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Financial Centers in Belgium

A comprehensive case study of multinationals' financial centers in Belgium.

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Abstract

This thesis explores the tax regime and environment for financial centers of multinational companies in Belgium. I show that the taxation of such activities have been and still is beneficial in Belgium and conclude that Belgium is an attractive location for financial centers. Also contributing to this is the business environment in Belgium with accommodating authorities and an already established cluster of coordination centers. I present the activities in which the financial centers engage in and the corresponding advantages. Furthermore, I give two examples of multinational companies having established such centers in Belgium, Statoil and Statkraft, and use them to illustrate both the benefits of an independent and centralized financial center per se and the taxation in the Belgian tax regime. Moreover, I evaluate the present regime in light of the current market conditions and explain the reasons for why the regime will continue to ensure advantageous taxation of financial centers. I also illustrate a method for which such centers can exploit differences in tax regimes to create tax arbitrage.

Preface

This thesis was written as a part of the Master of Science degree in Financial Economics at the Norwegian School of Economics and Business Administration (NHH) in the spring semester of 2010. The topic was inspired by Guttorm Schjelderup's lecture about "International Taxation" in the subject "Private Finance", FIE432, at NHH. Furthermore, the fascination of such matters was initially sparked during my summer position at Statkraft and further fueled by what you hear about such issues both in the media and at the university.

This thesis is written solely by the undersigned and any mistakes or misinformation should entirely be accredited to the writer. The content in the thesis is based on the books and articles referred to in the reference list, own knowledge and experience, and correspondence with the persons listed below. For any inquiries please contact the author at *styczen@gmail.com*.

I would like to use this occasion to thank the people who have provided me with valuable information and insight into this exciting industry, and give out a special thanks to:

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As this is my last contribution for now in my studies, I wish to thank everybody who have made the last five years unforgettable. This includes study mates, professors and other personnel at NHH, Bocconi and ESADE, and my friends and the persons who are nearest and dearest to me.

Marius Petter Styczen

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Introduction

In 2008 Statkraft announced that it would establish a financial center in Belgium. Financial centers are beneficially taxed in Belgium and have been so for a long time. Already in 1982 Belgium implemented the Coordination Center Regime which ensured almost zero taxation for financial centers. Initially the regime also included subsidies from the Belgian state for investments in Belgium that were funded through a coordination center. Statoil with two major projects in Belgium opened its coordination center in 1989 in order to benefit from these subsidies. Throughout the last 20 years there have been more than 200 active centers in Belgium employing more than 9 000 people at the most.

This thesis is a case study of the multinational’s financial center in Belgium. I illustrate why so many multinationals have established such centers in Belgium, and why they will continue to do so. The thesis is divided into two parts. The first part presents the financial center industry in Belgium and the applicable tax regimes. I also show other characteristics with Belgium which makes it attractive for multinationals. In the second part I turn to the companies’ view. First, I explore the activities such centers perform and the advantages linked to centralizing these in a financial center. Then I look at two specific examples, Statoil and Statkraft. And last, I demonstrate a simple financing arrangement which can be used to achieve tax arbitrage.

Throughout the thesis I try to maintain a neutral and objective view, and present the material and information in an unbiased way. All currency numbers are provided in euro to maintain consistency throughout the paper and to not confuse the reader, the conversion rates are given in the appendix. The appendix also provides a list of abbreviations and the various exhibits referred to in the text.

I assume the reader is familiar with general economic principles and the current economic situation, in addition to basic knowledge in the field of taxation.

In chapter one I define what I in this thesis classify as a financial center. Further, I present the financial center industry in Belgium. I uncover facts about the size of the industry, how many and which companies are part of the regime, etc. The taxation of coordination centers is advantageous and Belgium itself has earned very little in direct taxes during the Coordination Center Regime, so I explore other benefits such activity brings to the community. In addition I evaluate if Belgium resembles a tax haven or has harmful tax regimes. Last, I give a preliminary conclusion on the attractiveness of establishing a coordination center in Belgium, using the theory of revealed preference.

In chapter two I give an overview over the tax regimes for financial centers in Belgium, the Coordination Center Regime and the Notional Interest Deduction, in addition to other relevant taxation measures, like e.g. Controlled Foreign Company rules and directives from the European Commission. As I later focus on two Norwegian companies with coordination centers in Belgium I also include Norwegian specific legislation. Furthermore, I discuss the two tax regimes and evaluate them in combination with the other legislation presented.

In chapter three I focus on the business environment in Belgium and discover other factors which influence companies considering establishing a financial center in Belgium. Among the aspects presented are the political landscape, currency risk and the importance of experience and know-how of the industry in Belgium.

In chapter four I move over to firm specific issues by first illustrating what possibilities multinational companies have for adapting to different regimes in countries. Moreover, I go through the activities in a financial center and look at the advantages with such a center. I also comment on how the future looks for such centers in the NID regime and current economic environment.

In chapter five I introduce thoughts on financial centers in Belgium from important Norwegian stakeholders. More specifically I show how the Norwegian media and the finance department perceive this industry and special legislation. I also give the tax agency's view and show that the issue is somewhat delicate as abuse of the system is hard to identify.

In chapter six I examine the Statoil Coordination Center. First, I present the company itself to have some basic knowledge about the parent company. Further, I disclose information about the Statoil Coordination Center, and look at the financial statements to assess the profitability from both a qualitatively and quantitatively aspect. Lastly, I share some thoughts on how the new tax regime affects the taxation of the Statoil Coordination Center.

In chapter seven I evaluate the newly established Statkraft Treasury Centre in a similar fashion as was done with the Statoil Coordination Center. Yet there are no financial statements available so the analysis is shorter, but still give sufficient information to assess how the taxation of the center will be in the Belgian tax regime.

In chapter eight I present a financing structure which could be utilized by coordination centers, the so called "double-dip". I underline that I have no information or reason to believe financial centers are exploiting tax regimes to achieve tax arbitrage. Nevertheless, it is included for illustration purposes.

Last, I summarize the findings of this thesis and give my conclusion. I also make some suggestions on topics for further study.

Part 1

In the following three chapters the focus is to set the premises for financial centers in Belgium. First, I explore the history of such financial centers and seek to define the term itself. Further, I present facts about the industry and illustrate the industry's importance for the Belgian economy. The tax revenue from the coordination centers are rather limited but there exists other ways in which the centers contribute in a positive manner. The low taxation also raises the question if the regime in fact is a harmful tax practice. To answer this I use reports published by both the OECD and the EU. In this thesis I claim that Belgium is an attractive location for financial centers and already in chapter one I show evidence for this by using the theory of revealed preference. Next, I present an extensive overview of relevant measures regarding the taxation of financial centers and discuss the applicability and consequences of these. This obviously includes Belgium legislation, but also European directives and Norwegian tax measures are important. Not only do the taxation issues advocate Belgium as a preferable location, but the business environment also highlights Belgium's attractiveness. Belgium is located in the center of Europe and has a developed infrastructure both financially and physically. Although the political landscape is fragile, the parties agree on that accommodating foreign investors is important.

1. The Financial Center Industry in Belgium

Belgium has throughout the history been an attractive site and a preferred option for multinationals seeking to establish headquarter activities. Situated in the heart of Europe Belgium has a unique location. With proximity to huge exporters as Germany and France and the ports of Rotterdam and Antwerp, Belgium acts as a natural choice for any company seeking to establish central functions. Nonetheless, in the end of the 1970s Belgium experienced increased competition from nearby countries which introduced favorable regimes for such activities. In 1982 Belgium replied by introducing the Coordination Center Regime, a highly beneficial tax regimes for coordinating activities.

In this chapter I first define financial center, and explain how I use the term throughout this thesis. Moreover, I present the financial center industry in Belgium, including a historical overview and facts about the industry. Additionally, I give a list over well known companies which currently have such centers in Belgium. As the tax revenue from such centers is limited I explore the other advantages the industry have for Belgium. Furthermore, I present a common question related to low effective taxes, namely if Belgium can be considered to be a tax haven or if the tax regimes are harmful. Last, I give a preliminary conclusion of the attractiveness of the regime in Belgium using the concept of revealed preference.

1.1. Definition

A financial center is a division of a multinational company that performs certain financial activities, e.g. internal bank operations, internal financing and tax management. Companies choose to organize these activities in the financial centers for the reasons of economies of scales and tax planning, i.e. reducing the firm's overall cost and tax burden. The center can be the headquarter itself, but in this thesis I limit this to independent entities such as a daughter company, a subsidiary or a branch. Another prerequisite is that the activities undertaken are related to group companies and the center does not serve any third parties. In organization literature a financial center can be compared with a stab function, as it deals with tasks that can be done by all group companies themselves, but there are several benefits in centralizing this function. A coordination center is similar to the financial center, but includes a wider range of activities, i.e. also non-financial activities. In this thesis however I use coordination center and financial centers as synonyms to achieve more variety in the language. Internal bank, treasury center and shared services center are also used as synonyms.

1.2. Financial Centers in Belgium

1.2.1. History

One can argue that coordination centers have always existed to a certain extent. In one way or another, companies have always centralized certain activities by establishing headquarters and other superior entities. Nevertheless, the financial centers as defined above and as we know them today, emerged in the 1980s. The objective was to maximize return on investment which meant to increase profit and decrease costs, and at that this was to be done through Enterprise Resource Planning (ERP) solutions (Polak 2009). Belgium which had been a preferred location for foreign activities in Europe for decades appeared as the best choice. First, it has a unique geographical location, situated in the center of Europe and close to major economies as France, Germany and the UK, and the important ports of Antwerp and Rotterdam. Second, it was a developed country with all the services available, e.g. medical and health care, schools, recreation and public services. The communication infrastructure gave much room for travelling options with an extensive motorway network, high speed trains and a large international airport in Brussels. Last, the legal aspects were above satisfactory with a trustworthy judicial framework and accommodating authorities. Yet, Belgium faced fierce competition from neighboring countries, the Netherlands and Luxembourg, and Switzerland, which already had in place or introduced favorable tax regimes for coordination activities. In 1982 Belgium responded by introducing the Coordination Center Regime (CCR), which would prove to be very beneficial for multinational companies. The regime is further explained in chapter two, but the most important aspects are that the regime was limited to large multinational companies and the participants in the regime paid no or low taxes. This obviously attracted many companies and well over 400 companies applied for such status since the implementation of the regime (Pieron et al. 2000).

Following the work from both the Organisation for Economic Co-operation and Development (OECD) (2000) and the European Union (EU) (Code of Conduct Group 1999) the CCR was labeled as a harmful tax regime, and an uncertain future of the regime followed. On February 27 2002 the European commission formally started the investigation procedure against Belgium, and the regime was to be phased out by 2004. The Belgian government together with Forum 187, the association of coordination centers in Belgium, proposed changes to the regime and went into a legal battle

(Heyvaert 2006). Still, even though they were able to stall the process, the European Commission won the case. Nevertheless, the regime was allowed to continue for the participating companies until the end of 2010.

The Belgian Coordination Center Regime was internationally known by multinationals, and with the abolishment of the regime both the Belgium state and the industry itself feared that this would create a negative image of the investment climate in Belgium. The worst case scenario was that the industry would vanish altogether and job losses were estimated in the range from 10 000 (Quaghebeur 2005b) to 20 000 (Springael 2006) jobs. Consequently Belgium introduced a new regime, Notional Interest Deduction (NID). With the new regime, Belgium hopes to keep existing coordination centers while also attracting new ones. The NID is further explained in chapter 2, but the main feature is that companies receive a deduction for the equity in the company, i.e. a part of the profit is tax free. As financial centers often are heavily capitalized this assures ongoing beneficial taxation. In fact, many of the existing coordination centers in Belgium have already transferred to the NID regime (Adams 2010), including Statoil, while new companies have arrived, amongst them Statkraft.

1.2.2. Facts

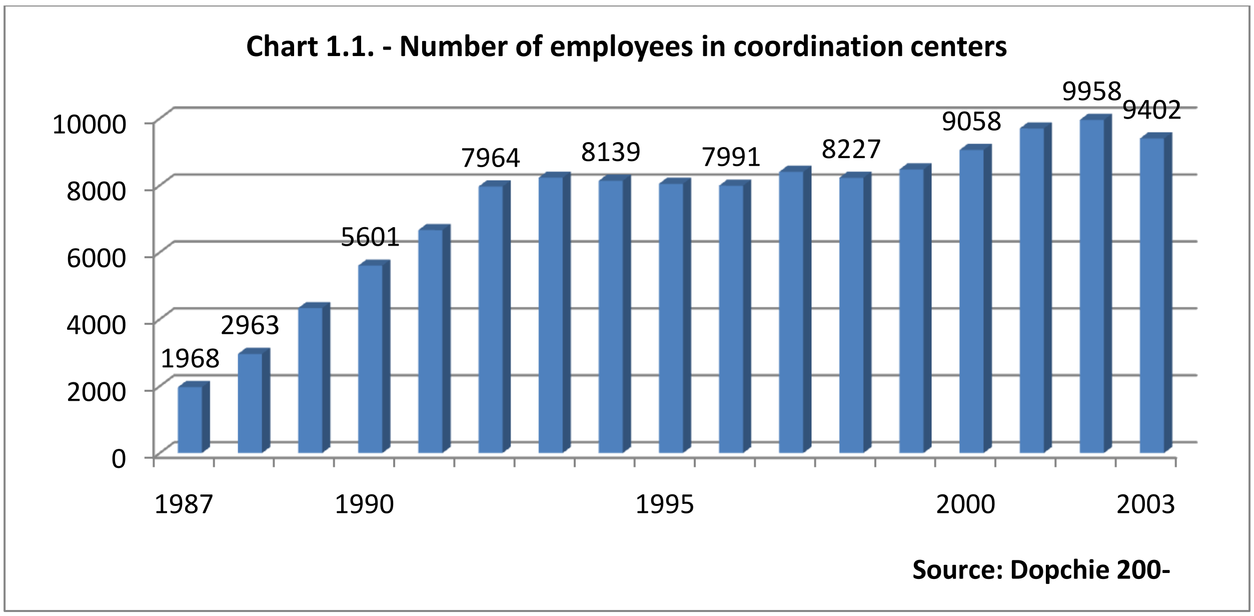
Since the beginning well over 400 multinationals applied for status as a Belgian coordination center and approximately 350 of these where given the royal permission to establish such a center (Adams 2010). If we deduct those which obtained the permission but did not establish and the ones that only were present for a short amount of time, there was somewhat around 280 coordination centers active during the lifetime of the regime. The participants were often well known large multinational corporations from all kinds of industries including Adecco, AT & T, BMW, Carrefour, Continental, Daimler, Du Pont, Exxon Mobil, General Motors, Henkel, Hewlett Packard, Kodak, Kraft, Shell and Volvo Trucks, but also companies less known. A selection of the most known companies are shown in table 1.1, while a more comprehensive list given in exhibit 1.1.

Table 1.1 - Well known companies with coordination centers in Belgium

3M	Daimler	HP
Adecco	Du Pont	Kodak
Alcon	ENI	Kraft
AT & T	Estee Lauder	L'oreal
Auchan	Exxon Mobil	Nestle
BASF	Ferrero	Shell
BMW	Flexsys	Shell
Bombardier	General Motors	Siemens
Campbell	Glaxo	Volvo
Carrefour	Goodyear	Whirlpool
Continental	Henkel	Yves Rocher
Daikin	Hertz	

Surce: AMADEUS

According to Dopchie (200-), secretary general of Forum 187, there was a large and steady increase in the number of employees from 1 968 in 1987 to 7 964 in 1992. After that the growth slowed down and reached the top level of 9 958 employees in 2002, see chart 1.1. The coordination center industry accumulated is huge. In 2002 there were some 224 coordination centers and these accounted for nearly € 243 billion in total assets. On the liability side, this was financed by some 57 % by equity, € 149 billion. In that given year the coordination centers had total profits before taxes of almost € 6 billion, but the taxable basis was only € 193 million. Furthermore, the centers paid just about € 66 million in corporate income taxes and an additional € 22 million in annual taxes. This sum up to total taxes of € 88 million and an effective tax rate of 1.47 % (Dopchie 200-, Exhibit 1.2.).



As the CCR is being phased out, it becomes more difficult to obtain information about the coordination center industry. The reason is that while the centers formerly needed permission to be part of the regime, the NID is available to practically every company. This makes structured industry wide information unavailable and hard to compute as it is difficult to distinguish the coordination centers from other companies. Nonetheless, according to Adams (2010), the number of financial centers is more or less the same now as it was before. After the transition to the NID regime Belgium has experienced both that companies have left Belgium and established in other countries, and that new companies have established in Belgium. In sum these should more or less cancel each other out.

1.3. Importance of the coordination centers[1]

A recurring theme in the thesis is the beneficial tax treatment of coordination centers. In Belgium specifically, such centers have benefitted from low or no taxation in the old CCR and will continue to do so in the NID regime. Using the year 2002 as an example, the coordination centers would only pay 2.49 % in effective tax rate in a NID regime. (Dopchie 200-). Thus, the financial centers per se do not generate considerable amounts of tax income for Belgium. So in this section I explain what other advantages there are to have a financial center industry for Belgium. The side effects presented are divided into the following categories, economic contribution, and spillover effect and intangible values.

1.3.1. Economic Contribution

First, the Belgian authorities presume that the coordination center industry and the incumbent companies are located in Belgium as a result of the tax regime. In other words, if the CCR or the NID did not exist, none of these companies, i.e. financial centers, or the coordination activities would be present. So despite the low effective tax rate, the taxes the centers actually pay are regarded as extraordinary income for the Belgian state. Second, the direct taxes paid by the coordination centers are not the only source of revenue for the authorities. As the industry employs more than 9 000 people, there are more sources of income which contribute a considerable amount of revenue for the Belgian government. The employees pay personal income taxes, value added tax (VAT) and other fees and charges. Third, before the introduction of the euro, the coordination centers and the related activity provided additional demand and liquidity of the Belgian franc. In fact, according to a study done by the National Bank of Belgium (Adams 2010) the isolated effect from the coordination centers was that the interest rate for the government was approximately one percent lower.

1.3.2. Spillover effects and Intangible values

In addition to the economic contribution there are spillover effects and intangible values related to a large coordination center industry. First, the centers and the industry itself can be used as a marketing tool to enhance the image of Belgium abroad and advocate establishment in Belgium. The effect is hard to measure, but surely the mere presence of many multinational corporations increase Belgium's attractiveness, as companies thinking of establishing abroad often look at what their peers are doing. This way the coordination center industry contributes to improve the perception of

[1] The following section is inspired by correspondence with Bart Adams, International Tax Expert, Fiscal Department for Foreign Investments in Belgium.

Belgium's investment climate and attract additional foreign direct investment (FDI) to Belgium. As a matter of fact the Belgian CCR was in a survey from 1995 the best known tax regime amongst CFOs of multinational companies (Adams 2010). The NID on the other hand does not currently share the same popularity, but it is still a relatively new regime so there could be changes in this in the near future. Second, coordination centers are often centers of influence or of decision making, thus the centers are important to the company as a whole. The centers have a pivotal role within the group and contribute to further integration of companies, both internal and external, which can signify expansion of the particular center. Third, although the coordination centers mostly perform activities for group companies, they still request external services. This lead to increasing demand for Belgian companies, may it be IT, construction or office supply companies, which further leads to more employment, tax revenue etc. for the Belgian state. And last, as the industry develops, competence and skills are acquired and give Belgium a competitive advantage in the future. These skills are not limited to the coordination centers, but also include third party companies providing services to the centers, e.g. tax advisors, lawyers, banks, software providers etc. Subsequently, this expertise can be popular in demand and attract additional business and activity.

1.4. Harmful tax practices

As companies in the CCR and the NID benefit from low taxation, an interesting question is whether Belgium can be considered a tax haven. In this section I briefly assess whether Belgium is a tax haven and later evaluate if the CCR or the NID are harmful preferential tax regimes. Specifications of the different regimes are thoroughly presented in chapter 2.

1.4.1. Is Belgium a tax haven?

Text box 1.1. - Tax haven criteria

a) *No or only nominal taxes*

b) *Lack of effective exchange of information*

c) *Lack of transparency*

d) *No substantial activities*

According OECD (1998) there are 4 key factors in identifying tax havens, see text box 1.1. The starting point of any examination of tax regimes is to look at the effective tax rate. The question is if the regime offers or is perceived to offer a place where non-resident can escape tax in their home resident. Next, laws or administrative practices which prevent effective flow of information are other characteristics of a tax haven. These issues are commonly known as secrecy rules and protect the tax payers against scrutiny from their own tax authority. Furthermore, lack of transparency in provisions, may it be legislative, legal or administrative, that prevents effective exchange of information is another factor. Such inability or unwillingness does not only help investors avoid taxes, but also facilitate illegal activity like money laundering or tax evasion. The last criterion is that there are no substantial activities. The absence of such a requirement suggests that the tax regime is attempting to attract purely tax driven transactions, and by this creating so called “paper companies”. A last, but important note, is that it is not enough to only satisfy one of the criteria, but one need to evaluate all four together to assess if a country is a tax haven.

Belgium would in such evaluation not be considered a tax haven. Even though financial centers in Belgium face low or no taxes, none of the other factors are satisfied and thus not sufficient to result in a characterization as a tax haven. First, the information flow from Belgium is satisfactory. The participants in the regime are large multinationals and these are in general very professional and accommodating when it comes to information exchange with government bodies. They are especially afraid of scandals, and would not risk something that can severely damage their reputation and brand. Second, the transparency in the regime is satisfactory as there are no laws or administrative procedure preventing effective flow of information. And third, the activity in the centers is substantial and all evidence point in the direction that transactions are not purely tax driven.

