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**MONEY MOVES:
TAX PLANNING IN MULTINATIONAL
COMPANIES
A Case of Microsoft**

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This thesis is written as a part of the Master Science in Economics and Business Administration at Norwegian School of Economics and Master in International Management (CEMS).

Please note that neither the institution nor the examiners are responsible – through the approval of this thesis – for the theories and methods used, or results and conclusions drawn in this work.

SUMMARY

This thesis presents tax minimisation strategies, how multinational companies use them and what regulations and actions that international policymakers and national governments use to tackle aggressive tax planning. Theories and relevant literature are used to describe and confirm the use of these strategies by multinational companies.

Focusing on Microsoft, various tax minimisation strategies are used by this company to minimise and even avoid the tax liabilities. By exploiting the loopholes in the U.S. and international tax regulations, Microsoft is able to avoid U.S. withholding tax and tax on the income passive. Their international operations and geographic locations are structured for the tax minimisation purpose. Internationally, Microsoft uses the operation centres in Singapore, Ireland and Puerto Rico to transfer the intellectual property rights and to retain the foreign income outside the United States avoiding the U.S. withholding tax. Using disregarded CFC entities, Microsoft shifts the intellectual property between the subsidiaries in the low-tax jurisdictions without being taxed. Microsoft manages to "bring" back the foreign income to the United States untaxed through investment in the U.S. financial markets done by the foreign subsidiaries. Double Irish Dutch sandwich is also used to channel the profits further to Bermuda. Microsoft operation in Norway seems to be used for the tax purpose as it is financed by debt and is loaded with high operating costs. There is also an indication that Microsoft shifts the revenue from North America to Norway. The sales from Norwegian market are booked in Ireland through Luxembourg. Even though there are value-added activities in Norway, Microsoft claims that there is none and due to residency-based tax regulations, only six percent of the total sales in Norwegian market are recognised as taxable income in Norway. Lack of transparency due to the use of tax havens increases the conviction of aggressive tax planning done by Microsoft.

Microsoft's business model involving intellectual property is one step ahead of the existing tax regulations. Some actions have been taken to mitigate any practices of exploiting the existing regulations. Future development seems promising as more countries are involved.

FOREWORD

This thesis is written as a part of the master study in Financial Economics at Norwegian School of Economics and master study in International Management (CEMS).

Master thesis is a valuable opportunity for a student to immerse in a self-chosen academic topic. The choice of the topic for this thesis was based on personal interest in tax planning done by multinational companies, especially technological companies. The academic interest was developed during the participation in the Taxes and Business Strategy course, in which Guttorm Schjelderup and Dirk Schindler delivered the academic background and real problems in the taxation issue in a challenging way. In addition, endless media attention and changing business models done by technological companies strengthened the choice. Most importantly, there is a huge motivation that the topic will be interesting, actual and important both for academics and today's society in Norway and international.

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1. INTRODUCTION

Profit shifting and tax planning are never-ending topics and still a focus in the media. The attention toward multinational companies doing profit shifting, especially the U.S. companies operating abroad, raises questions on the necessity to review the tax and revenue regulations and how governments can mitigate this practice, while at the same time maintaining their country's competitive advantage in terms of tax regulations in the international perspective. On the other hand, many countries' revenues depend on the taxes paid by these companies. The absence of or significant decrease in tax revenues from multinational companies will affect the welfare condition and to some extent forces the government to increase the taxes for domestic companies. This policy is burdensome for the citizens and increases the criticism to the tax regulations in the international level.

Multinational companies, in particular technological companies, utilise the existing tax and revenue regulations across the border to minimise their tax payment in the countries they are operating. This practice is not easy to justify from the legal side as the advance tax planning is considered by some to be the practice of tax avoidance, which is illegal; while some argue that the tax planning is in accordance with the regulations in the countries concerned, i.e. legal..

The media has been showing its attention to companies such Amazon, Google and Facebook. Baker's (2013) article mentions that Apple Inc. paid only two percent tax on income of \$74 billion; Google Inc. who generated \$18 billion of revenue in Britain from 2006 to 2011, paid only \$16 million in taxes; and Vodafone Group Plc. had managed to gradually reduce the tax payment, and paid almost no tax to British taxman in the last 16 years.

