
	CONS	-0.050	0.109	0.651	-0.046	0.103	0.657	-0.046	0.112	0.684

Appendix

8.1 Appendix: The Aberdeen Case

The Aberdeen case is of importance to Private Equity as the ruling has limited European countries' tax authorities' ability to levy withholding tax on foreign Private Equity investors from other member states. This appendix is meant to give a brief overview of the Aberdeen case and some the consequences it has had so far for the Nordic tax and legal environment in context of Private Equity.

8.1.1 Background

The Aberdeen Case concerns the Finish Resident company Aberdeen Property Fininvest Alpha Oy (Alpha) which is a 100 % owned subsidiary of a Luxembourg registered openended investment fund (SIVAC). Alpha was subject to withholding tax on dividends paid to its Luxembourg parent, and was refused by the Finish tax authorities when asked to be exempt from this taxation. It was argued by Alpha and its Luxembourg parent that the withholding tax was discriminating with respect to EU law, as dividends between Finish registered limited liability companies are exempt from such taxation. The issue was submitted to Finish courts, which passed the case over to The European Court of Justice (EJC) (Wildgen, 2009).

The Finish Tax Authorities argued that the Luxembourg Open-investment Vehicle (SICAV) was not an entity that is comparable to a Finish limited liability company comprised by the Finish exemption method (PWC, 2009). The main reasons why the SICAV and a limited liability company were not comparable were:

- 1. There are no type of companies in Finish law that are identical to a SICAV
- 2. Finish Limited Liability companies are liable to income tax in Finland, while a Luxembourg SICAV is not liable to income tax in Luxembourg
- 3. A Finish Limited Liability company is comprised by the EC Parent-Subsidiary directive²

The EJC rejected all arguments by the Finish Tax Authorities and ruled in favor of the tax payer. It was concluded that the withholding tax was a violation of the freedom of

² The Parent-Subsidiary directive was introduced in 1990 and was aimed to remove withholding tax payments on dividends between subsidiaries and parent companies in different member states (EU 90/435/EEC)

establishment which is prohibited by articles 43 and 48 of the EC Treaty (Wildgen). As stated by a Luxembourg law firm, the EJC held that:

- As the Finnish tax regime does not aim at preventing artificial arrangements, the Finnish rules cannot be justified by the fact that the Finnish government wish to prevent tax avoidance.
- 2. As Finland does not apply withholding tax on dividends received by Finnish companies, it cannot argue that there is a need to ensure the balanced allocation of the power to tax between Member State in order to justify withholding on dividends received by companies established in another EU Member State;
- 3. At last, in the case at hand, there is no link between the exemption of the withholding tax and the offsetting of that tax advantage by a particular tax levy which could justify a restriction needed to preserve the coherence of the Member State's tax system.

8.1.2 Consequences

The ECJ ruling in the Aberdeen case has had consequences for taxation laws and practice in many EU and EEA member states. According to a report from KMPG the European Commission has launched infringement procedures against many Member States which will likely result in changes in the countries tax laws in order to comply with EU law (KPMG, 2011).

Norwegian tax laws have until the Aberdeen case ruling stated that companies resident in a low tax country, defined as a country with a corporate income tax rate lower than two-thirds of the Norwegian tax rate, will not be comprised by the Norwegian exemption method. As a result of the Aberdeen case ruling, the Norwegian Ministry of Finance issued a statement in September 2009 that whether or not the foreign entity is subject to corporate income tax in its state of residence is irrelevant when determining if the foreign entity is comprised by the Norwegian exemption method (PWC, 2009).

Bibliography

- Appleby. (2011a, April). *Guide to Limited Partnerships in Guernsey*. Retrieved May 27, 2011, from Appleby website: http://www.applebyglobal.com/uploaded/Publication/1812_File_5.pdf
- Appleby. (2011b, April). *Guide to Limited Partnerships in Jersey*. Retrieved May 27, 2011, from Appleby website: http://www.applebyglobal.com/uploaded/Publication/1598_File_5.pdf
- Argentum. (2011a). *Market Database*. Retrieved April 2011, from Argentum website: http://www.argentum.no/DB/db-search/
- Argentum. (2011b). *About us*. Retrieved June 7, 2011, from Argentum website: http://www.argentum.no/Main-categories/Argentum/
- BA-HR. (2009). Rettslige rammer for Private Equity- og Venturekapital-bransjen i Norge. BA-HR.
- BA-HR. (2011, April 1). *Nyhetsbrev nr 2/2011 Skatt.* Retrieved May 28, 2011, from BA-HR website: http://www.bahr.no/Nyhetsbrev?key=2480
- Carey Olsen. (2010a). A Guide to Funds and Private Equity in Guernsey. Retrieved March 20, 2011, from Publications, Carey Olsen website:

 http://www.careyolsen.com/downloads/publications/a_guide_to_funds__private_equity_in _guernsey.pdf
- Carey Olsen. (2010b). A Guide to Funds and Private Equity in Jersey. Retrieved March 20, 2011, from Publications, Carey Olsen webside:

 http://www.careyolsen.com/downloads/publications/a_guide_to_funds_and_private_equity_in_jersey.pdf
- DVCA. (2008). Active ownership and transparency in private equity funds. Retrieved May 28, 2011, from Danish Venture Capital and Private Equity Association webiste:

 http://www.dvca.dk/uploads/Publikationer/DVCA%20Rapport_UK[1].pdf
- EVCA. (2008). Benchmarking European Tax and Legal Environments. Retrieved March 2011, from European Private Equity and Venture Capital website:

 http://www.evca.eu/publicandregulatoryaffairs/default.aspx?id=2414
- EVCA. (2010a). EVCA Research Statistics Fundraising. Retrieved June 8, 2010, from European Private Equity & Venture Capital Association website:

 http://www.evca.eu/knowledgecenter/statisticsdetail.aspx?id=414
- EVCA. (2010b). *Private Equity Fund Structures in Europe*. Retrieved March 2011, from European Private Equity and Venture Capital Association: http://www.evca.eu/uploadedfiles/home/public_and_regulatory_affairs/doc_sp_fundstruct ures.pdf

- EVCA. (2010c). EVCA 2010 Nordic Report. Retrieved March 2010, from European Private Equity and Venture Capital Association:

 http://www.evca.eu/knowledgecenter/PublicationDetail.aspx?id=PBNR10
- Gray, S. (2008, December). *Channel Islands show solidity in turbulent times*. Private Equity News Wire.
- Guernsey International Finance Centre. (2011, March 8). *News room.* Retrieved May 26, 2011, from Guernsey International Finance Centre website:

 http://www.guernseyfinance.com/news_room/cfos-rank-guernsey-number-one-private-equity
- Kaplan, S. N., & Stromberg, P. (2009). Leveraged Buyouts and Private Equity. *Journal of Economic Perspectives*, 23, 121-146.
- KPMG. (2011). National evolutions following the Aberdeen case: a further incentive to reclaim millions of unduly paid withholding taxes. Retrieved March 15, 2011, from KPMG Luxembourg website:

 http://www.kpmg.com/LU/en/IssuesAndInsights/Articlespublications/Documents/ECJ%20Ab erdeen%20decision%20%20WHT%20reclaims%20for%20Luxembourg%20investment%20funds%202011.pdf
- Lerner, J., Moore, D., & Shepherd, S. (2005). *A study of New Zealand's venture capital market and implications for public policy.* LECG.
- Metrick, A., & Yasuda, A. (2010). Venture Capital and the Finance of Innovation (2nd ed.). Wiley.
- Nordic Innovation Centre. (2009). *Obstacles to Nordic Venture Capital Funds*. Nordic Innovation Centre.
- Nordic Innovation Centre. (2010, December). Statistics on Cross Border Venture Capital Investments in the Nordic Region. Retrieved June 9, 2011, from Nordic Innovation Centre website: http://www.nordicinnovation.org/no/publikasjoner/statistics-on-cross-border-venture-capital-investments-in-the-nordic-region/
- Norwegian Ministry of Finance. (2008, September 26). Innstramming i fritaksmetoden fradrag for kostnader knyttet til inntekter med tilknytning til skattefrie aksjeinntekter mv. *Ot.prp. nr. 1* 2008-2009. Oslo.
- Norwegian Ministry of Finance. (2011, February 10). *Utenlandsk skattesubjekt fritaksmetodens* anvendelse på aksjeinntekt oppebåret gjennom filial/deltakerlignet selskap med virksomhet i Norge. Retrieved May 28, 2011, from Norwegian Ministry of Finance web site: http://www.regjeringen.no/mobil/nb/dep/fin/dok/andre/brev/prinsipputtalelser_fortolknin ger/2011/utenlandsk-skattesubjekt---fritaksmetode.html?id=633449
- Peng, C.-Y. J., Lee, K. L., & Ingersoll, G. M. (2002, September-October). An Introduction to Logistic Regression Analysis and Reporting. *The Journal of Educational Research*, *96*(1), 3-14.

- Phalippou, L. (2007, March). *The Hazards of Using IRR to Measure Performance: The Case of Private Equity.* Retrieved May 27, 2011, from Social Sience Research Network: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1111796
- PWC. (2009, September 30). *The Norwegian government concedes defeat on dividend withholding tax.* Retrieved May 28, 2011, from PWC website Publikasjoner Skatt og avgift: http://www.pwc.com/no/no/publikasjoner/skatt-og-avgift/international-taxnews/internationaltaxnews 5 30-sept-2009.pdf
- Strömberg, P. (2009). *The Economic and Social Impact of Private Equity in Europe: Summary of Research Findings.* Available at SSRN: http://ssrn.com/abstract=1429322.
- Tjernsland, J., Landre, E., Haugan, B., & Vågenes, H. (2011, January). Statseid selskap har milliardbeløp i skatteparadiser. *Verdens Gang*, 14.
- Venture Capital Tax Expert Group. (2010). Report of Expert Group on removing tax obstacles to cross-border Venture Capital Investments. European Comission, Unit E2, Direct Tax Legislation, Brussel.
- Wildgen. (2009, October 30). *The Aberdeen case: Withholding tax on dividends distributed by a*Finnish Company to a Luxembourg SICAV is discriminatory. Retrieved March 15, 2011, from Wildgen website: http://www.wildgen.lu/pdfs/aberdeen_case.pdf#search="aberdeen"
- Wooldridge, J. M. (2009). Introductory Econometrics (4 ed.). South Western.