1.4.2. Are the CCR or the NID harmful preferential tax regimes?

Text box 1.2. - Harmful tax regime

a) No or low effective taxes
b) “Ring fencing” of regimes
c) Lack of transparency
d) Lack of effective exchange of information
e) An artificial definition of the tax base

A number of OECD members and non members have introduced preferential tax regimes for certain specific industries. So even if Belgium as such is not regarded as a tax haven, the tax regimes might still be harmful. The OECD lists five factors in identifying and assessing harmful tax regimes, shown in text box 1.2. These are somewhat similar to the factors for tax havens, the only difference is the point about “ring-fencing “. “Ring-fencing” is a regime partly or fully separated from the domestic regime or the domestic tax payers. The fact that the regime is excluded from the national regime implies that the authorities feel the need to protect its own economy and hints of a harmful regime. “Ring-fencing” may take several forms, e.g. the resident taxpayers are explicitly disqualified for the regime, or the participants of the regime are excluded from the domestic market. Albeit not as important, a fifth criterion listed in the OECD report is an artificial definition of the tax base. The OECD recognizes the need for narrowing the tax base to take into account inflation and offset impacts of double taxation etc. However, to go beyond what economic reasoning can explain is considered harmful. Again, to assess whether a regime is harmful, all five factors must be evaluated. A regime can be considered harmful if a factor works in combination with one of the others. An additional note to make is that economic considerations also influence the characterization of a regime. Meaning, if the regime shifts activity from one country to another due to tax differentials, this is a significant economical effect and should be taken into account. Alternatively, if the regime does not have any economic effects, the regime is not described as harmful.

The NID regime provides in some instances low or no taxes, i.e. in the case where companies earns very low Return on Equity (ROE), but normally corporations will be subject to a "normal" tax rate. The regime is available for all companies in Belgium and as discussed above, there is effective exchange of information and there is not a lack of transparency. Subsequently, the NID is not considered harmful.

The CCR on the other hand satisfies two of the requirements, in addition to the fifth condition. The two criteria not met are again lack of transparency and lack of effective exchange of information which must be considered as satisfactory in Belgium. Taxation of financial centers in the regime is close to zero, if not zero, and thereby meets the first criteria. For example Statoil did not pay any taxes at all in their last 5 years in the CCR. Additionally, the taxable base in the CCR is artificially constructed as it has no connection whatsoever with income and profitability of such centers. The CCR is also ring-fenced as participants in the regime must satisfy stringent conditions, and the regime is limited to multinational companies above a certain size. In fact, in a subsequent report from the OECD in 2000, potentially harmful tax regimes in the member states were identified. The CCR was recognized as a harmful preferential regime in the fields of insurance, financing and leasing and headquarter activities. Additionally a report filed by the Code of Conduct Group to the Council of the European Union (1999) supports this conclusion and characterizes the Belgian CCR as a harmful tax measure. As a consequence of these two reports the focus on tax havens and harmful tax measures increased. Belgium first tried to modify the regime, before they abolished it altogether and replaced it by the NID.

1.4.3. Summary

Even if Belgium possesses some of the characteristics of a tax haven with the CCR and the NID regime, the effective flow of information and transparency in the regimes ensures the legitimacy of the system. And while the NID in general does not meet any of the requirements of a harmful tax measure, the CCR has low or no taxes and is a "ring-fenced", in addition to having an artificially constructed tax base. As a consequence the regime was labeled harmful by both the OECD and the EU which forced the regime to be shut down.

1.5. Preliminary conclusion - Revealed Preference

The theory of revealed preference was first developed by Paul Samuelson in the field of economics (Samuelson 1938). He looked at consumer behavior to determine the preference of consumers. If one assumes that consumers are rational, meaning that they maximize utility, one can by looking at consumer choices reveal the preferences of the consumer. For example, if a consumer has two alternatives, a banana and an apple, and chooses the banana, we can by looking at the choice made infer that the banana is the preferred choice.

Similarly in our case if we assume companies are rational, i.e. maximizing profit, the companies' preferences can be revealed by looking at their decisions. The fact that Belgium has such a large industry in connection with the coordination centers suggests that the environment for such activities is favorable in Belgium.

Following the implementation of the NID, numbers from the National Bank of Belgium (NBB) show that in the first nine months unlisted shares and equity investment increased substantially (National Bank of Belgium 2007). According to the United Nations Conference on Trade and Development's (UNCTAD) World Investment Report (2007) inflows of FDI to Belgium more than doubled in 2006. Moreover, the report explains that this may be a result of the continued presence of coordination centers and the implementation of new tax incentives, i.e. NID. The IBM Global Location Trends report (2007) about Belgium supports the findings from UNCTAD and classifies 2006 as a year with impressive performance with a record level of inward investment. In addition, Statkraft established such a financial center in Belgium after the abolishment of the CCR. Again, if we use the theory of revealed preference, the conclusion is that Belgium continues to be an attractive location for coordination activities despite the ending of the Coordination Center Regime.

In the continuation of this paper I go behind this conclusion and try to identify why Belgium was and still is preferred as a location for coordination activities.

2. Taxation of Financial Centers

The financial center industry in Belgium is large and has attracted many multinationals throughout nearly 30 years. Revealed preference theory suggests that Belgium is an attractive location for financial centers. Much of this attractiveness can be attributed to the taxation of such centers. In this chapter I present an extensive, if not exhaustive, overview of taxation measures relevant to coordination centers. To make the overview complete special attention is given to the case of financial centers established by Norwegian companies and relevant Norwegian and EU legislation and directives are therefore also demonstrated.

First, I look at the Coordination Center Regime (CCR), the tax regime itself is presented and the requirements to take part of the regime. Second, I explore the Notional Interest Deduction (NID). This measure was introduced in 2006 and I outline the tax regime and the requirements of the NID and also look at the regime in a worldwide context. Third, other relevant taxation measures that can be applicable to financial centers of multinationals are presented. Specifically we look at other special tax regimes, tax treaties, thin capitalization rules and the tax regime for expatriates in Belgium. I also present the Parent-Subsidiary and the Interest-Royalty directives together with the European Economic Area agreement, and look at Norwegian Controlled Foreign Company regulations. Fourth, the ruling practice in Belgium is outlined. Fifth, I discuss the measures presented and try to evaluate the attractiveness of Belgium as a location for coordinating activities. And finally, I give a short conclusion.

2.1. The Coordination Center Regime

In Belgium the Coordination Center Regime as we know it today emerged in 1982 through a Royal Decree. The centers participating in the regime where given favorable conditions in several ways and especially when it came to tax treatment More than 400 multinationals applied for such a status in Belgium including well know companies as Bayer, BMW, BP, Carrefour, Coca Cola, General Electric, HP, Statoil, Volkswagen and Volvo (Pieron et al. 2000). At the time of implementation this special tax regime was approved by the European Commission (EC). Although several changes was made underway to the regime, the introduction of the EU Code of Conduct for business taxation in 1997 would most likely characterize the regime as providing unfair tax competition (Heyvaert 2006). Following a report to the Council of the European Union in 1999 (Code of Conduct Group

1999) and the OECD progress report (OECD 2000) the Coordination Center Regime was labeled a harmful tax practice. The conclusion was that the CCR affect in a significant way the location of business activity in the European Union and is therefore is incompatible with EU state aid rules. Nonetheless, the association of coordination centers in Belgium, Forum 187, and the government started a legal battle and managed to at least stall the process. Still, in June 22 2006 the European Court of Justice (ECJ) stated: *"With regard to centers approved before 31 December 2000, the scheme may be maintained until the expiry date of the individual approval applying on the date of notification of this decision and until 31 December 2010 at the latest."*, and brought an end to the era of coordination centers (Heyvaert 2006).

2.1.1. Tax regime

The corporate tax rate in Belgium, 33.99 %, is relatively high and coordination centers are as all other companies subject to this particular tax rate. At the same time the taxable base for the coordination centers differs from the ordinary Belgian tax regime and the way general tax systems work. In these cases the taxable base is essentially the profit, i.e. income minus costs. The taxable base for the coordination centers however is calculated on a notional base determined by total cost less wage costs, financing costs and taxation, plus a mark-up of 8 %. The mark up is supposed to reflect a profit from the activities undertaken. In practice this means that the effective tax rate is existent but insignificant. What's more, the coordination centers are exempt from withholding tax on both interest and dividends in Belgium (Meyers and Verhaeghe 1992, Pieron et al. 2000 and Quaghebeur 2005a).

Historically in Belgium one needed to pay 0.5 % of equity in a so called one-time duty tax, meaning that when establishing a company with € 100 in equity, the company is liable to a duty tax of € 0.5 in duty tax. Coordination centers are exempted from this tax. (Meyers and Verhaeghe 1992, Pieron et al. 2000 and Quaghebeur 2005a).

2.1.2. Requirements

Not any company may set up division or branch in Belgium and expect to receive the CCR tax treatment. Financial institutions, e.g. banks and insurance companies, are not allowed to participate in the CCR and for the rest several requirements must be met and satisfied before status as a coordination center are given. If obtained, the approval last 10 years. The somewhat stringent conditions are to avoid every company to enjoy the benefits of such status and especially this applies to Belgian firms. So with strict requirements Belgium seeks limited the CCR to the target group, large multinationals.

The requirements are the following. One, the coordination center must be organized either as a subsidiary or a branch of a non-resident company as according to Belgian legislations. Two, the group must be a multinational corporation having at least four subsidiaries in four different countries. A group is defined as all the companies where common shareholdings surpass 20 %. Three, the reported consolidated equity of the group must exceed € 24 million, and the annual consolidated turnover is required to be over € 240 million. Four, the equity of the non-Belgian companies of the group located outside the group headquarters country of origin should amount to at least € 12 million or 20 % of the consolidated equity for the whole group, while the turnover equivalently must exceed € 120 million or 20 %. And five, the coordination center have to employ a minimum of the equivalent of 10 employees in Belgium by the second year in operation (Pieron et al. 2000, Meyers and Verhaeghe 1992 and Quaghebeur 2005).

The services conducted by the particular coordination center must follow the intra muros principle, i.e. the activities may only be performed to benefit the group and not to any third parties. This is to prevent the center from acting in commercial activities and compete with normal firms not benefitting from the CCR. Also worth noting is that it is not permitted to own shares, and thereby the center cannot act as a holding company.

2.2. Notional Interest Deduction

After the ruling from the ECJ stating that the Coordination Center Regime was considered as unlawful state aid, the phasing out of the regime would make Belgium less attractive for coordination activities. Additionally, the latest enlargement of the EU contributed to more fierce competition from countries with lower corporate tax rates, e.g. Latvia, Lithuania and Hungary (Krupsky 2006). Doing nothing could result in a loss of 10 000 jobs and approximately € 700 million in taxes (Quaghebeur 2005b). So as to combat this and avoid migrating companies the concept of Notional Interest Deduction, also known as Risk Capital Deduction, was introduced as of the accounting year of 2006. As opposed to the Coordination Center Regime the NID is simple to understand, calculate and complies with EU state aid rules.

According to the Modigliani-Miller theorem the tax treatment of debt and equity should be neutral to not affect a company's capital structure and value. Nonetheless, in most parts of the world interest payments are tax deductible, while dividends are not. Thus, corporate tax regimes discriminate against equity financing (De Mooij and Devereux 2009). The NID regime in Belgium however allows for a notional deduction as to compensate for the economic cost of equity and to level the playing field between debt and equity. These types of regimes are also referred to as Allowances for Corporate Equity (ACE) (Klemm 2006). The deduction is calculated on the basis of the equity and hence firms which operate in capital-intensive activities benefit from this regime (Joosten 2005). Such activities can be exemplified by precisely treasury activities and intra-group financing. So while the main aim with the NID is to provide a viable alternative and successor to the Coordination Center Regime (Vanclooster et al. 2003), another effect is a more tax neutral treatment of debt and equity in line with the Modigliani-Miller theorem. Also, Bombeke and Frenckell (2006) suggest that the NID was introduced to support the development of small and medium sized enterprises, as these are crucial to the Belgian economy. These companies often do not have much debt capacity and must rely on private equity financing, so by allowing for a notional deduction Belgium hopes to increase the attractiveness of the small and medium sized enterprises.

2.2.1. Requirements and tax regime

All companies in Belgium can take advantage of the NID, further specified as companies that are subject to either Belgian corporate income tax, or non-resident corporate income tax. In practice this includes Belgian companies, Belgian branches of foreign companies, non-profit organizations and foreign companies owning real estate or property rights in Belgium. However, companies already benefitting from other advantageous tax regimes, e.g. the CCR, are excluded.

The taxation under the NID regime works as follows. From the corporate profits a deduction (NID) calculated as according to the formula presented below, is deducted and this amount is tax free earnings for the company. The rest is taxable profit subject to the normal Belgian corporate tax rate. If the profits are not sufficient to utilize the tax advantage of NID, carry forward is allowed for 7 years (Daoût 2006 and 2009, Martin and Smet 2008 and Springael 2006).

NID = Notional Interest Rate x Adjusted Equity

The Notional Interest Rate (NIR) is based on the 10-year Belgian state bonds, more commonly known as the OLO rate, short for "obligations linéaires". This rate represents the annual average of the monthly published interest rates for the 10-year Belgian state bonds over the year two years before the fiscal year concerned, i.e. the notional interest rate for 2010 is the annual average of the monthly interest rates on the 10 year state bond in 2008, and is to be adjusted annually. For the purpose of the NID, the rate cannot deviate with more than 1 % from the preceding year, and limited to a maximum rate of 6.5 %. The current rate was however fixed by the government at 3.8 %, while the rate for 2011 is capped at 3.8 %. An overview of historical NIR rates is given in table 2.1. It is worth noting that small and medium enterprises, according to Article 15, §1 of the Belgian Company Code, receive a 0.5 % a higher rate. The logic is that investment in smaller companies is more risky and these companies have more difficult access to financial markets, and should therefore be granted a higher deduction. Nonetheless, branches or companies part of an international group are considered on a consolidating basis, meaning that the financial centers will in nearly all cases not apply for the 0.5 % higher NID.

Table 2.1. - NID rates (NIR)

Accounting year	*NIR*
2006	3.442 %
2007	3.781 %
2008	4.307 %
2009	4.473 %
2010	*3.800 %*
2011 max	3.800 %

The NID itself is calculated on the basis of so-called adjusted equity or risk capital. To reach adjusted equity one starts with the book value of equity, in accordance with Belgian Generally Accepted Accounting Principles, and subtract several items, e.g. share participations, assets where the income is not taxable in Belgium, assets excluded, and tax exempted items (Bombeke and Frenckell 2006). The adjustment of equity is provided to avoid abuse of the measure. To take into account changes in the adjusted equity throughout the accounting year a pro rata basis is used, i.e. weighted average.

It is also worth noting that together with the introduction of the NID, the capital duty of 0.5 % on equity raised was abolished altogether as of 1 of January 2006, and replaced by a fixed fee of € 25 regardless of the size of the equity raised. Also interesting is that companies have the right to waiver the NID as a whole or just partly, i.e. companies can choose not to receive the NID or parts of it, thereby increasing the effective tax rate. If executed the waived NID forfeits and cannot be carried forward or be used at a later stage (Daoût 2009, De Haen et al. 2008 and Martin and Smet 2008).

2.2.2. The NID in a worldwide context

As mentioned earlier, part of the rationale by introducing the NID regime was to level the playing field between debt and equity, and throughout the history there have been many suggestions on how to achieve this. So far Allowances for Corporate Equity have been the most popular way of doing so. The ACE regime is basically a system which tries to compensate for the differences in debt and equity treatment by allowing for some sort of notional deduction on the basis of equity. Klemm (2006) gives an overview over ACE regimes worldwide and states that the NID regime in Belgium is an example of such and in fact is the only ACE regime currently in effect in Europe. Croatia had a similar system from 1994, but it was abolished in 2000. Italy and Austria on the other hand had partial ACE systems, which allowed for lower taxation on a notional income. These were however also discontinued in years 2003-2004. Outside Europe Brazil implemented ACE in 1996, allowing for dividends to be treated as "interest on equity", i.e. deductible for corporate income taxes, but subject to interest withholding tax.

2.3. Other relevant taxation aspects

The CCR and the NID outline the main tax treatment of financial centers. Nonetheless, there are many more measures which affect the overall tax bill of CCs. In this section we see that it is not only the centers which have beneficial taxation but also service and distribution centers and holding companies. Another aspect of taxation in Belgium is the extensive tax treaty network which gives the incumbent firms access to over 80 treaties, most of them without strict provisions. If certain conditions are met, expatriates also are provided with several tax exemptions and tax relieves. To combat exploitation of tax regimes by debt shifting, countries introduce so called thin capitalization rules. Belgium has two such measures which deal with loans from tax haven companies and shareholders and directors in the company. For financial centers there are many cross border transactions of equity, dividends and interest. The Parent-Subsidiary Directive and the Interest-Royalty directive were implemented to avoid double taxation of cross border transactions. The consequences of these directives are that dividends are not subject to withholding tax and interest should only be taxed once. As a member of the European Economic Area (EEA) Norway is committed to introduce the same directives in its own legislation e.g. the Norwegian Tax Exemption Method which exempts the distribution of profit between companies from taxes. Also from a foreign point of view there exist rules to avoid abuse and protect tax revenue. Nevertheless, the Controlled Foreign Company (CFC) rules in Norway are in any way not applicable to the EEA and therefore not relevant for financial centers of Norwegian multinationals.

2.3.1. Special tax regimes in Belgium

Not only coordination centers have benefited and are benefitting from a favorable tax regime. Belgium also have special and tax favorable regimes for distribution centers, service centers and holding companies. A distribution center may perform logistical services e.g. purchase of supplies, goods, raw material and similar together with transport, storage and delivery to group companies. Service centers are considered to complement distribution and coordination centers and are therefore given beneficial tax treatment. The activities this center can undertake range from call center, information to customer, contributing in any passive way in sales, database management to other activities of preparatory or auxiliary nature (The Economist Intelligence Unit Limited 2006 and Vanhaute 2008). Although regarded an inferior compared to Luxembourg and the Netherlands, Belgium is a viable alternative for holding companies. The current regime includes several favorable features like the extensive tax treaty network, no domestic withholding tax for dividends and the above mentioned NID (Eynatten 2007 and Romano 1999).

2.3.2. Tax treaties

Belgium has an extensive tax treaty network, if not the most extensive in Europe, covering about 81 countries, including amongst other all EU members, the United States and United Arab Emirates. In addition, Belgium is the only western country that has a tax treaty with Hong Kong. These treaties are especially beneficial for companies because they in general have favorable provisions (Liebman et al. 2005 and Vanhaute 2008).

2.3.3. Tax regime for Expatriates

Belgium has relatively high personal taxes with a 50 % tax bracket for income above € 32 860, which is a huge number for many companies or employees coming from abroad. As a result a special tax reform for expatriates was introduced already in 1959, at that time to please US executives, but it quickly expanded to apply to all foreign nationals working for a foreign or foreign controlled company. The current regime which came in to force in 1983 has been criticized on various occasions due to the fact that it is only based on an administrative circular letter and not a formal law or similar. Yet the Belgian tax authorities keep on following the established practice (Vanhaute 2008).

To be eligible to the expatriate tax regime certain conditions must be satisfied. Firstly, the employer must be part of an international group of companies and perform activities within the three approved categories. These are as follows, a scientific center or research laboratory, an office performing a controlling or coordinating function, or an enterprise creating goods or services. Secondly, the position must be an executive position, i.e. a position that requires special knowledge and responsibility, or for highly specialized personnel, here defined as personnel whom are highly difficult or even impossible to recruit in the Belgium labor market. And finally, the employee in question must have been recruited directly by the Belgium entity from abroad, i.e. the person must live abroad prior to the employment, and thereby classified as a non-resident for tax purposes (Vanhaute 2008).

The regime is regarded as advantageous because its possibilities for tax savings and more relaxed requirements for working permit. The mentioned tax savings stem from mainly two sources, travel exclusion and tax-free allowances. Travel exclusion states that the employees are assessed solely on work actually performed in Belgium, meaning that personal income and investment income from abroad are not taxable. Tax free allowances are given on the basis of extra expenses incurred as a result of accepting the particular position. These costs, which are born by the employer, are tax exempt provided of course that they are reasonable, decided on a case to case basis, and can be documented. Such expenses includes compensation for higher living and housing costs, trip to the country of origin etc. and are limited to €29 750 for employees of coordination centers. In addition certain benefits are tax free and not included in the above mentioned limited amount such as tuition fees for children, any loss incurred on the sale of residence, car or equipment abroad, and the cost of moving into and setting up in Belgium as well as eventually moving out of Belgium (Vanhaute 2008)

2.3.4. Thin Capitalization Rules

Thin capitalization rules are implemented by tax authorities to avoid tax evasion by excessive interest deductions and transferring of income. Tax evasion in this sense is done by funding a foreign entity almost entirely with debt and very little equity, hence the name thin capitalization. To combat such practice countries introduce so called thin capitalization rules which are organized in various ways. In general one tries to target loans granted by shareholders, may it be all debt or only foreign. A commonly used measure is to have debt equity ratio limit where the interest payments related to debt above the ratio is not tax deductible. The OCED support such rules and states that member countries are free to apply such rules, as long as the result leads to a determination of taxable basis which satisfies the arm's length principle (Gouthière 2005).

Belgium has two statutory provisions to deal with thin capitalization, a 7:1 debt equity ratio regarding interest payments for the benefit of tax haven companies, and a 1:1 debt equity ratio for interest payments remunerating "advances" made to a company by individual shareholders, individual directors or foreign corporate directors. The implications of not satisfying these measures is non deductibility of the interest exceeding the 7:1 ratio and recharacterization of the interest above the 1:1 ratio as dividends. These provisions are specific in their nature and non stringent leaving room for tax planning. In addition, the ratios apply to the end-year share capital, which allows firms to adjust their share capital throughout the financial year if necessary (Clarebout and Dhaene 2005)

2.3.5. The EC Parent-Subsidiary Directive

The Parent-Subsidiary Directive (PSD) which was implemented in 1990 has effectively abolished withholding taxes on dividends flow within the EU. The directive deals with taxation of the distribution of profit when it comes to group companies, more specifically when the parent company and the subsidiaries are located in different member states (EU). The aim is to facilitate and accommodate group companies within the common market, and to ensure the effectiveness of the common market. Tax rules should be neutral from the point of view of competition and the operations of companies should not be hampered by restrictions, disadvantages or distortions originating from differences in taxation. In that sense it seeks to harmonize taxation rules within the EU area and in effect avoid double taxation by exempting dividends and other forms of profit distribution from withholding tax (Council Directive 90/435/EEC 1990 and Council Directive 2003/123/EC 2003).