Concerning with the aforementioned issues, this thesis will describe and discuss the tax planning methods/strategies that multinational companies use in common and how they use them. Studies on relevant literature and empirical analysis are expected to be able to answer and explain some of these problems.

Focus of this thesis is Microsoft and its operations, both internationally and within Norway. The purpose is to give a more real example on how a multinational company, particularly technological company, does its tax planning to minimise or even avoid taxes. Microsoft had been under the radar compared to other American multinational technological companies until an investigation on its tax planning scheme by U.S. Senate HSGAC Permanent Subcommittee on Investi-

gations released in September 2012. Since then, more publications and even an investigation by IRS regarding Microsoft transfer pricing for its intellectual properties (IPs) followed.

The thesis starts with theories on multinational company and its capital structure, followed by description of international tax codes and tax regulations in the United States, Ireland, Norway, and Singapore. Tax havens and secrecy jurisdictions are also reviewed. The next part is the presentation of tax minimisation strategies that multinational (technological) companies can do and the existing relevant literature to see how and to what extent these multinational companies utilise these strategies in their tax planning. Analysis of Microsoft's tax planning is performed in order to see and find out whether what Microsoft has been doing is in accordance with the theory and empirical evidence found on tax minimisation. It is also interested to present and discuss how the company minimises its tax payment both globally and in Norway. In the last part, existing and upcoming government regulations regarding tax and revenue are presented. The effects and the possibility of tax regulation development to tackle tax avoidance, especially within OECD and internationally will be discussed. Interestingly, even though the result is still unknown, positive attitude towards effort in mitigating tax avoidance also comes from some tax havens.

2. MULTINATIONAL COMPANY AND CAPITAL STRUCTURE

Theory on capital structure and how multinational companies choose the optimal capital structure will be presented in this chapter.

2.1. Multinational companies

Dunning and Lundan (2008) defines multinational company as a company that engages in a foreign direct investment (FDI) and owns or, in some ways, controls value-added activities in more than one country. The degree of a company's multinationality depends on the number and size of foreign affiliates, the number of countries in which it owns or controls the value-added activities, the proportion of its global assets, revenues and employment accounted for by its foreign affiliates, the extent to which its higher-value activities such as research and development (R&D) are internationalised, and other factors regarding ownership, management and financing, etc. Operating in many countries, a multinational is subject to multiple governances and tax jurisdictions, i.e. it must pay taxes to more than one countries.

2.2. Capital structure in multinational companies

Berk and DeMarzo (2011) point out that multinational companies' capital structure consists of equity, debt and other securities. However, the most common choices to raise funds are financing through equity alone and financing through a combination of debt and equity. In the case that multinational companies need to raise funds from external investors, they have to decide which type of securities to be issued. In deciding the optimal capital structure, multinational companies take into account the affiliates worldwide in addition to the parent company. Optimal capital structure implies that multinational companies maximise the global profit, i.e. minimise the global costs (Møen et al, 2011).

2.3. Tax-efficient capital structure

In a perfect capital market, firms could use any combinations of debt and equity in financing the investment without changing the value of the firm. Using Law of One price, Berk and DeMarzo (2011) argue that leverage changes the allocation of cash flows between debt and equity, but it will not alter the total value of the firm.

However, the real capital market is imperfect and taxes are present. Corporate tax, τ_t , changes the value of the firm because interest payments of debt can be deducted from taxable

corporate income, creating a valuable tax shield, $\tau_t D$. This tax shield will decrease the interest payments, i.e. increase after-tax profits, π . In a firm that is financed by equity, E , and debt, D , the after-tax profit, π , can be expressed as:

$$\pi = (1-\tau_t)[pF(K,L) - wL] - rK + \tau_t rD \quad (2.1)$$

where $K = E + D$

Therefore, the value of a firm with leverage exceeds the value of unlevered firm due to the tax shield.

Unfortunately, the advantage of using the debt is limited due the increase risks of bankruptcy and its costs, direct and indirect. For this reason, the firms have to balance the bankruptcy costs against the tax gains to achieve an optimal capital structure (Miller and Merton, 1977).

Further, Berk and DeMarzo (2011) mention that when raising external funds, firms seem to prefer debt, but not all investment is externally funded. Some firms support investment and growth by internally generated funds, such as retained earnings. In addition, there are large differences in the net leverage across industries. Firms in growth industries, like high technology, carry very little debt and maintain large cash reserves.