The directive recommends that the parent company is not to be taxed upon being distributed profits from the subsidiary, and the profits should in addition not be subject to withholding tax. Similarly should the subsidiary also not be applicable to withholding tax on profits distributed to the parent company. The prerequisites of receiving such treatment are that the companies are permanent establishments and subject to corporation tax or equivalent. Status as parent company is given if the ownership, directly or indirectly, surpasses 10 % of the capital, or alternatively the voting rights, in the subsidiary (Council Directive 90/435/EEC 1990 and Council Directive 2003/123/EC 2003).

2.3.6. The EC Interest and Royalties Directive

In 2003 the Interest and Royalties Directive (IRD) was introduced to level the playing field between cross-border and domestic interest and royalties payments. It follows much of the same rationale as the PSD, underlining the importance of tax harmonization to ensure an effective common market and to eliminate double taxation. More precisely, the directive seeks to remove withholding tax obstacles in the case of cross-border interest and royalty payments within a group of companies. In the preamble to the directive it is clearly stated that interest or royalty payments should be subject to tax only once. Further, it recommends that the taxation is to be in the member state of residence for the company, i.e. exempting payments from tax in the source country, so that is guaranteed that the income is taxed in the same member state as the related expenditure is deductable (Commission of the European Communities 2009 and Council Directive 2003/49/EC 2003).

Similarly to the PSD there are certain requirements to fulfill to fall under the directive. Companies need to be from the member states and be associated. Association is here defined by a minimum of 25 % ownership stake either from one company to the other or a third company owning at least 25 % of the capital in both companies. Also within this directive the 25 % ownership requirement can be replaced by having minimum 25 % of the voting rights. An important note is that contrary to the PSD these holdings must be direct, so a grandparent company in a member state would not qualify for this directive, although the companies as such clearly are associated (Commission of the European Communities 2009, Council Directive 2003/49/EC 2003 and Distaso and Russo 2004).

2.3.7. The European Economic Area Agreement

Following the European Economic Area agreement which was applied in 1994, the European Free Trade Association (EFTA) states of Norway, Iceland and Liechtenstein are allowed to participate in the internal market of the EU. In exchange they pay a fee, adopt relevant community legislation, including both the Parent-Subsidiary Directive and the Interest and Royalties Directive and have no voting rights in the European council. The Norwegian Tax Exemption method is an example of such and applies to the Parent-Subsidiary Directive.

2.3.7.1. The Norwegian Tax Exemption Method

The aim of the PSD is that dividends and capital gains should move freely between group companies and only be taxed at the end level, i.e. when paid out to personal investors. Following a tax reform in 2006 Norway introduced an equivalent model, "Fritaksmetoden", which allows for free movement of dividends and capital gains within the EEA. More specifically all dividend payments and capital gains originated from ownership in companies with residence in the EEA are exempt from tax at the corporate level, and this includes even portfolio investments making it go even further than the Parent-Subsidiary Directive. Outside of the EEA there are holding requirements similar to the PSD for ownership and voting rights, 10 % of each, and by this excluding portfolio investment (Leegaard 2007a).

2.3.8. Controlled Foreign Company Rules

To protect tax revenue, avoid abuse and secure neutrality of capital export companies may be subject to CFC legislation. In Norway such legislation is called "NOKUS" and comes into effect if the company invested in is located in a low-tax jurisdiction and if Norwegians effectively control the company. Low-tax jurisdictions are defined as less than two thirds of the Norwegian corporate tax, i.e. 18.67 %, while control is reached by owning a majority stake or by any other means controlling the company. If a firm satisfies these requirements the company is taxed as if it was a normal company taxable in Norway. However, there is an important exemption, the company will not be subject to these regulations if the company is resident within the EEA and can show for business activity and that it is not established simply for tax reasons, regardless of the fulfillment of the two requirements (Leegaard 2007b)

2.4. Ruling Practice

Ruling practice, also known as advance rulings, is a service to companies in tax matters. Usually it is a policy from the authorities that if a company has questions about how it will be taxed, it can refer to earlier rulings or itself apply for an advance ruling. A company sends an application with explanations of the matter and the authorities provide a statement on how it will be taxed. The authorities provide this service to increase certainty in tax matters, especially for foreign investors these may have great importance on localization decisions. In the later years the Belgium office has developed into being more efficient, proactive, flexible and business-minded. In 2005 the Office for Advance Decisions in tax matters was granted more autonomy and should now be able to provide rulings within a three month period. It is also possible to have no-name pre-filing meetings with the authorities without any obligations. In addition, it is now allowed request a ruling on nearly all tax enquiries. A ruling is binding for the Belgian Tax authorities and in general valid for a time period of 5 years. (Martin and Smet 2008 and Quaghebeur 2005c)

There have already been many rulings relevant to financial centers and among the matters considered are the use of NID, waiver of NID to meet CFC rules, and 0 % Belgian withholding for interest attributed by a Belgian finance center. According to De Haen et al. (2008) approximately 30 rulings about the matter have been given as of May 2008.

2.5. Discussion

The legislation and taxation concerning financial centers in Belgium are favorable. Both the CCR and the successor NID offers various possibilities for tax planning by multinational firms. While the CCR was limited to large multinationals, the NID now offers a better regime for smaller, albeit large, foreign companies. The presence of other advantageous tax regimes, as those for expatriates, distribution center, service center and holding companies do if not directly, at least indirectly positively affect coordination centers and lowers the threshold for establishment. The lack of applicability by Belgian thin capitalization - and Norwegian CFC rules ensure that Norwegian companies setting up financial center have a predictable environment. To support this, Belgium's ruling practice is accommodating by giving rulings which are business friendly and binding. And finally, the EC directives and the EEA agreement make the interest income not subject to double taxation and the distribution of a center's profit to the parent company tax free.

2.5.1. Coordination Center Regime

The taxation under the CCR is highly beneficial for financial centers. Firstly, the taxable base is not related to any income or profits, but based on costs. This means that the more profitable a center is, the more profitable it will be under this regime. On the other hand, a more profitable center would probably also increase its activity, which increases the cost and in that way the system takes profitability into account. Since the taxation is separated from profitability one could argue that the tax regime increases the business risk as taxes are calculated on costs and the tax bill needs to be paid. The tax regime works in some way as an amplifier, in good times the taxation is relatively low while in bad times the center receives a tax bill in addition to the initial loss. Nevertheless, the coordination centers are without exception part of the first group as the regime is not mandatory, and any firm expecting to incur a loss will be part of the normal corporate tax regime in Belgium. Secondly, the cost base excludes wages and financial cost, but includes a mark-up of 8 %. If one considers the cost structure of a financial center, it is obvious that wages and financial cost represent the largest costs, so even with the mark-up the taxable base is insignificant, and the actual taxation almost non-existent. In fact the effective tax rate of the coordination centers, as mentioned earlier, was only 1.47 % in 2002. Thirdly, there is no capital duty required and dividends and interest are exempt from withholding tax. For the coordination centers this lowers the threshold for establishment as the start-up capital is not subject to tax, but can go straight to the operation of the business. And no withholding tax on the distribution of profits means that a euro earned in the coordination center is a euro earned in the parent company.

To be accepted into the regime there is quite stringent conditions, and advice that the regime is not suited for every company. The requirements regarding employees, foreign activity, equity and turnover all point in the direction that the regime is better suited for larger multinational companies with large operations.

2.5.2. Notional Interest Deduction

The taxation of financial centers continues to be beneficial in the NID. First, coordination centers are often highly capitalized, and as a consequence they also receive a larger NID. Still, the capital which is applicable to the NID is based on book values. On the stock exchange one can easily observe that for the most part the book value of a company does not reflect the true value and market capitalization. As a consequence the NID understates the economic cost of capital as book values in most cases are too low, even so, to receive any deduction for capital at all is somewhat revolutionary and by itself constitutes a unique advantage. In the same way one can argue that using book values in most cases underestimate the actual cost of capital, using a notional interest rate does the same. Again, the true cost of capital is higher than the notional interest rate. This is among other due to the fact that equity in theory should receive a higher interest based on its characteristics, i.e. equity has a lower priority than debt in distributing the cash flow of a firm or in the case of a possible bankruptcy. Yet, although theoretically too small, a deduction is better than no deduction at all.

Second, analogously to the CCR, companies following the NID are exempt from capital duty. This comes as a natural feature as capital duty in any case is rare in Europe and some of the rationale behind the NID is to make capital investment more attractive.

Third, the NID cannot deviate with more than 1 % from the previous year. In the after-match of the financial crisis this was a positive feature as the interest rates decreased drastically, while changes in the NIR are capped at 1 %. Conversely, if the interest rate increases quickly it would be an unappealing feature. In addition, the NIR is capped at 6.5 % which is not benefitting companies if the interest rate surpasses this point. Then again, nowadays it seems rather improbable that interest rates will reach such levels, as central banks try to keep inflation stable and at low figure.

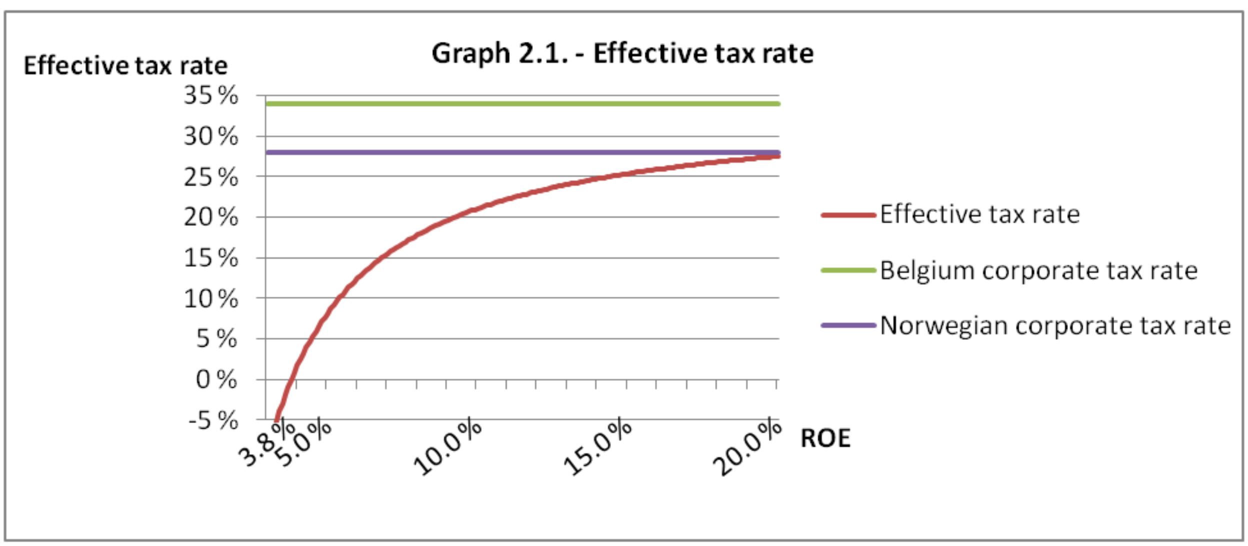
Fourth, as the NIR for SME is 0.5 % higher, this can help smaller firms to establish such centers. In fact they receive a higher NID and are not faced with the strict requirements from the old CCR. Still, there are significant fixed costs and a surge in small coordination centers is unlikely. Fifth, the activities of financial centers are predictable as they deal with in-company transactions. In combination with the simple nature of the NID this provides flexibility and additional possibility for companies to adapt to the system.

The high statutory tax rate is obviously a highly negative aspect of the Belgium tax system for foreign companies. Compared to Norway, Belgium has a statutory tax rate of 33.99 % while Norway has a rate of 28 %. According to Adams (2010) this can have an effect on foreign investors, and he explicitly mentions American companies which prefer tax regimes that have low statutory taxes. The CFO and similar obviously understand that the effective tax rate is more important than a statutory rate, but for the shareholders the concept becomes more blurry and they prefer simple regimes. Yet, since a financial center is just a service center for group companies the decision lies with the management which realizes the importance of effective taxes. In Belgium the NID lowers the effective tax rate by a significant amount, though dependent on profitability. This is illustrated in table 2.2 by showing the effective tax rate for a company with returns on equity of respectively 2.5 %, 5 %, 7.5 %, and 10 % for the year of 2010. The table is on relative form, meaning that it shows percentages and not absolute numbers. To reach the effective tax rate the taxable income needs to be calculated first. In the NID regime this is profit, i.e. ROE, less the NID rate which in 2010 is 3.8 %. The taxable income is subject to the corporate tax rate in Belgium of 33.99 %, and hence the taxes payable are the taxable income times the corporate tax rate. The effective tax rate is given by dividing the taxes payable with the ROE.

Table 2.2. - Effective tax rate on different ROE's

ROE	2.5 %	5.0 %	7.5 %	10.0 %
NID rate (2010)	3.8 %	3.8 %	3.8 %	3.8 %
Taxable Income	-1.3 %	1.2 %	3.7 %	6.2 %
Corporate tax rate	33.99%	33.99%	33.99%	33.99%
Taxes payable	-0.44%	0.41%	1.26%	2.11%
Effective tax rate	*-17.7 %*	*8.2 %*	*16.8 %*	*21.1 %*

From the table we observe that when ROE equals 2.5 % the effective tax rate is negative. The negative effective tax rate is to be interpreted as there are no taxes payable and the unused NID can be carried forward. This is the case for any ROE below the NID rate, which makes the regime especially attractive for low profit companies. Furthermore, for ROEs ranging from 5 to 10 % the taxable income is reduced significantly and the effective tax rate is respectively 8.2 %, 16.8 % and 21.1 %. Comparing with the statutory tax rate it is clear that the NID ensures a favorable tax rate. In graph 2.1. the findings from the table are illustrated graphically. The ROEs is given along the x-axis while the effective tax rate is given in the y-axis. The Norwegian and Belgium corporate tax rate is included for comparison.



From the graph we see that the effective tax rate curve intersects the x axis at exactly the NID rate as explained above. With increasing returns on equity the effective tax rate increases, but at a diminishing rate. The ROE must increase to over 20 % for the effective tax rate to come close to the Norwegian corporate tax, while it naturally never will reach the Belgium corporate tax rate. Moreover, the return on equity for financial centers most likely will be in the range of less than 10 %, and with a tax rate below 20 %. I evaluate the NID regime in the current market conditions further in chapter 4.

2.5.3. Other relevant taxation aspects

2.5.3.1. Special tax regimes and the Belgium tax treaty network

Although not necessarily beneficial for the coordination centers per se, other advantageous tax regimes may affect multinationals and their choice of location. So upon the decision of where to locate the coordination center, the possibility to also receive beneficial tax treatment for other activities increases Belgium's attractiveness. Companies appreciate the possibility to centralize more functions together to further benefit from economies of scale. In a similar fashion the extensive tax treaty network add to the attractiveness of Belgium as a preferred location for e.g. holding companies, and indirectly for coordination centers.

2.5.3.2. Tax regime for expatriates

Wage costs represent a large proportion of a center's cost and normally companies like to use current employees to start-up abroad, i.e. these are by definition expatriates, especially for high competence position. The reasons are easy to understand, one wants that important positions are hold by people who already knows the firm and its culture and which is trustable. However, at the lower level national employees are more attractive as these probably are cheaper and can work in the location for a longer period. The Belgian tax regime for expatriates therefore contributes to lowering the cost of expatriates which are crucial to the establishment, and hence lowers the threshold for establishing in Belgium.

2.5.3.3. Thin Capitalization Rules

Even if there are thin capitalization rules in Belgium, these are in general not applicable to coordination center. First, the 1:1 ratio is related to private debt holders. As it is large multinational companies that establish the financial center, these types of loans are unlikely. Second, the 7:1 ratio deals with companies in tax havens. The financial center serves the many companies of an international group and it could be that these are located in low tax jurisdictions. Nonetheless, this would in any case be just a small part of the overall activities. Also, with the introduction of the NID, where capital is treated beneficially, a high debt equity ratio is improbable and the 7:1 ratio should be easy to satisfy. In addition the ratios apply to the values the 31.12 every year, meaning it is predictable and should be possible to avoid. For all practical purposes when it comes to financial centers Belgium does not have any thin capitalization rules (Clarebout and Dhaene 2005).

2.5.3.4. The EC directives and the EEA agreement

Following the implementation of the Parent-Subsidiary and the Interest-Royalty Directives, cross-border distribution of funds became much easier for multinational companies. Firstly, it is now almost guaranteed that double taxation on movement on funds within multinational companies is eliminated. The member countries obviously have the right to elaborate its own regime, but for the most part these are similar to what is set out in the EC directives. Secondly, as the financial centers generally are fully owned subsidiaries, the prerequisites for the directives are easily met. Still, in the interest-royalty directive some structural adjustment might be needed due to the fact that holdings in the companies must be directly owned for the directive to be valid. Additionally the IRD is somewhat stricter, requiring a 25 % ownership stake versus 10 % in the parent-subsidiary directive. This could lead to some necessary structural changes in the international group of companies, but in most cases should constitute a problem since as mentioned the financial center are in general fully owned by the parent company. And finally, the directives aim to avoid double taxation and arrange a common market by eliminating withholding taxes on the cross-border transfer of money within a group of companies. For financial centers this means that the profit easily can be distributed back to the parent company and that inter-company interest is not subject to double taxation.

As a member of the EEA, Norway follows the same directives as given for the EU. So for financial centers established by Norwegian companies these are highly relevant. The Norwegian Tax Exemption Method is an example of Norwegian adaptation to EC directives as it allows for free movement of dividends and capital gains within the EEA area.

2.5.3.5. CFC rules

As coordination centers in Belgium are subject to low taxes, CFC rules might be applicable. In the Norwegian case the company will be taxed as if it was a domestic firm, i.e. be subject to the 28 % corporate tax rate in Norway. As mentioned earlier, this criterion is not applicable for Norwegian companies in Belgium. Nonetheless, the subject-to-tax requirement can be relevant for other countries and jurisdictions, so I use the Norwegian rules for illustration purposes. To deal with these kinds of criteria Belgium has given the companies the right to waiver the NID as a whole or just part of it. This way, companies are able to adjust the effective tax rate upwards so as to satisfy the conditions of not being subject to any CFC rules. In the case of Norway, the CFC rules say the company must be subject to a minimum tax of 18.67 %. As we earlier saw in table 2.2 the effective tax rate of a company under the NID regime varies across profitability. By waivering part of the NID the companies can reach the required tax level, and this is shown for the same ROEs as in the former example and is illustrated in table 2.3. The ROE's and the taxable incomes are still the same, and so are the effective tax rates "before". However, in the three first scenarios the CFC requirement of a tax rate of 18.7 % is not fulfilled. So in order to satisfy the requirement I calculate the necessary taxable income[2]. Further, I subtract the "taxable income before" from the "necessary taxable income" to find the amount of NID waivered, if this is a negative number the NID waivered is set to zero. The taxable income after the adjustment can now be calculated as ROE less the NID used, which is the available NID minus the NID waivered. This income is subject to the corporate tax rate of 33.99 %, so the taxes payable is the corporate tax rate times the income. The effective tax rate is again taxes payable divided by the ROE.

Table 2.3. - Waivering of the NID to satify CFC-rules

Return on Equity	2.5 %	5.0 %	7.5 %	10.0 %
Taxable Income *before*	-1.3 %	1.2 %	3.7 %	6.2 %
Necessary taxable income (CFC)	1.4 %	2.7 %	4.1 %	5.5 %
NID waivered	2.7%	1.5%	0.4%	0.0%
Taxable income *after*	1.4%	2.7%	4.1%	6.2%
Corporate tax rate	34.0%	34.0%	34.0%	34.0%
Taxes payable	0.5%	0.9%	1.4%	2.1%
Effective tax rate *before*	-17.7 %	8.2 %	16.8 %	21.1 %
Effective tax rate *after*	**18.7 %**	**18.7 %**	**18.7 %**	**21.1 %**

The table shows us that in the latter case, no adjustment is needed. The effective tax rate is 21.1 % which is above the requirement. For the other three ROE's however the effective tax rate before adjustment is below the 18.7 % requirement. By waivering part of the NID the effective tax rate can be tweaked to exactly match the requirement, and the respective effective tax rate after the adjustment for the three alternatives are all the same and equal to the CFC condition.

[2] Necessary taxable income= $\frac{\text{ROE*CFC requirement}}{\text{Belgian corporate tax rate}} = \frac{(\text{ROE*18.7\%})}{33.99\%}$

To conclude, the right to waiver the NID effectively ensures that participating companies can adjust their taxation to suit any eventual subject-to-tax requirements.

2.5.4. Ruling Practice

The ruling practice in Belgium is advantageous for multinational companies. First, a company can approach the authorities in an informal way, anonymous, with no obligations from the company's side. This clearly lowers the threshold for firms establishing in Belgium as any unresolved questions can be asked in advance and the company will receive an official ruling. Second, the ruling is binding for the government with a timeframe of normally 5 years. This practice can be very helpful for a business as it ensures what kind of treatment it receives from the authorities. Third, there have already been many rulings on important subjects regarding the NID. The rulings are supportive to companies as they complement the law text, and give other companies the insight on how various matters are dealt with. An example was shown above regarding the ruling about the right to waiver the NID, either partly or fully. And finally, after the implementation of the new ruling practice the users of it have shown great satisfaction. According to De Haen (2008 and 2009) the ruling office provides clear and understandable guidelines of appropriate and inappropriate use of the NID and the different rulings. In addition, the tax officials are considered to be intelligent and business oriented, and thereby understanding and being able to view a matter from the company's side.

2.6. Conclusion

The taxation of Belgian financial centers is favorable. Both under the CCR and NID there are various possibilities for tax planning by multinational corporations. In the CCR the taxable base is not related to income but to a limited number of costs, excluding the most important costs for financial centers, namely financial and labor costs. This makes the effective tax rate small and insignificant for profitable coordination centers. To be accepted in the regime one has to satisfy stringent requirements, but for a multinational company these should be manageable. The NID on the other hand is available to all companies, and although not as unequivocal favorable as the CCR it still provides financial centers with a beneficial tax regime. In this regime firms are able to deduct a cost for equity on their tax bill, and thereby lowering the effective tax rate. In fact for ROEs below the NID rate the effective tax rate is negative. These regimes also ensure that the high statutory tax rate in Belgium is not applicable to financial centers.

The presence of beneficial tax regimes for other activities indirectly increases the attractiveness of Belgium as a prime location as companies seek to centralize more functions. Although not so relevant under the NID regime, it is worth commenting that for all practical purposes there are no thin capitalization rules for coordination centers in Belgium. The personal tax level in Belgium is considered to be relatively high, and for some companies this can be discouraging. Nevertheless, Belgium provides several tax exemptions for foreign executives and thereby lowering the threshold for establishment.

With the introduction of the Parent-Subsidiary Directive companies now can distribute profits freely within a group of companies. For coordination centers especially, this means a euro in profit in the coordination center is a euro in profit for the parent company. In addition, the Interest-Royalty Directive eliminates double taxation concerning interest making internal bank functions in Belgium profitable. This also applies to Norwegian companies as the directives are implemented through the EEA agreement. In addition, Norwegian CFC rules are not relevant as Belgium is a part of the EEA.

Should however the CFC-rules be applicable, the requirement regarding minimum taxation could easily be met by waivering part of the NID. This right was given through a ruling and the ruling practice in Belgium complements the actual laws and enhances the certainty of taxation matters for multinational firms.

3. Business Environment

In the previous chapter I showed that the taxation of financial centers is advantageous and can explain much of the attractiveness of Belgium as a location for coordination activities. Regardless of which regime a company is a part of there are possibilities for reducing the overall tax bill. In this chapter I argue that there also are several other factors contributing in making Belgium a prime location.

Firstly, I explain the turmoil that is the Belgian political landscape and assess how it may affect coordination centers. Then I present a discussion which arose with the introduction of the Notional Interest Deduction. The question is how to finance the measure since all Belgian companies are applicable to the regime. Secondly, I briefly present Belgium's relative performance within the area of doing business for foreigners. Thirdly, I evaluate the currency risk and use the recent financial crisis to illustrate the attractiveness of the euro. And finally, I look at the how the industry by being present in the last 30 years have created a cluster and know-how and experience for the financial center industry in Belgium.

3.1. Political regime

The 22 of April 2010 it happened again - the Prime Minister of Belgium Yves Leterme handed in his resignation. Tensions between the French and Dutch-speaking parties have during the last years caused great instability in the political landscape in Belgium. After the last election it took the Christian-Democratic Party nine months to form a government and there are legitimate concerns that Belgium could be divided (Aftenposten 2010 and Dagbladet 2010).

Despite the fact that the political landscape is highly unstable in Belgium, with open disagreement between the French and Dutch-speaking parties, the government and the authorities show great effort in accommodating foreign investors and small and medium sized companies. Moreover, the government follows international trends within taxation, having reduced the statutory corporate tax rate in later years and introduced new measures to attract investors. It is said that capital intensive companies constitute the engine of the Belgian economy and employment (De Haen et. al 2008), underlining the importance of accommodating these firms. Another comment regarding the so called division of the Dutch and French-speaking regions is that both are dependent of Brussels, the capital, and a separation is highly unlikely in the short to medium term. If something drastic were to happen the democratic principles are well established in Belgium and one would expect the regions to continue with similar legislation for foreign companies as we see today.

3.1.1. Financing of the NID

Some politicians dispute NID from a budgetary perspective, arguing that it is too expensive. However, macroeconomic analyses show that tax revenue is increasing with a higher pace than before in Belgium. While tax revenue on average increased 3.39 % in the years from 1999-2007, the revenue increased with 6.5 % after the implementation of the NID, suggesting that this concern is exaggerated (De Haen et al. 2008). Also it would be difficult for the politicians to defend a worsening of the conditions for coordination centers as the relocation of these would risk the jobs of around 15 000 people working in or are in some way related to the industry. In fact the council of ministers gave this statement on October 26th 2007:

"A stable investment climate is important. Therefore it is self-evident that the existing measure should be left untouched…" (Council of Ministers 26th October 2007 cited in De Haen et. al, 2008)

This statement gives unambiguous support to the NID and suggests that the NID will be around for a longer time. Nonetheless, it is important to note that politicians by nature do change their opinions and are prone to public pressure. After the financial crisis it is evident that in extreme events, governments may change the rules and decide to break established codes. For example for the accounting years of 2010 and 2011 the NIR is already fixed at 3.8 %, meaning that the government broke the direct connection to the OLO-rate for those two years. And despite the fact that the rate still is rather close to the OLO-rate, the signal effect from breaking the relation is negative from the foreign investors' point of view. Nonetheless, the Belgium state still has much legitimacy as far as foreign investors are concerned and it is expected that the NIR returns to its relationship with the OLO rate after the two years passes.

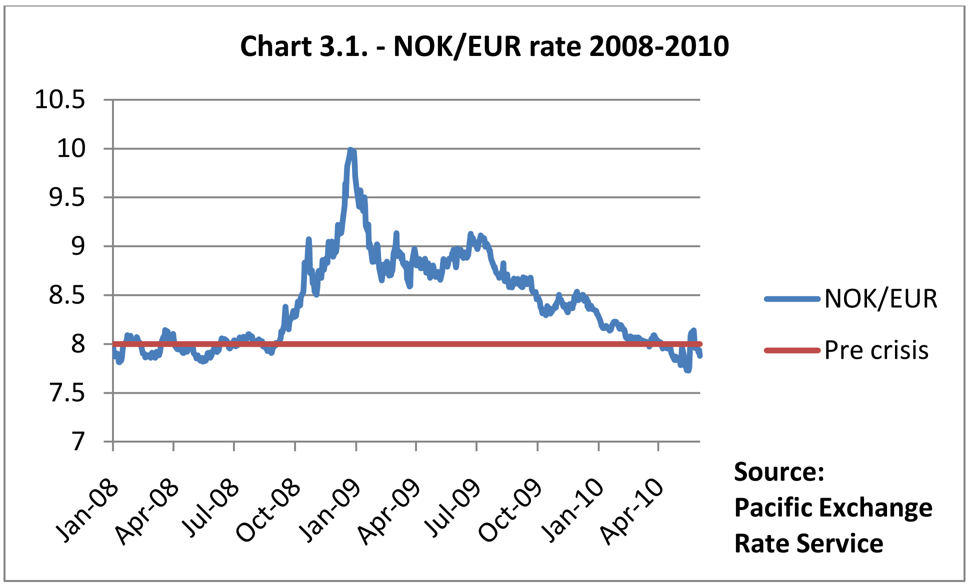
The NID is applicable to all companies in Belgium irrespective of what ownership it has or activities performed. This obviously have a negative effect for Belgian tax revenue as all companies can claim the NID. Upon the implementation of the NID the government aimed at achieving budget neutrality, i.e. that NID would not have any impact on the government budget. To qualify for the Coordination Center Regime a firm needed to fulfill strict requirements, while NID is applicable to practically all Belgian firms, making compensating measures necessary for the government. According to Springael (2006) the lost tax revenue from the introduction of the NID is estimated to be € 1.1 billion. The government expects that close to half of this will be offset by increased equity investment. As activity increased by means of the NID government revenue will increase with more dividend withholding tax, VAT, custom revenue, corporate tax and reduced cost of unemployment. However, the rest, estimated at € 566 million, is proposed to come from a new definition of capital gains, abolition of tax credit and abolition of standard investment deduction. Bart Adams from the Fiscal Department of Foreign Investment informs that the revenue in fact was compensated by stricter amortization and depreciation rules and the loss compensation rules between related companies were strengthened. In any case, none of these measurements noteworthy affect financial centers, so for them this has no particular consequences.

3.2. Doing business in Belgium

Belgium ranks high in all international rankings concerning business environment. In the World Bank annual ranking, Doing Business, Belgium ranks 22th overall (World Bank 2009). Given its quantitative nature, this survey gives an indication on how Belgium performs compared to its closest peers in attracting foreign capital. On that cue we note that Belgium ranks behind countries like Switzerland and the United Kingdom, but before Germany, France and the Netherlands. Belgium launched in 2007 its National Reform Program to maintain business competitiveness (Datamonitor 2009). This is sought to be achieved through an easing of labor cost and more realistic wage determination. Belgium has traditionally been considered and still is a favorable place to do business for foreign investors, and there is no indication that this will change in the future. In Transparency International's yearly ranking, Corruption Perceptions Index (CPI), Belgium scores satisfactory and was in 2009 ranked as number 18, this time behind Germany and the Netherlands but before France. The CPI ranks countries based on to what degree business people and country analysts perceive corruption exist among public officials. In the smaller Bribe Payers Index, where only the 22 most economically influential countries are included, Belgium finished first in 2009 (Transparency International 2009). This ranking focuses on the countries firms' likelihood to offer a bribe abroad.

3.3. Currency risk and developed financial markets

A financial center which conducts inter-company loans between group-companies from different countries and currencies obviously encounters significant currency risk. In the short and medium term, this risk can be mitigated by future and forward contracts. In the long term however this risk is difficult to avoid, and should in any case be considered by the company's risk management program. Nevertheless, it seems obvious that being a part of the euro zone is an advantage compared to smaller currencies. In the recent financial crisis smaller currencies became highly volatile as we saw a flight to safety by the investors, meaning that they fled to larger and more "safe" currencies like the US dollar, the euro and the British pound. The financial markets dried up, and for a financial center of a multinational company it was clear that in the times of crisis you do not want to be locked in with huge liabilities in countries with smaller currencies prone to outside events. To take Norway as an example the NOK/EUR currency rate surged from 7.90 in late august to 10.0 in late December 2008, an approximate increase of 25 % in only 4 months, as shown in graph 3.1[3]. Furthermore, it took 1 year and 3 months for the rate to reach pre-crisis level.



The Single Euro Payments Area (SEPA) can also contribute to the attractiveness of Belgium as it is part of the initiative. SEPA seeks to create a zone for the euro, in which electronic payments are considered domestic. This increases the efficiency in intra-European cross border transactions and lowers costs. With the recent chaos with Greece's deficit and public debt, the euro zone has also shown some weaknesses. Some have even predicted that the euro will seize to exist in the future. Nevertheless, with the recent financial rescue package another crisis seems to have been avoided and the euro still looks stable (Hall et al. 2010).

Another important factor is the efficiency of financial markets. As financial centers obviously have much interaction with the financial market, the development of the sector is crucial. In this matter Belgium is attractive as it traditionally has been a center for financial transactions, and still is

[3] The data set is retrieved from the Pacific Exchange Rate Service, <http://fx.sauder.ubc.ca/data.html>.

regarded as superior to many countries, especially those of Eastern Europe and other close competitors.

3.4. Know-how

For over nearly thirty years Belgium has been the preferred location for coordination centers. During this amount of time it is reasonable to expect that the clustering of such centers has created know-how and valuable experience which are not easily transferable to other locations. One could argue that this know-how is firm specific and not related to Belgium per se. However, the authorities are used to accommodate large multinational companies and establishment here would be low risk. Also, the majority of the employees is Belgian and would not be as willing to relocate as the firm itself, representing a cost of moving the center or establishing at another location. The pay-roll costs in Belgium are considerable compared to e.g. Eastern Europe. On the other hand, the workforce is educated and demonstrates other beneficial qualities as language skills and great knowledge of the European system. To have the financial center in another country than the corporate headquarter may cause friction. But the nature of coordination activities is in general not stressful and subject to time constraints, but rather the result of long-term strategies from the management. With today's technology the geographical distance should not pose a problem.

3.4.1. Business Cluster

In 2008 Paul Krugman received the The Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel for his theory of trade patterns and location of economic activity. According to Krugman the location of economic activity follows a so called core-periphery pattern. He states that localization is a result of maximizing economies of scale and minimizing transport costs. Krugman's focus was mainly on a country level, while Michael Porter focused more on business specific clusters. Porter argues that despite more open global markets and faster transportation and communication similar companies tend to locate in the same place (Porter 1998). Further he defines clusters as geographic concentration of interconnected companies and institutions in a particular field. The cluster of Belgian Coordination Centers provides the incumbent firms with several advantages. First, there is better access to employees and suppliers as it lowers its search and transaction costs. Regarding employees this means that there is an existing pool of specialized and experienced personnel, while the employees themselves run a lower risk of relocation which can be very important for some people. When it comes to suppliers, the cluster makes special suppliers available, and it is easier for suppliers to establish support services and similar. Second, specialized information is more readily accessible. Markets, technical and other information accumulates in a cluster and the members have easier access to it. Third, in a cluster there are complementary services which increase the performance of the overall industry. In Belgium this is among other the presence of banks, lawyers and advisors which specializes in the field of internal financial services. Fourth, local rivalry gives better motivation and measurement. One can argue that this is not applicable to financial centers since they in theory do not compete with each other. However, pride may still ensure for competitiveness, while comparing results are relevant as the centers perform similar activities. And last, if the industry manages to cooperate it will also have a strengthened negotiation position towards important stakeholders as e.g. the mentioned suppliers and the authorities.

3.4.2. Advisory and technological change

As with other industries there are learning effects for the coordination industry. The centers, advisors and authorities all benefit from experience and technology and are able to reduce costs. As the organization of such centers become more streamlined, the fixed cost of establishment and operating costs lowers, thus additional companies can benefit from establishing a financial center. This means that there are established so called best practice solutions in Belgium, where firms much easier than before can establish coordination centers. The whole process can be advised from experienced consultants, the authorities are helpful and knowledgeable in handling such establishments, and other companies can be approached to receive guidance.

3.5. Geographic location

The geographic location of Belgium in the middle of Europe also contributes in making Belgium attractive. Belgium is a small country in size, so the international airport in Brussels is easily accessible from any place in Belgium and many important European countries can be reached with car or train in short time. In fact, according to Datamonitor (2009) Belgium possesses one of the best infrastructure networks in Europe and can be regarded as the natural gateway to Europe. In addition, Brussels is the de facto capital of the European Union with important political decision makers within its borders, including the European Commission. Belgium is also close to large economies like Germany and France and has easy access to the ports of Antwerp and Rotterdam. Krugman even pointed out that nighttime satellite photos of Europe revealed a center-periphery pattern whose hub is in Belgium (Krugman 1991).

3.6. Conclusion

In addition to the beneficial tax regimes Belgium can show for an attractive business environment. Although the government and political landscape is somewhat fragile and unstable, the majority of parties agree that accommodating foreign investors is crucial for the development of the economy. Internationally speaking Belgium ranks high in all indices, surveys and rankings. Belgium's membership in the euro zone is an advantage compared to countries with smaller and more unstable currencies. After thirty years the coordination industry itself has developed into a cluster and acquired much knowledge and experience in addition to complementary third party players. Last but not least, the geographical location of Belgium is highly favorable for centralized activities as it is close to major economies and infrastructure networks.

Part 2

The combination of an advantageous tax regime and favorable business environment has made Belgium one of the top locations for coordination activities. Even though the corporate tax rate in Belgium is relatively high, the CCR and the NID regime ensure a significantly lower efficient tax rate. There are currently around 200 financial centers located in Belgium. In part one I focused on the overall picture and Belgium as a preferred location for financial centers, while I now turn to the company's view of the financial center.

First, I go through the activities which financial centers normally perform and identify the sources of advantage of centralizing these in an independent center. Next, I go specifically into how the financial centers of Norwegian companies are perceived by important stakeholders, the media, the authorities and the tax agency. Further, the two following chapters show two examples, the Statoil Coordination Center and the Statkraft Treasury Center. Statoil established its center already in the late 1980s and have therefore been part of the CCR for a number of years. The evidence points in the direction that the center has been successful and so does the decision about maintaining the center in Belgium after the transfer to the NID regime. Statkraft on the other hand founded its treasury center in 2008 and was never part of the CCR. Nonetheless, the rationale behind the establishment suggests that also this center enjoys the advantages of centralizing financial functions and benefits from Belgium's tax regime. And last, I illustrate how a financial center can create a simple tax arbitrage. I use the examples of a Norwegian company establishing its center in Belgium, but the example is also applicable to other jurisdictions.

4. The Financial Center

Multinationals have many possibilities for tax planning and reducing their overall tax burden. The Belgian financial center is exactly an example of such a vehicle. The centers are not only established to benefit from tax savings, but also to achieve economies of scale and exploit the potential benefits of centralizing. The centers for the most part engage in internal funding of group companies and cash management for the whole multinational group. The current market conditions, low interest rates and an upward sloping interest curve, make the NID especially attractive for financial centers.

First, I present a number of articles that deal with multinationals and adaptation of capital structure according to tax regimes, which underlines the position financial centers have within the company. Second, I explore the activities usually undertaken by these centers and explain briefly the reasoning behind locating these in the coordination center. Third, I look at the advantages of financial centers and evaluate how important taxation is for establishing such centers. I also clarify why the current financial environment is especially beneficial for financial centers participating in the Belgian NID regime. Fourth, I briefly comment on the performance of financial center and give a conclusion on this chapter.

4.1. Multinationals and tax planning

In the literature there are numerous papers that explore multinationals and in what way they adapt their capital structure to differences in tax rates. Møen et al. (2009) found that both internal and external debt is important for tax planning for the multinational firm. Furthermore, they find that the subsidiary located in the lowest tax jurisdiction is the financial center of the company. Buettner and Wamser (2007) further claims to find conclusive evidence for profit shifting to low tax countries. Huizinga et al. (2007) looks at the incorporation of international taxes in deciding of a multinational firm's optimal debt policy. The conclusion is if corporate taxation is not harmonized internationally, international debt shifting will remain important for multinationals. And last Schindler and Schjelderup (2010) show that affiliates of multinationals have higher internal and overall debt ratios than comparable domestic firms, thus saving tax payments and lowering the overall tax burden.

The amount of similar articles is endless, but the common denominator is the same. Multinationals, because of their nature, i.e. they are present in many countries and in many different tax systems, have many opportunities for tax planning to lower their overall tax burden. A financial center in Belgium is exactly an example of such. The most usual mechanism of tax planning is to use debt shifting, so interest expenses becomes tax deductable in a high tax country and interest income earned in the low tax country. In this case this implies that interest is deducted for companies situated Norway and other higher taxed countries, while the income arises in the Belgian coordination center. This illustrates the possibilities that arise with having financial centers and underlines the important position these have in multinational companies.

4.2. Activities of financial centers

There are numerous activities that a financial center can perform. The most common are presented below.

4.2.1. Funding

With many subsidiaries and projects abroad, multinational corporations use financial centers to coordinate and centralize funding. This incorporates both internal lending between companies and external loans from the financial markets. By centralizing debt and investment, the company can match excess funds in one subsidiary with lack of such in another. Assuming that the borrowing rate is higher than the placement rate in the marked, the two subsidiaries can meet halfway. Thus the subsidiary with excess funds earns a higher interest rate, while the other obtains a cheaper loan.

Subsidiaries vary in size and activity. Some are mature and have a positive cash flow, while others are in the initial stage and require funding. Sales entities typically generate cash, while research and development consume it (Mainwaring 2008). Furthermore, this implies that a multinational company could have multiple subsidiaries negotiating loan agreements and while some can be experienced in the matter and achieve good terms, others may be inexperienced and receive relatively worse terms. By centralizing this in the financial center, the probability of achieving good terms increases as the particular employees are used to negotiate such agreements. Another advantage is that by centralizing and bundling the loans, a multinational can capitalize on its sheer size and credit rating. In other words, instead of each subsidiary seeking loans in the financial markets by itself, the parent company bundles the loans and distribute the funds through the internal bank. This gives a better negotiation position and further translates into higher debit interest rates and lower credit interest rates.

4.2.1.1. Guarantees

Another way of exploiting the parent company's trustworthiness is to use guarantees. By using guarantees, smaller group companies can offer the banks guarantees from the parent company or another group company and thereby increase their bargaining power and achieve better terms. Guarantees do not necessarily only have to concern loans, companies may also use guarantees to assure partners, suppliers or the local community. In theory these guarantees should be priced according to the intra-group principle, meaning that e.g. the borrowing entity should pay a fee to the parent company for the guarantee. This also allows multinationals to take advantage of their organization and allocate such income to the treasury center, which in most cases is located in a tax favorable jurisdiction.

4.2.2. Cash management

Regardless of which industry or marked a company belongs to there are working capital requirements, and for multinationals this further implies numerous cash boxes, often also in different currencies. According to Gallanis (2008) best practice is to use zero-balance accounts to eliminate and minimize the number of accounts, and thereby reducing the number of transfers and fees, further explained in an own section below. There are also two other well known methods, notional pooling and interest optimization, but these are not covered here, see Mainwaring (2008). Regarding foreign exchange, centralizing this function allows for larger transaction volume. Subsequently this makes companies able to solicit for competitive bids from banks and this way realizing improved yields of 5-10 basis points (Gallanis 2008).

Idle cash is inefficient, and treasury centers help avoid this by having a complete overview over cash balances. Furthermore, by monitoring and forecasting the cash balances become more predictable, thus making financial planning easier. Mainwaring (2008) warns about taking forecasting to light and proposes to divide cash in four tranches. She argues that while forecasting may prove beneficial to some part of the company, other times it may be totally misplaced and rather be a source of confusion. First, operational cash is the funds needed in the day-to-day management of the business and the hardest to manage and forecast on a global scale, suggesting that this is best done by the local affiliate itself. Second, core cash is used to meet unexpected operational needs. This can be due to a delayed project, missing payment etc. and this cash needs to be mobilized within a very short time. This can be handled by the global treasury as long as proper measures are taken to ensure that such funds can be transferred in a short amount of time. Third is strategic cash, which typically is hold for a longer period to be in invested in e.g. an acquisition, a factory or any other opportunity that may arise. This cash is per definition idle, but needs to be available on short notice, albeit not as short as core cash. The amounts required here are larger and would be best managed by a global center. Last, absolute surplus cash is as the term suggests a surplus which does not have a purpose for the moment. This cash is best handled by the treasury center to decide whether the cash is needed on shorter or longer term or better distributed to the owners.

4.2.2.1. Zero-balancing

Zero-balance accounts are used as an in-house bank concept and to eliminate excess cash balances in separate accounts (Mainwaring 2008). In practice all separate accounts of the different group companies are balanced to zero each day. If the account has a surplus, this is transferred to the financial center, while in the case of deficit funds are transferred from the financial center. In the financial center there is one master account, alternatively more if there are several currencies, which deals with all the different group accounts. There are mainly four advantages with this type of in-house bank system (Lammens 2010). First, pooling of funds makes cash management easier. Instead of all the subsidiaries having loans or funds in different banks all over, this is limited to the treasury center. If a subsidiary has excess cash, while another lack cash, these would normally go to their respective banks and either loan or invest the money. With zero-balancing these two opposite positions are zeroed out, and the company effectively surpasses the bank and earns the interest rate margin itself and avoids extra fees. An example is further illustrated in chapter six. The subsidiaries still earns interest on excess cash and needs to pay interest when borrowing, but the result is beneficial for both parties as explained above in the section regarding funding, the only difference is that funding is for a longer time period, while cash management and zero-balancing are day to day activities. Second, with your own banking structure the transactions between group companies are done practically for free. No banks are needed as intermediaries, leading to lowering the bank fees. Third, with all the cash in one place, the control and overview over cash is improved. The company itself has full control with loans, funds and transactions between affiliates and improved the basis for cash forecasting. And last, as all cash transfers are automatic and the treasury now is the only one handling financial loans and placements, the need for labor decreases and so does the costs for the company.

4.2.3. Tax management

Financial centers often deal with numerous affiliates in different countries and under different tax regimes. A coordination center performs international financial transfers regularly and needs to have great knowledge of the different tax regimes, especially those of cross border transactions.

This effectively makes the centers specialist in many financial categories, including taxation. While some subsidiaries of multinationals may be large, many are relatively small, and lack proper knowledge or experience to deal with complicated tax matters. So, instead of educating the different affiliates, tax matters in relation with international taxation can be centralized in the financial center. This way one builds expertise in the center and is able to harvest from economies of scale and the fact that the issues are handled by the persons with the best prerequisites to do so.

4.2.4. Accounting

Despite the advantages mentioned earlier, zero-balancing does create more paper work and documentation needs for the authorities. This is best handled by the center itself, as it is the only one with a complete overview and knowledge about the details. As with tax management, it is also logical to believe that a financial center has the most appropriate resources, knowledge and expertise for these kinds of issues. Depending on the strategy of the multinational and the available resources in the financial center other accounting tasks can also be undertaken. This can e.g. be the case for a smaller affiliate which does not have the resources or large enough demand to justify hiring a person to do the accounting.

4.2.5. Advisory

In connection with the above mentioned activities, the financial centers often perform some sort of advisory services, may it be regarding tax, accounting, cash management or any other financial issues on which the center hold superior knowledge and information.

4.3. Advantages with financial centers

Some of the advantages financial centers have already been mentioned in the section above. In this section I concentrate on the overall advantages, namely economies of scale and centralization. I also comment on the importance of beneficial taxation.

4.3.1. Economies of Scale

Central in economic reasoning is the concept of economies of scale. I do not use further space to explain this concept further but the essentials are that when volume increases the cost per unit decreases. For multinationals especially there are several scale benefits by establishing a financial center. First, the sheer size of the collected funds and money ensures an improved negotiation position for the company towards the banks and suppliers. This negotiation power translates to better prices and terms, in short better deals, because the center becomes a more important customer as quantity demanded is larger. Second, as the number of transactions within the center increases the cost decreases per transaction. Some argue that this argument speaks in favor of outsourcing these transactions to banks, which then can receive even better economies of scale. This can be true in some cases, but there are few banks with a truly international presence, and this must be considered on a case to case basis. In addition one must consider this in combination with the other advantages of handling these transactions in-house, so for truly international firms, the best solution often is a financial center. Third, more work and transaction volume for financial centers allows for specialization for the employees and automation of procedures. This can again reduce cost and even create special competence within the company. Fourth, larger entities are often a more attractive workplace for good candidates which are interested in the field. So by having a large financial center the company is able to attract higher qualified personnel. Also, if the cost reductions are large enough, the company has more room in the budget to pay higher wages which again can attract the best candidates. From the definition of the concept it is clear that the larger the company is the larger is the benefit. So financial centers are best established by larger multinationals with considerable activity abroad and which extensively use banking and financial services.

4.3.2. Centralization

According to Polak (2009) the erratic behavior of the international financial market necessitates standardization and simplification of payments for multinationals. By centralizing these kinds of activities in a coordination center the companies are able to develop and simplify standards, procedures etc., which makes the process easier for the group companies and saves time for all parts. Centralization also contributes to increase the focus on these tasks, and provides the company with a basis for identifying and improving the services performed. Related to the fact that financial transactions become centralized, a financial center is able to have a complete overview over financial transactions. This may prove very beneficial in the area of for example banking fees. As the financial centers become larger and include a variety of tasks, they require additional services from banks. For large companies the banking fees can be large and significant and with a complete overview the financial center can identify redundant and unnecessary services. This overview also provides the center with a basis to discover invoice errors or it can be used in further analyses of structural financial linkages with the purpose of finding new solutions or areas where the financial center itself can undertake activities that are currently outsourced to banks. Already mentioned briefly and maybe even more important is the possibility a financial center has in regards of financial control. With most transactions channeled through one body, errors are reduced or at least easier noticeable, and hence the labor and time used before in problems related to errors may now be used in a more efficient matter.

4.3.3. Taxation

In some respects, the coordination center industry can be compared to that of shipping. They both are mobile industries and are offered tax beneficial treatment from many countries. Taxation needs to be taken into account when considering the advantages of a financial center, as these centers often are given preferable tax regimes and can more easily relocate. So even if the establishment of a financial center can be justified by itself, based on the above mentioned arguments, tax regimes make the centers even more profitable. So by establishing financial centers multinationals are able to exploit the beneficial tax regimes which exist for such centers.

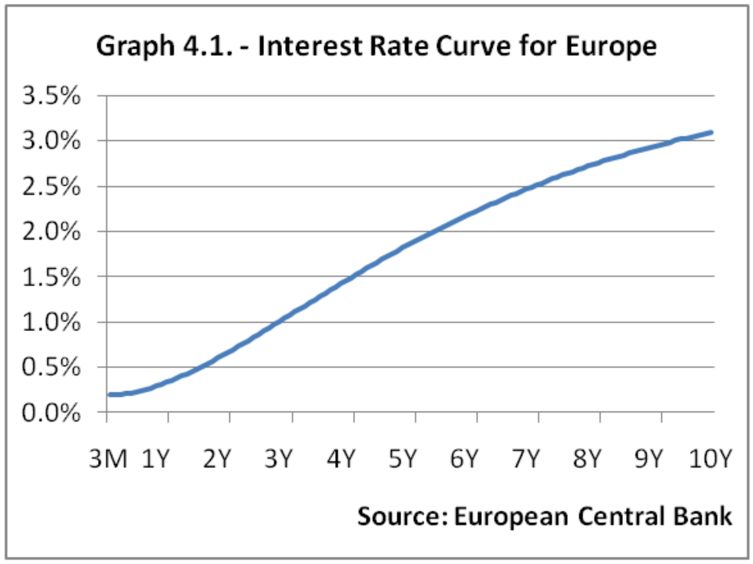
4.4. The financial center and the NID in the current market conditions

As presented above there are several advantages to a financial center, and most of these are company specific and independent of the location. Taxation however is a direct consequence of the location, and in this section I evaluate the Belgian NID regime in the current market conditions from the viewpoint of a financial center.

There are mainly two characteristics with today's market which make the NID a favorable tax regime nowadays. First, the upward sloping interest curve makes the taxation in the NID regime favorable. The income and profit for financial centers are mostly based on short term loans, meaning also short term interest rates. The NID however is based on the long-term interest rate, the 10 year Belgian government bond. Normally the interest curve resembles an upwards sloping curve, and the current curve, shown in graph 4.1[4], is no exception. This creates a favorable situation for the financial centers as their income is based on a lower interest rate than the NID. Second, the interest rate level is low which contributes to lower profits for the centers, and thereby more beneficial taxation. The profit of coordination centers very much depends on the margin they earn on their loans. These margins evidently become smaller as the interest rate in general becomes lower. Following the financial crisis the interest rates plunged, and many countries found themselves in a situation where the interest rates were at an all time low. Despite that some of the turmoil after the

[4] The underlying data set is provided by the European Central Bank and the yields are for AAA rated bonds. The data is given in exhibit 4.1.

crisis has faded, interest levels continue to be on a historical low level. The effect is that the financial centers receive a low margin, which translates into low profits, which again implies lower ROE and a lower efficient tax rate.



On the other hand, the uncertainties around the NID regime create a more unpredictable future for the centers. The NID rate was fixed and capped for 2010 and 2011, thus breaking the connection to the OLO-rate. It is still higher than the short term interest rate and closer to the long term rate, but this signals that that politicians can decide to fix the rate for the following years. Nonetheless, as discussed earlier Belgium has shown great effort in accommodating multinationals historically. Additionally, by worsening the terms of the NID, Belgium risk that companies move to other countries and thereby reducing employment and revenue for the Belgian state.

4.5. Performance of financial centers

In a survey done by PriceWaterhouseCoopers (PWC 2006, cited in Vyncke et al. 2008 p. 368), the respondents express an ambiguous view of treasury centers. While over 50 % considered treasury centers to be value adding, 43 % still perceived such centers as mere cost center. On the other hand, since the shared service centers were developed by US corporations in the 1980s (Polak 2009), more and more multinational companies are establishing such centers and recognizing the benefit of centralized finance functions.

According to Gallanis (2008) best practices can ensure quantifiable results for treasury center, and based on the issues covered in this chapter there seems to be significant advantages with financial centers. By doing the internal funding in-house and by this not having to go through banks, the company achieves a higher rate of return of its funds, while the subsidiaries are able to borrow at a more preferable rate. When bypassing the banks the company itself earns the margins on loans. Also by using zero-balancing accounts, the centralizing of cash management contribute in securing a faster and more direct transfer and by this avoiding many fees. Because of the high mobility of the financial center industry, a favorable tax regime is important to attract multinationals. With the NID Belgium is especially well positioned to attract multinationals in the current market conditions.

5. The view from Norwegian stakeholders

As I present two Norwegian examples of multinationals which have established financial centers in Belgium, it would be interesting to know how these are perceived by important Norwegian stakeholders. The media choose to focus on tax savings when mentioning the financial centers. They also often hint that something not completely legitimate is happening. Nonetheless, when confronted, the authorities' answer continues to be the same, as long as these companies follow Norwegian and international law and regulations, the operations are completely legal. They have no reason to believe that the coordination centers are not established for commercial reasons. In addition, the companies with such centers are larger Norwegian companies which are highly professional and have a good relationship with the tax authorities. The tax agency, however, admits that the activities in a financial center are complex and it would anyhow be difficult and time consuming to discover any wrongdoings. In fact, if something is discovered, even the outcome in the courthouse is uncertain. Also, an interesting note is that Norway itself has a special tax regime for shipping companies.

So, first I give an overview of the media's coverage of coordination centers in Belgium. Then, I present the authorities view and their thoughts on such centers and special tax regimes. Further I move into the tax agency's view in specific, and illustrate the concern that if companies do something wrong, it is difficult to discover. Last, I note that Norway itself has a special tax regime for shipping companies.

5.1. Coordination centers in the Norwegian media

When presenting the financial centers in the news, the media has not surprisingly focused on the tax savings (Anda 2001, 2002, and Dagens Næringsliv 2007). Furthermore, the presentation of the matter has often hinted of the controversies around the tax regime. When confronted with this, the executives of the different companies underline that the activities are completely legit, and one would be foolish not to take part of it (Ånestad 2007). In addition, they emphasize the other advantages, e.g. economies of scale and cost savings, arguing that the reasons for the establishment are not solely based on tax considerations. With the opening of Statkraft's financial center, the media continued with negative press, focusing on state ownership, and suggesting that the tax savings actually are lost tax revenue for the Norwegian government (Brox 2009, Tranøy 2009 and

Ånestad 2009). This was picked up by famous corruption hunter Eva Joly, which linked the advantageous regime for financial centers with tax havens (Dagens Næringsliv 2009). Moreover the Norwegian left wing party "Red" and its leader Torstein Dale proposed that the state should execute its voting rights to stop the activities in Belgium. This is highly unlikely, but demonstrates the controversies about these centers in Norway.

5.2. State ownership and the authorities' view[5]

Despite the impression given by the media, the Norwegian authorities express another opinion. While politicians represent subjective attitudes and can react negatively, the authorities have a more objective view. Politicians are elected officials and hence their opinions are subject to pressure from the surroundings, i.e. the media, and do in some cases express populist opinions. The finance department states that as long as tax payers follow the law and report their income according to national and international rules, they do not interfere with or express an opinion of a company's activities. Said in another way, if companies establish the financial centers in Belgium for commercial reasons and do not engage in aggressive tax planning or activities in grey areas, the Norwegian authorities have no interest in pursuing the matter.

5.3. The tax agency's point of view[6]

The Norwegian Tax Administration, which is in charge of taxation of Norwegian companies, supports the view from the finance department and underlines that multinationals are very professional and accommodating in providing information. The tax agency checks the financial statements and ensures that the companies pay the correct amount of tax. When in doubt, the tax authorities can ask for further documentation and financial statements. In the case of large multinationals with coordination centers in Belgium specifically, these are nearly always a formality. Large corporations are highly professional, and the authorities have no reason to believe that any information is false or that the companies are engaged in tax evasion. In addition, information from the Belgium authorities is readily available upon request and controllable.

Then again, the agency mentions that large financial centers are complex operations and produce enormous amounts of documentations and facts. To control if the financial transactions of the

[5] The information in this text is gathered through e-mail correspondence with Stig Sollund, Director General, The Tax law Department, The Norwegian Ministry of Finance.
[6] The information in this text is inspired by a conversation with Gaute Solheim, Norwegian Tax Administration.

coordination center are fairly priced is extremely difficult. First, one needs extensive knowledge and experience to even comprehend the transactions in question. And second, the number of transactions is high, making it a labor intensive activity. Faced with these constraints it is clear that from the tax authorities' perspective such a job would require a significant amount of effort and resources. At the same time the probability of finding anything suspicious is low because of the enormous amount of information and for the above mentioned reasons. If contrary to expectation something irregular were to be found the agency still run the risk of losing in court. Currently in the Norwegian court system there is a case regarding structured financial products, and even for these relatively simple financial products much time is used for the explanation of the products. One can only imagine how complex financial transactions would be perceived in the court house.

A case worth commenting is the Statoil Angola case which went through the Supreme Court in 2007. The transaction in question was a loan from the coordination center to the Angola subsidiary, in which the coordination center charged a market based interest rate. At the same time the parent company Statoil had given a non interest bearing loan to the same subsidiary in Angola. The assertion from the tax authorities was that the interest paid by the subsidiary should be allocated proportionally to the loans. This way the parent company would be subject to a proportional amount of the interest paid, which would be taxable in Norway as interest income. Said in a simpler way, they claimed that the reason for the characteristics of the two loans was due to the taxation the parties involved were subject to, the commonality of interest principle, i.e. interest income is taxed higher for the parent company and lower for the coordination center, therefore the interest income in channeled to Belgium. Nonetheless, the court did not agree and ruled in favor of Statoil. The justification was that since the coordination center did not hold equity in the subsidiary it had to charge a market based interest rate. Statoil on the other hand holds equity in the firm, and the non-interest bearing loan was a result of commercial reasoning by the company and the fact that the subsidiary was not able to handle more interest payments or to obtain any additional loans in the financial market.

5.4. Taxation of Shipping Companies in Norway

In tax literature, a regime like the old CCR in Belgium is a so called ring fenced tax regime, i.e. that the system is limited and separated from the national tax base, thus not affecting the general tax income of the country. Just as Belgium had a special tax regime for coordination centers and such activities, Norway has a special tax regime for shipping companies. This is an interesting fact, since one cannot criticize a tax regime, while at the same time advocating for similar system itself. So for the Norwegian authorities to disapprove of the Belgian regime would by self-contradictory making such a stance impossible. Subsequently, one could argue that because of the taxation of shipping companies in Norway, the authorities view should be considered disqualified.

5.5. Conclusion

When observing companies which pay zero or nearly nothing in taxes, it yields some questions. As a matter of fact the Norwegian media and some politicians have raised their concerns about the tax regime and suggested that the companies in question should reconsider their operations. Nonetheless, the tax regime is completely legit and the authorities support the companies. In addition, the information flow from Belgium and the companies is more than satisfactory and there are no indications of tax evasion. Nevertheless, the complexity of the financial centers and the disqualification of the Norwegian authorities view suggest that the media and politicians play an important role in securing an opposite opinion on the matter.

6. Statoil

Finally, I now present two examples of Norwegian companies with financial centers in Belgium. I start with Statoil, Norway's largest company and also a large player in the oil and gas industry. In later years Statoil has grown significantly abroad and is now present in over 40 countries. Statoil established a coordination center in Mechelen, Belgium, in the late 1980s. At that time Statoil received large subsidies from Belgium as the coordination center financed two major projects, the building of a petrochemical plant and a gas pipe. Later, the subsidies were phased out and the internal bank and financial operations became more important. In 2000 a special SAP ERP system was implemented and became a huge success. According to Statoil, this investment was paid back within 18 months. Now, the cash and the indirect tax management constitute for the most of the operations and income, with clearing and bank margins as the greatest contributors. If we look at the financial statements, we observe that the Statoil Coordination Center has shown a continuous growth over the last 10 years. And although according to the financial statements there is no operating profit margin, the financial profit is substantial and Statoil had a result of nearly € 600 million in 2008. The assets are growing in a similar pace totaling more than € 15 billion in 2008. With equity accounting for 50 %, i.e. € 7.7 billion, the NID regime ensures that Statoil can earn € 344 million in profits in 2009 without paying taxes. Given the current market conditions, the future, especially in the short term, looks promising for the Statoil Coordination Center.

In this chapter I first give a brief overview of Statoil's history and its current situation. Further, I present the Statoil Coordination Center specifically and explore the reasons behind the initial establishment and the profitability of its current operations. In addition to qualitatively assessing the profitability, I support the evaluation with quantitative evidence from the profit and loss accounts and the balance sheets from the last ten years of available financial data. As Statoil's permission to participate in the CCR expired in 2008, I also present some thoughts on the transfer to the NID regime and future profitability of the center. Finally, I evaluate the findings in this chapter.

6.1. History

In 1962 an American oil company asked the Norwegian authorities for permission to search for oil in the North Sea. 8 years later an elephant was found, oil terminology on fields larger than 500 million barrels of oil, signaling the start of a prosperous era for Norwegian industry and the economy (Museumsnett.no). Already from the beginning Norway wanted to take a significant part of the industry and established Statoil in 1972 fully owned by the Norwegian state, which was to be a fully integrated petroleum company taking part in all stages of the industry. Throughout the seventies the parliament favored Statoil giving them a minimum 50 % stake in all new concessions. Consequently, in 1973 Statoil was awarded in a 50 % stake in Statfjord which at the time would be the largest offshore field worldwide, and would be the backbone in the development for Statoil as a company. Over the next decades Statoil evolved to be a major player in both oil and gas, and also established a comprehensive network of service stations in Scandinavia, in addition to developing their operations abroad. In 2001 Statoil was partly privatized, but the government kept a majority stake of 81.7 %. In late 2006 Statoil and Norsk Hydro announced that Statoil would merge with Norsk Hydro's oil and gas division, further strengthening their leading position on the Norwegian Continental Shelf. The merged company took the name StatoilHydro, but later changed it back to Statoil from November 1 2009 (Bryhn 2009).

6.2. Current situation

Statoil currently has operations in approximately 40 countries worldwide and is present in all continents. Statoil is the largest offshore operator and employs almost 30 000 people. In 2008 the company had revenues of € 82 billion and net income of € 5.4 billion, and book value of assets of € 72.3 billion divided in €45.4 in liabilities and € 27.0 billion in equity. The Norwegian State is still the largest stockholder directly representing 67 % of the votes, 71 % including the Government Pension Fund Norway (StatoilHydro 2009).

Statoil often figures in the Norwegian media, and hot topics later years includes the above mentioned merger, acquisition of an oil-sands company in Alberta, Canada, their Latin American operations in Brazil and Venezuela, and the 24 % ownership stake in the Shtokman field, the world's largest gas field at seas, in the Barents Sea. The bottom line objective of the company is to create long run value through mostly upstream activities in the oil and gas industry (StatoilHydro 2009). It is the largest operator on the Norwegian continental shelf and is growing internationally. Also following the merger with Norsk Hydro, Statoil is now the largest oil and gas company in deep sea waters.

6.3. Statoil Coordination Center[7]

> **Text box 6.1. - Loan subsidy**
>
> To attract foreign investment and multinational companies to establish coordination centers in Belgium, the authorities subsidized the funding of investments in Belgium. More specifically, 25 % of the cost of the loan, i.e. 25 % of the interest payments, was covered by the Belgian state. The only requirement was that the loan was organized through a coordination center.

The Statoil Coordination Center (SCC) was first established 1989 as a shared services center for the Statoil Group in Mechelen, Belgium. At that time the Coordination Center Regime included loan subsidies for funds used to finance investments in Belgium, see text box 6.1. For Statoil, which had two large projects under way in Belgium, first the building of a petrochemical processing plant and later a gas pipe from the Sleipner field to Zeebrugge, "Zeepipe", a coordination center would significantly lower their financing costs. So initially the establishment of the SCC was greatly motivated by the loan subsidies offered by the Belgian state to coordination centers.

Together with Statoil there were almost 300 coordination centers in Belgium throughout the 1990s. They learned from each other and developed a cluster which increased profitability and contributed to further possibilities and development. Although, originally the subsidies were the main attractiveness, the shared services became more and more important. When the subsidies started to phase out in the middle of the 1990s, the shared services were more than profitable enough to ensure the continuation of the SCC.

Today the goal of the SCC is to develop and run the most efficient global shared services in the area of cash management and indirect tax. In addition, the center includes geographically limited, only for Belgium and the Netherlands, HR, IT and office services and an EU affairs office, which deals with relations with the EC. Also worth mentioning is that 2008 was the last year for Statoil in the CCR and it currently operates under the NID regime.

6.3.1. Indirect tax and cash management

The two main drivers currently for the SCC are the indirect tax and the cash management. The center handles indirect tax management for nearly all group companies. This department prepares

[7] Information about the Statoil Coordination Center is largely based on correspondence with Piet Lammens, General Manager of the SCC and CFO FIN PFA in Statoil. More information about the rationale behind the establishment is also provided by Lammens et al. (2001).

more than 2300 tax declarations on a yearly basis which covers amongst other VAT, duties in relation to oil and gas and other taxes.

The cash management unit works in much sense just like a normal bank, and as shown later the balance sheet of the SCC resembles that of a bank. The SCC uses bank software and provides banking operations and financing for group companies. The SCC did these activities from the very beginning of the center, but it was first after the implantation of specialized SAP ERP software the activity took off. In fact Statoil was one of the first customers of this kind of comprehensive software and a pilot in the development of the software. The software effectively enabled the company to introduce zero-balancing accounts and to do all transactions between affiliates automatically and instantly. The system was fully implemented in 2000 and there were three main rationales behind the decision. Firstly, the system allowed for fewer personnel, as the number of bank accounts which needed treasurers decreased, and thereby reduced labor costs. Secondly, it provided a more centralized and controllable structure. And lastly, but must important, it allowed Statoil to do internal clearing and to earn margins which before went to commercial banks. These cost savings are further explained below, and according to Statoil the investment in the specialized SAP ERP program had a payback of only 18 months (SAP 2002).

6.3.1.1. Clearing

Before, if a Statoil subsidiary was to pay money to the parent company it first needed to contact its own bank, and that bank would contact the parent company's bank which then would transfer the money to the parent. Say that Statoil Denmark was to pay to Statoil Norway. There first would be a transaction from Statoil Denmark to Nordea[8] Denmark. Next Nordea Denmark would transfer the funds to Nordea Norway. And finally, Nordea Norway would transfer the money to Statoil Norway. In all these transactions the bank would charge a fee. Now, Statoil does the clearing itself so that the money goes directly from Statoil Denmark to Statoil Norway, and by this avoiding such fees. In addition, in the old way the transfer could take days to complete, and interest on the funds in question would then go to the banks and not to any of the Statoil companies. Now, the transfer is done instantly and no interest income is lost.

6.3.1.2. Bank margins

Before, if a Statoil subsidiary needed financing it would go to a bank to obtain a loan. Alternatively if the subsidiary had abundance of money it would go to the bank to place the money. By definition the banks charge a higher interest rate for the loan than what they offer for the investment. So, if

[8] Nordea is a Scandinavian bank

Statoil Denmark needed a loan, while Statoil Norway had abundance of money they would both go to their respective banks and borrow or invest the money, while the banks would charge a margin. Now, the there are more than a thousand bank accounts which are balanced to zero every night, and as explained in chapter four, any margin or fees are earned by Statoil itself.

6.4. Statoil Coordination Center's financial statements

As discussed earlier the taxation of coordination centers in Belgium is advantageous for multinational companies. Other information presented earlier also point in this direction and both Statkraft and Statoil state that they experience a significant amount of tax savings by establishing in Belgium. These are however qualitative statements and in this chapter I wish to underpin these statements by looking at the financial statements of Statoil Coordination Center (SCC).

The data set is retrieved from the AMADEUS database and goes from 1999 to 2008. Financial statements are in general hard to interpret without the knowledge of what is behind the numbers. A complete analysis of the benefit of the SCC should also include a comparable analysis to illustrate the marginal profit the tax regime in Belgium contributes. The analysis is however time consuming and prone to errors and in any case out of reach of this paper. Such an analysis would in any case not necessarily add more insight or value to the discussion and conclusion. Furthermore, I comment on the important parts of the financial statement and give an indication on the profitability of the center itself and regarding the tax regime.

6.4.1. Assumptions and prerequisites

Time value of money is disregarded for three reasons. First, to ensure the simplicity of the analysis. Second, to adjust the values would necessitate additional assumptions about alternative cost and inflation and hence provide uncertainty in the numbers. I prefer to use the numbers as is. And third, for the purpose of this analysis adjusted values would anyways not alter the conclusion. With this assumption I sum up the years to look at the accumulated figures for the different sections of the profit and loss, to illustrate the profitability over the past ten years. The profit and loss statement for the SCC can be found in the appendix as exhibit 6.1., while an excerpt in given below in table 6.1.. The balance sheet is shown in exhibit 6.2., while an excerpt also here is provided below in table 6.2.

6.5. Financial Analysis

6.5.1. Profit & Loss Account

Table 6.1. - Profit & loss account for SCC (excerpt)

in th EUR	Accumulated	2008	1999
Operating revenue	17,709	6,019	671
Operating P/L	**-38,367**	**-8,438**	**-1,162**
Financial revenue	7,778,052	1,667,351	209,834
Financial expenses	6,697,339	1,066,181	180,084
Financial P/L	**1,080,713**	**601,170**	**29,750**
Turnover	7,795,761	1,673,370	210,505
P/L before tax	**1,042,346**	**592,732**	**28,588**
Taxation	65	0	-61
P/L after tax	**1,042,281**	**592,732**	**28,649**
P/L for period*	***1,042,235***	***592,732***	***28,649***

***Any differences with the P/L after tax and the P/L for the period is due to one time events.**

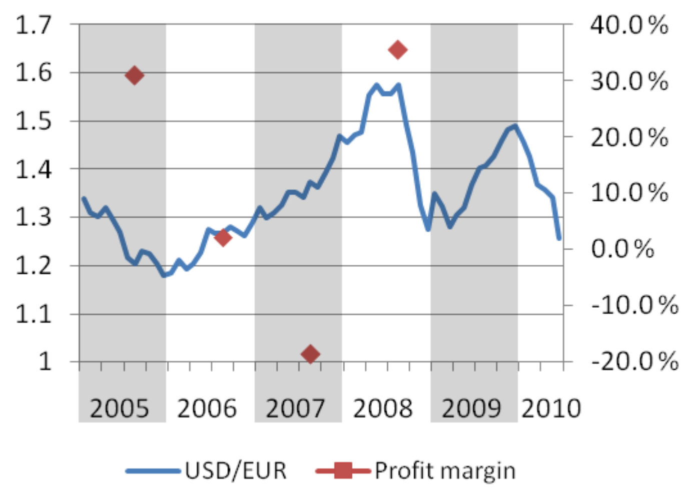
The operating revenue of the SCC is showing positive growth, more precisely there has been a tenfold increase in operating revenue, starting at € 0.67 million in 1999 and ending at € 6.02 million in 2008. The operating revenue stems for the most part from the indirect tax services which the SCC provides, but with a small addition from the limited HR, IT and office services. Nonetheless, the operating loss implies that the costs are higher than income. In fact the costs have increased in a similar pattern as the operating income, showing a sevenfold increase from € - 1.16 million to € - 8.44 million. It seems that the company is succeeding in growing revenue, but has negative margins and struggles to achieve profitability. However, the financial profit and loss tells another story. Here, the financial income, which comes from the SCC's banking and financing activities, increased from nearly € 210 million to € 1.7 billion and the financial profit was € 601 million in 2008. Evidently the majority of the operating costs are related to financial activities. Due to accounting standards this information is not taken into account, making it impossible to extort anything conclusive about the operating or the financial activities. So in the continuation of this analysis I focus on aggregate numbers.

The turnover, which is the operating and financial activities combined, shows a considerable growth, starting at just over € 210 million and ending at close to € 1.7 billion. In total the SCC earned almost € 593 million in 2008, representing a profit margin of 35.4 %[9], see exhibit 6.1. For the period as a whole the SCC had profits of over € 1 billion, and a profit margin of 13.4 %. Nonetheless, the profit fluctuates greatly throughout the period, moving from -18.6 % as a minimum and 35.4 % as a maximum. According to Statoil (Lammens 2010) the main reason for these

[9] The profit margin is calculated by taking the profit and loss for the given year and dividing it by the turnover. Please consult exhibit 6.1. for the margins for the whole ten year period.

fluctuations is that the SCC takes financial risks in the foreign exchange market, as a consequence of that most of the cash management is in US dollars while the company itself is a euro company. The SCC has income in US dollars which is converted to euro. This implies that when the euro strengthens the profit decreases as the dollar is worth less. Conversely, if the euro weakens, profit increases as the dollar is worth more. In graph 6.1. the USD/EUR rate for the last 5 years[10] is plotted together with the historical profit margin for SCC in the corresponding years. The left axis corresponds to the USD/EUR rate, while the right axis corresponds to the profit margin. In 2005 and 2008, the euro weakened and the profit margins for the SCC were high, while in 2006 and 2007 the euro strengthened and the profit margins were low and negative. The graph understates the relationship explained above, and suggests that the USD/EUR rate do in fact affect the profit of the SCC.

Graph 6.1. - USD/EUR rate 2005-2010 and SCC's historic profit margin



Source: Pacific Exhange Rate Service and own calculations

The taxation was zero in 2008 and € 65 000 throughout the period, representing an effective tax rate of 0.006 %. In fact for the last 5 years the taxation has been zero and the year before that it was negative. There is no doubt that the low taxation contributed to the profit margins of the SCC.

6.5.2. Balance Sheet

The size and amount of activities in the SCC has increased over the ten year period in the data set. The fixed assets increased from just over € 1 billion to € 6.5 billion. This category includes tangible fixed assets like buildings, machinery and similar, which for SCC represented € 1 million in 2008. This is a relatively small number, but for a service provider which mostly acts as center where paper values go through it is not unreasonable to operate with little tangible fixed assets. Intangible fixed assets constitute the rest, i.e. 6.499 billion, and consist of all other expenses with long term effect,

[10] The rate is based on monthly observations provided from the Pacific Exchange Rate Service. The data set is available in exhibit 6.3.

e.g. R&D and goodwill. As expected there are no other fixed assets in the SCC as according to the CCR the company is not allowed to hold any shares or similar. The current assets have grown likewise from nearly € 0.7 billion to € 8.8 billion, and consist of the sum of stocks, debtors, other current assets and cash and cash equivalent. As a service center SCC obviously has no warehouse stock and only a limited amount of debtors, just above € 2 million in 2008. Although the SCC has a considerable amount in cash and similar, € 424 million, the largest item is other current assets which include receivables from other group companies and other sources totaling to € 8.4 billion. Together the total assets represent a capital base of over € 15 billion.

Table 6.2. - Balance Sheet for SCC (exerpt)

in th EUR	2008	1999
Fixed assets	**6,518,194**	**1,059,771**
- Tangible fixed assets	1,000	151
- Other fixed assets	6,517,194	1,059,620
Current assets	**8,820,561**	**364,171**
- Debtors	2,213	115
- Other current assets	8,394,072	90,690
- Cash & cash equivalent	424,276	273,366
Total assets	**15,338,755**	**1,423,942**
Shareholders funds	**7,690,229**	**661,608**
- Capital	7,151,466	500,487
- Other shareholders funds	538,763	161,121
Non-current liabilities	**145,304**	**178,455**
- Long term debt	145,304	178,455
Current liabilities	**7,503,222**	**583,880**
- Loans	7,453,897	389,713
- Creditors	39,746	96
- Other current liabilities	9,579	194,071
Total shareh. funds & liab.	**15,338,755**	**1,423,942**

To finance the company there is now a nearly 50/50 split between debt, € 7.6 billion, and equity, € 7.7 billion. The debt ratio has been rather stable and relatively low throughout the period varying from 40 % to 63 %. Last, the growth in the number of employees underlines the growth of the SCC, as it has increased its staff from 13 to 53 people, exhibit 6.2.

6.5.3. Conclusion

The qualitative information suggested that the SCC was profitable, and this is confirmed by the quantitative information. The SCC grew significantly in terms of turnover, assets and employees in the last ten years and now has assets totaling more than € 15 billion. During the period Statoil only paid € 65 000 in total taxes, and can show for accumulated profits of more than € 1 billion.

6.6. Considerations for the future and the transition to the NID regime

In 2009 Statoil transferred to the NID regime, and does not benefit anymore from the CCR's beneficial taxation. As 2008 is the latest available year regarding financial statements it is difficult to see how the SCC will be affected by the transfer to the NID regimes. Nevertheless, in this section I use available information and findings earlier in the thesis to share some thoughts on the SCC's transfer to the NID

6.6.1. 2009

In the NID regime companies with a lower ROE than NIR are effectively not taxed, as shown in chapter 2.5.2. Hence with a profit equal to the NID, the taxable base is zero and no taxes are charged, and thus one can calculate what profit a company maximum can earn before it is subject to taxes. In the last five years with available financial statements Statoil paid no taxes, so if the NID is to be as beneficial as the CCR the taxation needs to be zero. I calculate the maximum profit the SCC can have in 2009 by using the formula given for NID in chapter 2.2.2.

$$NID = Notional\ Interest\ Rate\ x\ Adjusted\ Equity$$

The NIR for 2009 was 4.473 %, according to table 2.1., while Statoil's year end equity in 2008 was nearly € 7.7 billion, exhibit 6.2, which gives us the following calculation.

$$NID = 4.473\ \%\ x\ \text{€}7.7\ billion = \text{€}\ 0.344\ billion = \text{€}\ 344\ million$$

So in 2009, the SCC may earn a profit of € 344 million without being subject to any taxes. Yet, the profit for 2009 for the SCC is uncertain and difficult to estimate. The historical profit has fluctuated significantly as we saw above. If we assume that next year's profit is the same as for 2008, the SCC will have a taxable profit of nearly €249 million which is subject to the normal tax corporate tax rate in Belgium, 34 %. This translates in to € 84 million in taxes, representing an effective tax rate of 14.3 %, see table 6.3. In this scenario the taxation is relatively low, but much higher than that of the CCR.

Table 6.3. - NID and the SCC

In th EUR	**2009**
Profit	592,732
NID	344,000
Taxable profit	248,732
Tax rate	34%
Taxes	84,569
Effective tax rate	*14.3%*

On the other hand, as presented above the USD/EUR rate affect the SCC's profit. In 2009 the euro has strengthened against the US dollar, graph 6.1., suggesting that the SCC's profit margin will decline. In addition, the interest rate has been low in 2009, suggesting a further decrease in the profit margin. This argument is similar to the one presented in chapter 4.4. These two factors in combination with a high NID rate propose that the profit for 2009 will be considerably lower than in 2008, and most likely also below the NID. If that is the case the taxation is zero, and the SCC will even have unused deduction which it can carry forward.

It should be noted that from 2005 shareholders' funds increased more than threefold from € 2.4 billion to nearly € 7.7 billion, exhibit 6.2. The rapid growth in equity in the later years may suggest that Statoil was preparing for the transition to the NID regime. With a larger equity base Statoil can claim a larger NID and lower their taxes. On the other hand, there are three factors which may have contributed to the increase in equity. First, after the merger with Hydro the company obviously grew significantly and so did the demand for the services provided from the SCC. Second, in the later years Statoil has become more and more international with several acquisitions and investments abroad. More operations abroad imply more work and profit for the SCC. And third, Statoil has given more attention to cost cutting and focused more on shared services to utilize their capabilities. So based on the above mentioned points it seems that the increase in equity is a natural consequence of the changing characteristics of Statoil.

6.6.2. 2010 and onwards

From the analysis above, the taxation of the Statoil Coordination Center most likely continues to be favorable in 2009. When looking even further ahead the conclusion becomes more ambiguous. The NID regime acts as a double-edged sword for the SCC, the more profits, the higher effective tax rate. Another way to look at it is to say that if profits are high the SCC wins because it has high profits and is able to pay taxes. If profits are low, the taxation is low, and the SCC wins again. So in any case the NID regime is beneficial for the SCC. However, as the industry is highly mobile the taxation aspect becomes more important, since in case of high taxation a center could locate to a more favorable jurisdiction. Hence, I focus on taxation in the following discussion.

The way NID is constructed works favorably for most financial centers as they most often engage in short term financing, thus their income is linked to the short term interest rate. The NID rate however is linked to the 10 year Belgian government bonds rate. In the normal state with an upward sloping interest curve, this ensures beneficial tax treatment, as explained in chapter 4.4. It is however possible that this relation will not hold. Firstly, based on recent experience the NIR may be capped or fixed at a lower rate, and thereby not be based on the OLO-rate. This happened for the accounting years of 2010 and 2011 when the rate was fixed and capped at 3.8 %, and although the rate still is close to the OLO rate, it is not certain what the politicians will do after these years. Secondly, there are regularly short periods with downward sloping interest curves, and in those cases the NID lowers, while income increases, hence the effective tax rate goes up. Nonetheless, this usually only last for a short period of time, and will not affect the taxation in a long run perspective.

Another factor influencing the profit is obviously the interest rate level, as most of the SCC's income comes from margins on loans. When the market interest rates are higher, the SCC is able to charge a higher margin, while when the interest rate is low the margin also lowers. The current market outlook suggests that the current low interest rate will continue in the short term and in any case not rise significantly in the medium term. With this situation the SCC continues to have lower profits and benefit from favorable taxation. Nonetheless, if the market changes and the interest rates increase faster than expected, the profits of the SCC may rise again, and so will the taxation.

For the SCC specifically the USD/EUR rate influence the profit, thus the movements in the exchange rate have an effect on the effective tax rate. To this date, June 2010, the euro has weakened, graph 6.1., if this persist the SCC's profit augments and so will the taxation. On the other hand, if the euro strengthens again, the profit becomes lower and the taxation more beneficial.

As argued above, the future taxation of the SCC is uncertain. In a "worst" case scenario where the interest rate goes up, the NIR stays low and the euro weakens, the taxation may in fact be considerable, and according to Statoil (Lammens 2010) be as high as 25 %. Yet, this scenario is not likely and the most probable development is that the NID ensures a favorable tax environment for the SCC in the future, albeit not a zero tax regime as the CCR was.

6.7. Conclusion

Established in 1989, the Statoil Coordination Center initially benefitted greatly from loan subsidies given by the Belgian state. As the subsidies were phased out in the midst 1990s, the coordination center industry developed and internal bank functions became more and more important. In 1998 Statoil decided to further invest in new ERP software which gave them the possibility introduce zero-balancing accounts. In 2000, the SCC reported that the investment had been very successful with a pay back of only 18 months. This was largely due to the fact that Statoil now received profits which earlier were reserved to banks, namely margins on loans and clearing fees.

The financial statements suggest that the establishment of the coordination center has been highly profitable for Statoil, much due to the advantageous Coordination Center Regime. In fact, over the period from 1999 to 2009 the Statoil coordination Center had accumulated profits of over € 1 billion, while at the same time the taxes paid accumulated to only € 65 000, which translates to an effective tax rate of practically zero.

Despite the transfer to the NID regime the future still looks prosperous for the SCC. The assets are showing positive growth and with the current equity the center can earn a profit of € 344 million in 2009 without being subject to any taxes. In fact, for 2009 the SCC most likely will earn below the NID because of the strengthening of the euro in combination with low interest rates. To predict further into the future is difficult and there are several factors which influences the SCC's profit. In a "worst" case scenario the SCC may be subject to a significant efficient tax rate, but most likely the NID regime ensures the continuation of beneficial tax treatment for the Statoil Coordination Center.

7. Statkraft

While Statoil established its coordination center as early as in 1989, Statkraft opened the Statkraft Treasury Centre first in 2008. Being a developer of hydro power Statkraft was central in the development of Norwegian industry and the electrification of Norway. Nonetheless, in the 1990s there were not many projects left in Norway and Statkraft began looking into other technologies and expanding internationally. Still Statkraft is very much a hydro power company, but it also have considerable solar and wind power divisions and does research on additional forms of renewable energy. Currently Statkraft is present in over 20 countries and still expanding. As a result of the massive international growth in later years Statkraft wished to centralize its financial activities in Belgium. They chose to organize this as an independent financial center to increase the focus on such activities, while Belgium was chosen for its tax regime and the proximity to decision makers in the EU. The timing of the establishment could not have been better, regarding taxation, as the market conditions ensure lower profit but relatively large NID. In 2010 Statkraft Treasury Centre can earn € 228 million in profit without being subject to any taxes.

This chapter is organized in a similar way as with Statoil. As there are no financial statements available for the center, the analysis is somewhat shorter. First, I present Stakraft with some information about their history and their current situation. Next, I look at the Statkraft Treasury Centre, more specifically about their operations and the rationale behind the establishment. Furthermore, I evaluate the future for the center, before I give a short conclusion on the chapter.

7.1. History

Statkraft's history is closely linked with the development of Norwegian hydropower. The company itself was first established in 1992. Nevertheless, the company roots can be traced all the way back to 1895 when the Norwegian state bought its first waterfall to electrify the Setesdalsbanen railroad. Further investment in hydropower was done to continue the electrification of the industry and railroad, but also to prevent foreign ownership. Even so, after the Second World War much of Norway was still not electrified, and the Norwegian parliament decided to go for massive development in hydropower to supply the industry sector with cheap electricity to provide for exports and employment (Statkraft 2010b). Many large hydropower plants were constructed in the following period. In the 1990s the time for large hydro power projects in Norway was over and in

2001 the Prime Minister Jens Stoltenberg stated in his new year's speech that "we have now reached the point where large development of hydropower in Norway is over" (Stoltenberg 2010). However, Statkraft had already begun to expand internationally as well as in other technologies.

7.2. Current Situation

Even though mostly a hydropower company Statkraft has considerable divisions in wind power and gas power, and is doing research and development in new technologies as osmotic, tidal and solar power. Following the asset swap with E-On and other expansions in 2009 Statkraft now claims to be the largest producer in Europe in renewable energy, with a production of 56.9 TWh. Furthermore, Statkraft has currently 3400 employees and operations in more than 20 countries. The financial result of 2009 was a net income of € 964.5 million on total revenues of € 3.1 billion. Further, the book value of assets totaled € 18 billion, made up by € 9.9 billion in liabilities and € 8.1 billion in equity (Statkraft 2010a)

Although Statkaft is highly profitable and operates in renewable energy, the investment budget is strict due to the high dividends required from its sole owner, the Norwegian State. In 2009 the dividends amounted to 76 % of the group's result. Strategically Statkraft focuses on three directions, continue to be a driving force in the development if Norwegian power industry, establish a strong position within hydropower and other renewable energy in Europe and to grow its flexible power production.

7.3. Statkraft Treasury Centre[11]

Statkraft Treasury Centre (STC) was established in October 2008 in Brussels, Belgium. The center currently employs 5 people and shares their office in "the Norway House" with among other the Norwegian embassy, the Norwegian EU delegation and Norsk Hydro.

Following the substantial international growth in the latest years the demand for internal financial operations has increased. After the swap with E.On in 2008, the acquisition of Yesil Energy in Turkey in 2009 and own investment in Spain, Albania, France, Italy and Germany, Statkraft now has considerable activity in Europe. In addition, with a majority stake in the international player SN Power, Statkraft is also present globally in Asia, Africa and Latin America. The STC operates in three

[11] Information about the Statkraft Treasury Centre is largely based on correspondence with Ola Idland, Managing Director of the STC.

areas, internal financing, administration of guarantees and a limited number of shared services, which it offer group companies. The two first constitutes the majority of the activities and are explained below.

7.3.1. Financing and guarantees

Statkraft is part of the energy industry which is characterized as capital intensive. Currently the many projects abroad create a considerable need for financing, and not least guarantees. Building new hydro power, gas power, or photo volcanic plants requires huge amounts of upfront investment, while the day-to-day maintenance and operating costs are relatively low. This very much resembles the classical textbook example in investment theory where you have a large investment cost today, and income in the future which needs to be discounted and if the net present value is positive one goes forward with the investment. Even so, companies do not have abundance of funds to invest in positive net present value projects, making external financing crucial. With the treasury center, group companies area able to obtain financing at a more preferable rate and with better conditions.

Many of Statkraft's projects are not only large in absolute terms, but also relative in the communities where the power plants are constructed. In these kinds of projects politicians and local authorities are often heavily involved and these require guarantees from the company, both when it comes to financing, but also regarding employment and use of the surrounding areas. As the constructors of the projects are often smaller subsidiaries, the mother company is required to give these guarantees. Obviously, also the financial markets require guarantees and similar from the parent company. The STC manages these and sort out all other details in that regard.

7.3.2. Rationale

The main reason for establishing the STC was to increase the focus on these kinds of activities, and thereby obtain a more professional, international and integrated structure when it comes to internal financing. Their own experience showed that country managers and subsidiaries preferred to handle financing and guarantees on their own. To go through the main office and the established procedures was simply regarded as less exiting and not as fulfilling for the management in question. Without the competence and bargaining power of the parent company these external financial agreements were often more expensive and with poorer provisions. By establishing the STC and centralizing this function Statkraft hopes to increase the focus on internal financing and the relating benefits as well as make it easier and more convenient to use for the respective managers. Another and almost equally important aspect was to improve security and control over the financing operations. By having everything in one place, it is easier to have a complete overview and to uncover areas of improvement and avoid mistakes or unpleasant surprises.

These functions could be located in the headquarters in Norway. An advantage with this is that much of Statkraft competence and experience is between the walls in the main office. Another is that one would have close links with important decisions makers. Still, Statkraft is a large organization and one feared that a treasury department within the headquarters would be subject to unnecessary bureaucracy and meetings, and not receive proper attention. Furthermore, Statkraft has gone through a successful restructuring in the later years by decentralizing larger departments, and has positive experience with separating and creating own entities. As the development of projects in Norway is limited, most new projects are abroad. So by establishing in Brussels, the office would be closer to subsidiaries and projects, and travelling to the mentioned subsidiaries would be simpler. With increased activity within the EU, Statkraft wishes to locate closer to political bodies. Statkraft's projects are prone to political decisions in the fields of e.g. water body regulations, climate commitments and subsidies for green energy. Last, but needless to say, the NID regime and the business environment was vital in choosing Belgium as the location for the center.

7.4. Considerations for the future

The STC has total capital of approximately € 6 billion and as the entity is fully funded the equity also amounts to € 6 billion (Idland 2010). As we already have the NIR for 2010, 3.8 %, table 2.1., we calculate the maximum profit the STC can earn tax free for the year of 2010.

$$NID = 3.8\ \%\ x\ \text{€}6\ billion = \text{€}\ 0.228\ billion = \text{€}\ 228\ million$$

In 2010 Statkraft can have a profit of € 228 million before being subject to any taxes. If the profit is smaller, the remaining can be carried forward and be deducted against future profits.

The NID regime provides a favorable tax environment for financial centers which provide group companies with short term funding. The center's performance and profitability depends very much on the short term interest rates, while the NID is based on the long term interest rate. In the normal case with an upward sloping yield curve, the short term interest rate is lower than the long term interest rate which ensures beneficial tax treatment as discussed in chapter 4.4. and for the SCC. Although the NIR is supposed to be connected to the OLO-rate, the politicians may deviate from this, as they did for 2010 and 2011. Subsequently, there is some uncertainty about the regime in the future.

Also, the STC is newly established, while the SCC has years of experience. The SCC also operates on a larger scale and has approximately double the amount of total assets, while the two companies have a similar amount of equity. Looking at employees, Statoil Coordination Center has 53, while Statkraft Treasury Center has five. Having that in mind, to assume that STC earns the same profit as SCC seems unreasonable, which hints that the taxation most likely will be low or even zero, and in any case beneficial.

7.5. Conclusion

Statkraft has in the later years increased their international operations considerably. With that came a greater need for financing and guarantees. By establishing the Statkraft Treasury Centre, Stakraft emphasizes the focus on internal financing and can offer loans with better terms to group companies. Although the main office in Norway has the best experience and knowledge, the center was located in Belgium to avoid unnecessary bureaucracy and meetings and ensure an absolute focus. The fact that Belgium is closer to most of Statkraft projects and important political decisions makers also played an important role. Needless to say, the NID regime made Belgium especially attractive. With equity of € 6 billion, Statkraft is entitled to over € 228 million in Notional Interest Deduction for the year of 2010, which implies that the STC can have profits of €228 million tax free. Comparing with Statoil there is reason to believe that the taxation of the STC will at least be low in 2009, and continue to be beneficial in the future.

8. Tax Arbitrage

In the previous chapters I have shown that financial centers take advantage of the tax regime in Belgium to lower their overall tax burden. In fact Statoil paid only a total of € 65,000 in taxes, an effective tax rate of 0.006 %, from 1999 to 2008. While the focus earlier have been on legitimate adaptations by companies due the tax regimes, I will in this chapter illustrate how to take advantage of the system to create so called tax arbitrage. I underline that this practice in fact is illegal and there is no evidence or proof that the companies mentioned in this thesis undertake such activities. This chapter is for illustration purposes only and to illuminate a problem which arises when tax systems are different. Although most tax arbitrage strategies are complex and require a lot of effort, the "double-dip" is simple and I present an example of it in case of the Norwegian and Belgian tax systems.

Firstly, I explain the "double-dip" and show the steps in a simple financing arrangement that can provide a risk-free profit. This is illustrated by using the information about taxation given earlier in this paper to create a financing structure for a Norwegian parent company and a Belgian subsidiary financial center. And finally, the results are discussed and I introduce other elements which is relevant to the issue in question.

8.1. "Double-dip"

When tax regimes are different companies are sometimes able to exploit the differences in, or the lack of, tax rates to create a risk-free profit, and thereby perform so called tax arbitrage. The "double-dip" is such a vehicle, and refers to a financing structure where multinational enterprises are able to achieve two deductions for interest expenses on a single sum and hence create a risk free profit.

For the following illustration there are three parties involved, *NorCo*, a Norwegian Parent company, *BelCo*, a Belgian financial subsidiary, and the *financial market*. The interactions in the double-dip financing arrangement are explained below in a two period model with four steps in each period. In the first period the relationships between the involved parties are established and one performs the initial transactions. In the second period the initial transactions corresponding cash flows are conducted. The notation used is as follows:

K = the initial sum borrowed from the financial market.

r = the interest rate

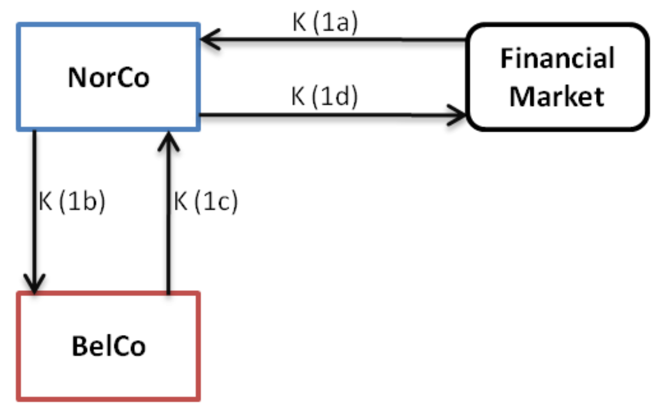
t_B = Belgian corporate tax rate

t_N = Norwegian corporate tax rate

NIR = Notional Interest Rate

8.1.1. Period t =1

Figure 8.1. – "Double-dip" period t = 1



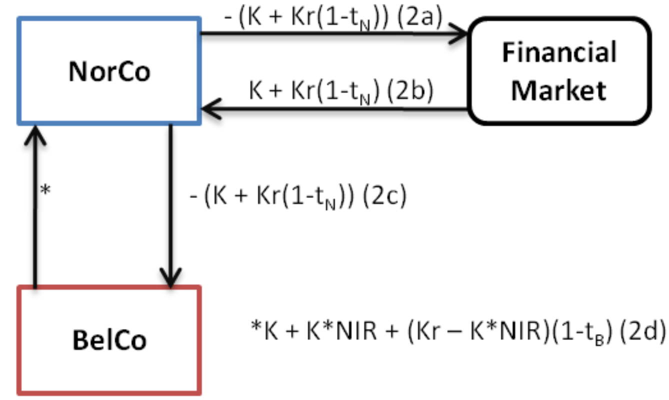
In period 1, NorCo takes up a loan, K, in the financial market (1a), and uses all the funds, K, to subscribe in for equity in BelCo (1b). BelCo then uses the funds received, K, to lend out money to NorCo (1c). NorCo now has the same amount as initially borrowed, K, and places this in the financial market (1d). The transactions are illustrated in figure 8.1., and in effect we observe that the transactions are zeroed out and that all parties are in the same state as before the transactions.

8.1.2. Period t = 2

In the second period the corresponding cash flows from the initial positions incur. For the initial loan NorCo has to pay back the loan with interest to the financial market. The interest is however tax deductible so for NorCo the transfer is $K + Kr(1\text{-}t_N)$ with a negative sign (2a). Conversely the placement from NorCo in the financial market yields interest income for NorCo which is subject to tax and the result is the same transaction as previous, $K + Kr(1\text{-}t_N)$, but this time with a positive sign. The loan from BelCo follows a similar pattern as the loan from the financial market. NorCo has to pay back the loan with interest to BelCo, but the interest payments are tax deductible and thus the result is $K + Kr(1\text{-}t_N)$, again with a negative sign (2c). In the same way as the loans, the equity and corresponding dividends are to be paid back. In this case I assume that all funds available in BelCo go back to NorCo. The funds available are the payment from NorCo, which according to the NID regime is treated in the following way. On the interest income received, Kr, BelCo is entitled to a

Notional Interest Deduction[12] which is calculated on the basis of equity and use the Notional Interest Rate. Here the equity is the initial funds from NorCo, K, making K*NIR tax free. The rest, Kr - K*NIR, is subject to Belgian corporate tax, t_B. So in effect NorCo receives K + K*NIR + (Kr-K*NIR)(1-t_B) in equity payback and dividends (2d). Note that dividend transfer within the EEA is exempt from withholding tax due to the Parent-Subsidiary Directive. Specifically in Norway this legislation is named the Norwegian Tax Exemption Method, and ensures that the transfer from BelCo to NorCo is tax free. The transactions are illustrated in figure 8.2.

Figure 8.2. – "Double-dip" period t =2



8.1.3. Result

In a domestic economy the result of the transactions in period 2 would zero out, just as it did in period 1, and still do for the transactions between NorCo and the financial market. However, since there are differences in the tax regimes for BelCo and NorCo, income and cost is treated differently crossing border. Last, summing up the transactions, the result for NorCo is given in the following formula, the deduction of the formula is given in exhibit 8.1.

$$\textit{Profit for NorCo} = \pi = K(rt_N - rt_B + NIRt_B)$$

From the formula we observe that the expression within the brackets decides whether the transactions yield a positive profit or not, while the K merely affect the size of the result. In our case we know from before that the Belgian corporate tax rate is higher than the Norwegian tax rate $t_B > t_N$, hence $rt_N - rt_B < 0$. So the positive profit for NorCo is therefore accredited to $NIRt_B$, or in other words the NID regime[13].

An important note to make is that the expression is not unequivocally positive. In the case of $NIRt_B$ being smaller than $rt_B - rt_N$ the result would be negative, hence the financing arrangement would

[12] NID = NIR * Equity

[13] The term $NIRt_B$ within the brackets is a direct consequence of the NID regime. If we were to disregard the NID regime in the financing arrangement, the result of the transactions would be $K(rt_N - rt_B)$, and in this case negative

yield a loss. This is nevertheless highly unlikely. Rearranging the expression within the brackets to achieve a negative result gives the following expression[14]:

$$NIR < \frac{(t_B - t_N)}{t_B} r$$

Inserting for the Norwegian and Belgium tax rates, we find that:

$$NIR < \frac{(33.99\ \% - 28\ \%)}{33.99\ \%} r \quad \rightarrow \quad NIR < 0.176r$$

This implies that for the financing arrangement to yield a loss the NIR must be lower than 17.6 % of the interest rate. Applying the current NIR, 3.8 %, implies that the interest rate has to be larger than 21.6 % to reach a negative result. Comparing with the current interest rates, given in exhibit 4.1, an interest rate of 21.6 % is clearly unrealistic, So for all practical purposes the double-dip financing arrangement yields a profit due to the NID regime.

8.2. Discussion

With the "double-dip" financing structure illustrated above companies can exploit differences in tax regimes to create a risk-free profit. Some may argue that it is not risk-free since there is currency issues involved between Norway and Belgium. However, this is easily mitigated by entering a forward rate agreement which effectively lock the positions and ensures that the profit in fact is risk-free and noncontiguous of how the exchange rate moves.

With the presence of such alternatives to create tax arbitrage, one would think that countries would be interested in blocking the loophole. As a matter of fact such measures already exist.

In Belgium the authorities can pursue transactions that lack a business motive whatsoever on the grounds of a sham, on the general anti-abuse provision, or in the "cash drain theory". (Martin and Smet 2008) On the other hand, Belgium's policy against tax arbitrage has been rather lax historically due to the fact that they want to attract multinationals and financial centers. Authorities constantly looking for illegitimate transactions are a discouragement to companies. This is obvious for companies which operate in grey areas, but also for legitimate companies there are concerns as they risk being falsely accused and thereby receiving bad press. Nevertheless, firms in Belgium are able to receive advance ruling making the transactions safe from litigation on a later stage and thus minimizing the above mentioned concerns.

[14] The deduction of the expression is given in exhibit 8.2.

In Norway the CFC rules are applicable for a company which is established simply for tax reasons, here tax arbitrage. In such a case the company is taxed as if it was a Norwegian based company and the profit would disappear. However, Norwegian CFC rules are not applicable to EEA members and thus not relevant for this case. In addition, the legislation is on company basis and does not apply to single transactions. In any case it is difficult to prove that a financial center has financing arrangements that creates tax arbitrage. Such centers perform transactions every day and distribute money back and forth, so that there are transactions going on every day, every hour and every minute. The authorities cannot supervise every little transaction and need to focus on larger transactions which are possible to track, making it difficult to discover any wrongdoings.

The above mentioned arguments indicate that multinationals with legitimate financial centers can perform tax arbitrage. On the other hand, if caught the downside effect of litigation and bad press can be severe. There are no indications that multinationals are performing tax arbitrage today, but as shown above the double-dip is an example of a simple and difficult to discover method in which a financial center can be used to create a risk-free profit.

9. Conclusion

Throughout this thesis much information has been presented and many subjects have been explored. So I first summarize the findings of this thesis before I give a short conclusion. Working with this paper I encountered several interesting topics along the way which deserve to be explored. Some suggestion for further study is therefore giving in the closing of this thesis.

9.1. Summary

In chapter one I introduced the financial center industry in Belgium. A financial center is an independent entity which performs financial services on behalf of group companies. Since the implementation of the Coordination Center Regime, Belgium has attracted over 350 companies and more than 200 of these have been active over a longer time period. These centers employs nearly 10 000 people, but do only pay 1.47 % in direct taxes. Nonetheless, the employees and the increased activity from the centers contribute to increase Belgium's tax revenue, attract multinationals and develop special capabilities. The CCR is being phased out since it was labeled a harmful tax practice due to low effective taxes and ring-fencing. The successor NID however is available to all companies, and was introduced in 2006. Already in the first chapter I concluded that by looking at the multinationals behavior, Belgium is a preferred location for financial centers.

In chapter two I gave a comprehensive overview and evaluated relevant legislation and rules applicable for financial centers in Belgium. The CCR is an advantageous tax regime because taxes are calculated not on profit, but on a limited number of costs, excluding the two most important ones for financial centers, namely wage and financial cost. Still, to participate in the regime a company must fulfill stringent conditions concerning size and turnover and needs to be a truly multinational company. The NID however is available to all Belgian companies and is unique both in a European and worldwide context. The NID offers a notional deduction on the basis of equity and this way levels the playing field between debt and equity. For financial centers which are capital intensive this is a beneficial measure and secures the continuation of advantageous taxation. In addition to these two main tax regimes, the EC directives especially ensure that the centers are not subject to double taxation and that profit can be distributed free from withholding tax to the parent company.

In chapter three I presented other aspects which make Belgium a suitable location for financial centers. Despite the political turmoil the last years, Belgium is very accommodating for foreign investors. Belgium ranks high in all rankings regarding business environment and being part of the euro zone is no disadvantage. Throughout the last 30 years a cluster has developed and gives the incumbent firms several advantages. Last, Belgium's central location gives a unique starting point for multinationals establishing a central function.

In chapter four I turned to the company's view of the financial center. The activities of such centers are mostly based on internal funding and cash management, but they also deal with tax management, accounting and advisory. The advantages from establishing such centers come from economies of scale and the benefits of centralization and are by themselves reason enough to establish a financial center. Yet, the taxation aspect is highly valid as the nature of the industry ensures beneficial tax treatment which contributes to the profitability. In the current market conditions the NID is highly attractive as the interest rates in general are low, and the interest curve is upward sloping.

In chapter five I showed the view on the subject from important Norwegian stakeholders. The media focuses on tax savings and hint that these activities result in lost tax revenue for the Norwegian government. The authorities do not share this view, and state that as long as national and international rules and regulations are followed, these operations are completely legit. Also, I noted that Norway has a ring fenced regime for shipping companies making their view disqualified. The tax agency informs that multinationals are easy to deal with and that they disclose the information requested and there is no sign of tax evasion or similar. Nonetheless, a financial center is a complex matter and to evaluate if transactions are fairly priced is difficult.

In chapter six I explored the Statoil Coordination Center. This center was established in the late 1980s by the means of receiving loan subsidies from the Belgian state. Following the development of the internal bank the financial activities became more and more important. Today the income for the most part originates from the financing and banking activities and accumulated over the period from 1999 to 2000 the center had a profit of over € 1 billion. In 2009 the SCC transferred to the NID regime and can now be subject to larger tax bill. However, the current market conditions propose that the center continues to be beneficially taxed.

In chapter seven I looked at the Statkraft Treasury Center. Stakraft has been expanding significantly abroad over the last decade and opened its financial center in 2008. The main rationale was to increase the focus on such activities and streamline the financing of group companies. Similarly to the SCC, the taxation of the STC most likely will prove to be beneficial.

In chapter eight I illustrated the "double-dip", a financing structure, which can create tax arbitrage. This particular arbitrage exploits the differences in tax systems with the result of a risk-free profit. The method is difficult to discover, but nonetheless illegal, and if caught the multinationals risk both litigation and bad press.

9.2. Conclusion

Belgium offer multinationals many advantages for establishing a financial center. The CCR was an extraordinary advantageous tax regime for financial centers, and with the NID, even though not to the same extent, the beneficial tax treatment is set to continue. Furthermore, for a Norwegian multinational with a financial center in Belgium the profit in the center can be transferred tax free to the parent company. Also contributing to the attractiveness of Belgium is the business environment, with accommodating authorities, a central geographic location, well developed financial markets and last but not least a cluster of financial centers.

The mentioned financial centers mostly engage in internal financing and cash management, and by centralizing these functions the companies hope to exploit the advantages of economies of scale and centralization. Taking the example of the Statoil Coordination Center most of the profit comes from bank margins, earned on loans given to group companies, and the banking activity.

The future for the financial centers and the industry as a whole in Belgium looks promising. The combination of the way the NID is constructed and the current market conditions ensure the continuation of low taxation of financial centers and thereby also the presence of those in Belgium.

9.3. Topics for further study

This thesis touches upon many interesting topics which deserves further investigation. I have listed some ideas for themes below.

9.3.1. The transfer from the CCR to the NID regime

As the financial data becomes available it would be exciting to investigate how the taxation of financial centers changes from the CCR to the NID regime. I predict that the taxation continues to be relatively low, although not as low as under the CCR. Also interesting would be to analyze what the coordination centers participating in the CCR do after the phasing out of the regime. I have already mentioned that some companies have left Belgium, while others, like Statoil, have chosen to stay.

9.3.2. The NID regime

The new NID regime, implemented in 2006, is unique in both a European and worldwide context. In this thesis the focus was on its consequences for financial centers. It would however be equally interesting to explore how the NID regime works for other industries and companies. Another related topic is to evaluate how Belgium performance in and after the financial crisis was affected by the NID regime. Both Bart Adams (2010) and Piet Lammens (2010) suggest that because the NID increased the attractiveness of equity the Belgium companies were financed by relatively more equity than in comparable countries. Also a study on the effect of the NID on the capital structure of Belgian companies could be worth investigating.

9.3.3. Is the NID a harmful tax practice?

Even though I concluded that the NID is not a harmful tax practice, there are still some elements that may suggest otherwise. Although the system is not ring fenced per se, the way the NID is constructed makes it especially beneficial for financial centers and in this way be sort of a ring fencing mechanism. Also, the ruling which gives the centers the right to waiver the NID effectively makes it possible to surpass any subject-to-tax requirements. So evaluating the NID regime according to for example the OCED criteria for harmful tax regimes could be interesting.

9.3.4. Tax regimes for financial centers

I focused in this thesis particularly on the Belgian regime for financial centers, and I suggested that this regime is one of the most, if not the most, preferable regimes in the world. So a comparative study of the tax regimes for financial centers would prove very interesting. Such a paper could also explore what the reasoning is to establish elsewhere.

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11. Appendix

Conversion rates

EUR/NOK: 8.0

EUR/BEF: 40.0

Abbreviations

ACE	Allowances for Corporate Equity	***Million***	1,000,000
BEF	Belgian Franc (currency)	***NBB***	National Bank of Belgium
Billion	1,000,000,000	***NHH***	Norwegian School of Economics and Business Administration
CCR	Coordination Centre Regime	***NID***	Notional Interest Deduction
CFC	Controlled Foreign Company	***NOK***	Norwegian Kroner (Currency)
EC	European Commission	***OECD***	Organisation for Economic Co-operation and Development
ECJ	European Court of Justice	***P/L***	Profit and Loss
EEA	European Economic Area	***PSD***	Parent-Subsidiary Directive
EFTA	The European Free Trade Association	***R&D***	Research and Development
ERP	Enterprise Resource Planning	***ROE***	Return on Equity
EU	European Union	***SCC***	Statoil Coordination Center
EUR	Euro (currency)	***STC***	Statkraft Treasury Center
FDI	Foreign Direct Investment	***UNCTAD***	United Nations Conference on Trade and Development
IBFD	International Bureau of Fiscal Documentation	***USD***	US dollar (currency)
IRD	Interest-Royalty Directive	***VAT***	Value Added Tax

Exhibit 1.1. List over Coordination Centers in Belgium

This list was obtained from the AMADEUS database. The search was limited to companies in Belgium and the search words used were: *coordination center* and *coordination centre*. For people interested in identifying more financial centers I propose the following search strategy, limit the search to Belgium and to companies with shareholders' funds larger than € 100 million. Export the search result to Excel and create an additional column calculating the ratio of the financial revenue on operating revenue. A financial center usually have much larger financial revenue than operating revenue, so by sorting the result according to this criterion the centers are easier identifiable. In addition, look for company names containing financial, services, treasury, CC, center, centre etc.

Company name	
3 SUISSES INTERNATIONAL COORDINATION CENTER	EASY DRIVE COORDINATION CENTER
3M COORDINATION CENTER	ENI COORDINATION CENTER
ACKERMANS EN VAN HAAREN COORDINATION CENTER	ESSO COORDINATION CENTER
ADECCO COORDINATION CENTER	ESTEE LAUDER COORDINATION CENTER
ADP COORDINATION CENTER	EUROPEAN TOURISM COORDINATION CENTER
AGILENT TECHNOLOGIES COORDINATION CENTER	FERRERO COORDINATION CENTER
AJINOMOTO COORDINATION CENTER	FLEXSYS COORDINATION CENTRE
ALBEMARLE COORDINATION CENTER	FLOWSERVE COORDINATION CENTER
ALCON COORDINATION CENTER	FOOD MACHINERY COORDINATION CENTER
ALCOPA COORDINATION CENTER	GENERAL MOTORS COORDINATION CENTER
AMAR COORDINATION CENTER	GIB COORDINATION CENTER
ARDO COORDINATION CENTER	GIMV COORDINATION CENTER
ASSOCIATED WEAVERS COORDINATION CENTER	GLAXO COORDINATION CENTER
AT AND T NETWORK SYSTEMS INTERNATIONAL COORDINATION CENTER	GOODYEAR COORDINATION CENTER
AUCHAN COORDINATION CENTER	GREIF COORDINATION CENTER
AVERY DENNISON COORDINATION CENTER	HENKEL COORDINATION CENTER
B.I.G COORDINATION CENTER	HERTZ COORDINATION CENTRE
BARCO COORDINATION CENTER	HEWLETT-PACKARD COORDINATION CENTER
BASF COORDINATION CENTER	***The list continues on the next page***

BELGIAN DAIRY COORDINATION CENTRE
BEMIS COORDINATION CENTER
BMW COORDINATION CENTER
BOLSWESSANEN COORDINATION CENTRE
BOMBARDIER COORDINATION CENTER
C.D.L.COORDINATION CENTER
CAMPBELL COORDINATION CENTER
CARMEUSE COORDINATION CENTER
CARPET - LAND INTERNATIONAL COORDINATION CENTER

CEGELEC COORDINATION CENTRE
CENTRE DE COORDINATION AIDE & SOINSA DOMICILE DE L'ARR. DE
CENTRE DE COORDINATION CARREFOUR
CENTRE DE COORDINATION DE CHARLEROI
CENTRE DE COORDINATION DE SOINS & SERVICESA DOMICILE INDEP.
CENTRE DE COORDINATION DES BETONS - COORDINATIE CENTRUM BETON
CENTRE DE COORDINATION DUPUIS
CENTRE DE COORDINATION ET DE SERVICES A.E.P.
CENTRE DE COORDINATION GENERALE SA
CENTRE DE COORDINATION HACHETTE DISTRIBUTION ET SERVICES
CENTRE DE COORDINATION INTERNATIONAL C.F.E.
CENTRE DE COORDINATION SIDERURGIQUE
CENTRE DE COORDINATION YVES ROCHER

CENTRE DOCUMENTATION & COORDINATION SOC. CENTRUM VOOR MAATSCHAPPELIJKE
CENTRE D'ORG. , RECHERCHES, GESTION & COORDINATION D'ENTR.
CERESTAR COORDINATION CENTER
CLABECQ COORDINATION CENTER
CONTINENTAL COORDINATION CENTER
COORDINATION CENTER

ICI COORDINATION CENTRE
IMPERIAL COORDINATION CENTER
JEUNESSES MUSICALES DE LIEGE, CENTRE DE COORDINATION
KODAK PHOTO SERVICES COORDINATION CENTRE
KRAFT JACOBS SUCHARD COORDINATION CENTER
LHOIST COORDINATION CENTER
L'OREAL SERVICES - CENTRE DE COORDINATION
LUBRIZOL EUROPE COORDINATION CENTER
MEISTER COORDINATION CENTER
MILLENNIUM INORGANIC CHEMICALS - EUROPEAN COORDINATION CENTER
MIYATA (EURO-NIPPON COORDINATION CENTER
MOBIL COORDINATION CENTER
NESTE COORDINATION CENTER
ONTEX COORDINATION CENTER

PROJECT COORDINATION CENTER
QUICK COORDINATION CENTER
RAVAGO COORDINATION CENTER
SCA COORDINATION CENTER
SCA PACKAGING COORDINATION CENTER
SCHERING-PLOUGH COORDINATION CENTER
SCREG COORDINATION CENTER
SGS COORDINATION CENTER

SHELL COORDINATION CENTRE
SHELL COORDINATION CENTRE
SIEMENS COORDINATION CENTER
SJM COORDINATION CENTER
SPECIALITY CHEMICALS COORDINATION CENTER

The list continues on the next page

COORDINATION CENTRE BALTA GROUP	TENNECO AUTOMOTIVE EUROPE COORDINATION CENTER
COORDINATION SERVICE AND TRADING CENTER	TRANSAMERICA LEASING COORDINATION CENTER
COULTER COORDINATION CENTER	USG INTERIORS COORDINATION CENTRE
DAIKIN EUROPE COORDINATION CENTER	VANDEMOORTELE COORDINATION CENTER
DAIMLER COORDINATION CENTER	VOLVO TRUCK COORDINATION CENTER
DECEUNINCK COORDINATION CENTER	WESTINGHOUSE ELECTRIC EUROPE - COORDINATION CENTER
DELHAIZE THE LION COORDINATION CENTER	WHIRLPOOL EUROPE COORDINATION CENTER
DEME COORDINATION CENTER	WIENERBERGER COORDINATION CENTER
DONALDSON COORDINATION CENTER	YAGEO COORDINATION CENTRE
DOW CORNING COORDINATION CENTER	ZENITEL COORDINATION CENTER
DU PONT COORDINATION CENTER	

Exhibit 1.2. Estimated tax burden for coordination centers

This slide is taken from Dopchie 200-.

Estimated tax burden for coordination centers

based on 223 annual accounts available for 2002 , when applying the general tax regime

Own equity (10/15): 138.324.286.000 **Distributed profit (694): 3.019.707.000**	**"Cost plus" regime in force** **Corporate Income Tax rate 33,99%**	**Notional Interest Deduction of 4% on own equity** **Corporate Income Tax rate 33,99%**
Profit before taxes (70/66)	5.971.997.000	5.971.997.000
Notional Interest Deduction	N.A.	- 5.532.971.440 (138.324.286.000 x 4%)
Taxable basis	193.406.884	439.025.560
Corporate Income Tax	65.739.000	149.224.788
Effective tax burden	1,10%	2,49%
Annual tax	22.300.000	N.A.
Effective tax burden (annual tax included)	1,47%	2,49%

Exhibit 4.1. Yield Curve data

The data set is retrieved from the European Central Bank. <http://www.ecb.int/stats/money/yc/html/index.en.html>

Yields - AAA-rated bonds - Spot rate

Time	*Yield*	*Time*	*Yield*	*Time*	*Yield*	*Time*	*Yield*	*Time*	*Yield*
3M	0,195%	2Y3M	0,698%	4Y3M	1,524%	6Y3M	2,247%	8Y3M	2,777%
4M	0,197%	2Y4M	0,730%	4Y4M	1,558%	6Y4M	2,273%	8Y4M	2,795%
5M	0,201%	2Y5M	0,764%	4Y5M	1,591%	6Y5M	2,299%	8Y5M	2,813%
6M	0,208%	2Y6M	0,797%	4Y6M	1,624%	6Y6M	2,324%	8Y6M	2,830%
7M	0,217%	2Y7M	0,831%	4Y7M	1,657%	6Y7M	2,349%	8Y7M	2,848%
8M	0,228%	2Y8M	0,865%	4Y8M	1,689%	6Y8M	2,374%	8Y8M	2,864%
9M	0,241%	2Y9M	0,900%	4Y9M	1,721%	6Y9M	2,398%	8Y9M	2,881%
10M	0,256%	2Y10M	0,934%	4Y10M	1,753%	6Y10M	2,422%	8Y10M	2,897%
11M	0,273%	2Y11M	0,969%	4Y11M	1,785%	6Y11M	2,446%	8Y11M	2,913%
1Y	0,291%	3Y	1,004%	5Y	1,816%	7Y	2,469%	9Y	2,929%
1Y1M	0,310%	3Y1M	1,039%	5Y1M	1,847%	7Y1M	2,492%	9Y1M	2,944%
1Y2M	0,332%	3Y2M	1,074%	5Y2M	1,878%	7Y2M	2,514%	9Y2M	2,960%
1Y3M	0,354%	3Y3M	1,109%	5Y3M	1,909%	7Y3M	2,536%	9Y3M	2,974%
1Y4M	0,378%	3Y4M	1,144%	5Y4M	1,939%	7Y4M	2,558%	9Y4M	2,989%
1Y5M	0,402%	3Y5M	1,179%	5Y5M	1,968%	7Y5M	2,580%	9Y5M	3,003%
1Y6M	0,428%	3Y6M	1,214%	5Y6M	1,998%	7Y6M	2,601%	9Y6M	3,018%
1Y7M	0,455%	3Y7M	1,249%	5Y7M	2,027%	7Y7M	2,622%	9Y7M	3,031%
1Y8M	0,483%	3Y8M	1,284%	5Y8M	2,056%	7Y8M	2,642%	9Y8M	3,045%
1Y9M	0,511%	3Y9M	1,319%	5Y9M	2,084%	7Y9M	2,663%	9Y9M	3,058%
1Y10M	0,541%	3Y10M	1,354%	5Y10M	2,112%	7Y10M	2,682%	9Y10M	3,072%
1Y11M	0,571%	3Y11M	1,388%	5Y11M	2,140%	7Y11M	2,702%	9Y11M	3,084%
2Y	0,602%	4Y	1,422%	6Y	2,167%	8Y	2,721%	10Y	3,097%
2Y1M	0,633%	4Y1M	1,456%	6Y1M	2,194%	8Y1M	2,740%		
2Y2M	0,665%	4Y2M	1,490%	6Y2M	2,221%	8Y2M	2,759%		

Exhibit 6.1. Profit and loss account for Statoil Coordination Center (1999-2008)

The profit and loss accounts are taken from AMADEUS and have been edited. No values are modified or inserted, but I have added some rows and columns to enlighten some information, mentioned below, and edited the layout of the AMADEUS transcript. First, I added a column for accumulated values which simply summarize all the values in the corresponding flow. I also added a row named turnover, which summarize the operating and financial revenue. Last, I added the profit margin, which is the profit and loss for the period divided by the turnover.

Statoil Coordination Center (SCC) - Profit & loss account											
in th EUR	**Accumulated**	**2008**	**2007**	**2006**	**2005**	**2004**	**2003**	**2002**	**2001**	**2000**	**1999**
Operating revenue	17,709	6,019	3,349	2,773	1,615	577	678	654	579	794	671
Operating P/L	**-38,367**	**-8,438**	**-6,679**	**-5,013**	**-4,157**	**-3,576**	**-2,925**	**-2,438**	**-2,386**	**-1,593**	**-1,162**
Financial revenue	7,778,052	1,667,351	828,510	873,801	991,581	543,887	916,237	725,896	543,087	477,868	209,834
Financial expenses	6,697,339	1,066,181	976,825	849,686	680,128	585,118	840,213	640,732	457,170	421,202	180,084
Financial P/L	**1,080,713**	**601,170**	**-148,315**	**24,115**	**311,453**	**-41,231**	**76,024**	**85,164**	**85,917**	**56,666**	**29,750**
Turnover	7,795,761	1,673,370	831,859	876,574	993,196	544,464	916,915	726,550	543,666	478,662	210,505
P/L before tax	**1,042,346**	**592,732**	**-154,994**	**19,102**	**307,296**	**-44,807**	**73,099**	**82,726**	**83,531**	**55,073**	**28,588**
Taxation	65	0	0	0	0	0	-8	133	0	1	-61
P/L after tax	**1,042,281**	**592,732**	**-154,994**	**19,102**	**307,296**	**-44,807**	**73,107**	**82,593**	**83,531**	**55,072**	**28,649**
P/L for period*	***1,042,235***	***592,732***	***-154,995***	***19,090***	***307,263***	***-44,807***	***73,107***	***82,593***	***83,531***	***55,072***	***28,649***
Profit margin	13.4%	35.4%	-18.6%	2.2%	30.9%	-8.2%	8.0%	11.4%	15.4%	11.5%	13.6%
Effective tax rate	0.006%	0.000%	0.000%	0.000%	0.000%	0.000%	-0.011%	0.161%	0.000%	0.002%	-0.213%
***Any differences with the P/L after tax and the P/L for the period is due to one time events.**											**Source: AMADEUS**

Exhibit 6.2. Balance sheet for Statoil Coordination Center (1999-2008)

The balance sheet is also retrieved from the AMADEUS database.

Statoil Coordination Center (SCC) - Balance Sheet										
in th EUR	**2008**	**2007**	**2006**	**2005**	**2004**	**2003**	**2002**	**2001**	**2000**	**1999**
Fixed assets	**6,518,194**	**4,601,091**	**3,139,795**	**2,904,417**	**2,077,553**	**846,515**	**1,013,480**	**1,074,682**	**1,307,630**	**1,059,771**
- Tangible fixed assets	1,000	605	648	628	138	188	227	229	265	151
- Other fixed assets	6,517,194	4,600,486	3,139,147	2,903,789	2,077,415	846,327	1,013,253	1,074,453	1,307,365	1,059,620
Current assets	**8,820,561**	**4,518,189**	**3,460,044**	**3,613,940**	**2,846,493**	**3,071,661**	**2,214,143**	**1,548,164**	**1,127,698**	**364,171**
- Debtors	2,213	1,307	1,811	646	439	132	116	181	708	115
- Other current assets	8,394,072	4,296,421	3,363,464	3,370,678	547,777	1,403,478	513,989	739,513	330,873	90,690
- Cash & cash equivalent	424,276	220,461	94,769	242,616	2,298,277	1,668,051	1,700,038	808,470	796,117	273,366
Total assets	**15,338,755**	**9,119,280**	**6,599,839**	**6,518,357**	**4,924,046**	**3,918,176**	**3,227,623**	**2,622,846**	**2,435,328**	**1,423,942**
Shareholders funds	**7,690,229**	**5,497,498**	**3,422,492**	**2,403,401**	**1,927,708**	**1,489,446**	**1,416,339**	**1,333,746**	**902,123**	**661,608**
- Capital	7,151,466	5,551,466	3,321,466	2,321,466	1,904,966	964,609	964,609	964,609	616,517	500,487
- Other shareholders funds	538,763	-53,968	101,026	81,935	22,742	524,837	451,730	369,137	285,606	161,121
Non-current liabilities	**145,304**	**137,447**	**153,545**	**171,418**	**148,221**	**249,543**	**300,825**	**127,321**	**187,890**	**178,455**
- Long term debt	145,304	137,447	153,545	171,418	148,221	249,543	300,825	127,321	187,890	178,455
Current liabilities	**7,503,222**	**3,484,336**	**3,023,802**	**3,943,538**	**2,848,117**	**2,179,187**	**1,510,459**	**1,161,779**	**1,345,315**	**583,880**
- Loans	7,453,897	3,476,505	3,015,041	3,937,908	2,761,710	2,169,217	1,505,233	1,074,459	1,255,772	389,713
- Creditors	39,746	2,434	1,932	305	185	269	25	132	447	96
- Other current liabilities	9,579	5,397	6,829	5,325	86,222	9,701	5,201	87,188	89,096	194,071
Total shareh. funds & liab.	**15,338,755**	**9,119,280**	**6,599,839**	**6,518,357**	**4,924,046**	**3,918,176**	**3,227,623**	**2,622,846**	**2,435,328**	**1,423,942**
Number of employees	53	40	31	24	18	15	13	12	13	13
Debt ratio	50%	40%	48%	63%	61%	62%	56%	49%	63%	54%
										Source: AMADEUS

Exhibit 6.3. USD/EUR rate 2005-2010

The currency data is retrieved from the Pacific Exchange Rate Service, provided by Professor Werner Antweiler at UBC's Sauder School of Business. <http://fx.sauder.ubc.ca/data.html>

MMM YY	USD/EUR	MMM YY	USD/EUR	MMM YY	USD/EUR
Dec-04	1.338	Oct-06	1.262	Aug-08	1.492
Jan-05	1.310	Nov-06	1.289	Sep-08	1.434
Feb-05	1.301	Dec-06	1.321	Oct-08	1.327
Mar-05	1.319	Jan-07	1.299	Nov-08	1.275
Apr-05	1.294	Feb-07	1.308	Dec-08	1.348
May-05	1.269	Mar-07	1.325	Jan-09	1.324
Jun-05	1.216	Apr-07	1.352	Feb-09	1.279
Jul-05	1.203	May-07	1.352	Mar-09	1.305
Aug-05	1.230	Jun-07	1.342	Apr-09	1.320
Sep-05	1.224	Jul-07	1.373	May-09	1.367
Oct-05	1.202	Aug-07	1.362	Jun-09	1.401
Nov-05	1.179	Sep-07	1.392	Jul-09	1.408
Dec-05	1.186	Oct-07	1.424	Aug-09	1.426
Jan-06	1.213	Nov-07	1.468	Sep-09	1.457
Feb-06	1.194	Dec-07	1.456	Oct-09	1.482
Mar-06	1.203	Jan-08	1.471	Nov-09	1.491
Apr-06	1.228	Feb-08	1.475	Dec-09	1.459
May-06	1.276	Mar-08	1.552	Jan-10	1.427
Jun-06	1.266	Apr-08	1.575	Feb-10	1.368
Jul-06	1.268	May-08	1.557	Mar-10	1.357
Aug-06	1.281	Jun-08	1.556	Apr-10	1.341
Sep-06	1.272	Jul-08	1.576	May-10	1.256

Exhibit 8.1. Formula deduction – "Double-dip"

(1) $\pi = (2a) + (2c) + (2b) + (2d)$

(2) $\pi = -(K + Kr(1- t_N) - (K + Kr(1-t_N)) + K + Kr(1-t_N) + K + KNIR + (Kr-KNIR)(1-t_B)$

(3) $\pi = - K - Kr(1-t_N) + K + KNIR + (Kr-KNIR)(1-t_B)$

(4) $\pi = - Kr + Krt_N + KNIR + Kr - Krt_B - KNIR + KNIRt_B$

(5) $\pi = Krt_N - Krt_B + KNIRt_B$

(6) $\pi = K(rt_N - rt_B + NIRt_B)$

Exhibit 8.2. Formula deduction – NIR

$\pi < 0$ if $NIRt_B < rt_B - rt_N$

(1) $NIRt_B < rt_B - rt_N$

(2) $NIRt_B < (t_B - t_N)r$

(3) $NIR < \frac{(t_B - t_N)}{t_B} r$