For multinational companies, debt financing can be separated in to two sources: external and internal. It is optimal to use both types of debt to save taxes as their cost functions do not correlate to each other. Huizinga et al. (2008) and Egger et al. (2010) use total debt, i.e. the sum of internal and external debt, in their empirical analysis, and show that multinational firms have higher debt-to-asset ratio than domestic firms. This is the opportunity that domestic firms do not have as they can only access external debt. In addition, multinational companies can exploit the tax advantage more by shifting debt from affiliates in low-tax countries to affiliates in high-tax countries. Debt financing is also important for non-tax factor as it is a disciplining device for overspending managers (Møen et al, 2011).

2.4. Trade off in tax-efficient capital structure.

Møen et al (2011) model the tax-efficient capital structure of affiliates of multinational companies and show that there are three debt tax shield effects that multinational companies can use; the standard debt tax shield effect and two effects related to international debt shifting, namely external and internal debt shifting. The model starts with the economic profit in affiliate i :

$$\pi_i^e = F(K_i, L_i) - w \cdot L_i - [r + C^E(b_i^E) + C^I(b_i^I)] \cdot K_i \quad (2.2)$$

where $b_i^E = D_i^E/K_i$ is the external leverage and $b_i^I = D_i^I/K_i$ is the internal leverage.

However, there is cost of using debt. External debt creates agency cost, $C^E(b_i^E)$, due to excessive borrowing and higher risk of bankruptcy. Internal debt generates concealment cost, $C^I(b_i^I)$, due to tax engineering expenses (e.g. hiring lawyers and tax experts) that incur in order to avoid or relax regulations such as thin capitalisation (TC) rules and/or controlled-foreign-company (CFC) rules.

Overall bankruptcy cost at parent level of the multinational company, C_f , occurs when parent company guarantees the external debt of the affiliates, i.e. willing to bail out any affiliate facing bankruptcy. This cost depends on the firm-wide external debt-to-asset ratio, $b_f = \frac{\sum_i D_i^E}{\sum_i K_i}$. The use of internal debt creates interest expenses in the borrowing affiliates and interest income in the lending affiliate. The overall sum must be equal to zero ($\sum_i r \cdot D_i^I = 0$), as the total amount of interest expenses should show up with the exact amount as interest income in the lending affiliate, i.e. internal lending constraint.. As cost of equity is not deductible, the taxable profit in affiliate i :

$$\pi_i^t = F(K_i, L_i) - w \cdot L_i - r [D_i^E + D_i^I] - [C^E(b_i^E) + C^I(b_i^I)] \cdot K_i \quad (2.3)$$

Deriving the world-wide profits, $\Pi_p = \sum_i (\pi_i^e - \pi_i^t) - C_f$, with respect to D_i^E and D_i^I , subject to internal lending constraint and bankruptcy cost, results in the optimal capital structure:

$$t_i \cdot r = (1 - t_i) \cdot \frac{\partial C^E(b_i^E)}{\partial b_i^E} + \frac{\partial C_f(b_f)}{\partial b_f} \cdot \frac{1}{\sum_i K_i} > 0 \quad \text{for external debt, and} \quad (2.4)$$

$$(t_i - \lambda) \cdot r = (1 - t_i) \cdot \frac{\partial C^I(b_i^I)}{\partial b_i^I}, \text{ with } \lambda = \min_i t_i = t_1 \quad \text{for internal debt.} \quad (2.5)$$

The equations imply that the capital structure is optimal when the marginal tax saving equals marginal cost of using (increasing) debt (external debt, eq. 2.4 and internal debt, eq. 2.5). The lending affiliate, i.e. internal bank is always located in the lowest-taxed affiliate, i.e. country 1, in order to maximise internal debt tax shield. In addition, it is optimal to use both external and internal debt. If C_f is zero, the external leverage of the multinational companies will be the same as the leverage in the domestic firms, because there is no use of doing external debt shifting.

However, the affiliates of multinational companies will still have higher total leverage due to the internal borrowing.

2.5. Multinational company structure and its financing structure.

Grubert (2003) explains that multinational companies can be organised as corporations, branches, trusts and partnerships. A corporation is registered and incorporated in a country and issues shares to owners who have voting right and a claim to the profits and losses. However, the residence of the corporation is not based on where shareholders live, but instead based on where multinationals are incorporated or where they are managed and controlled. If the corporation operates with limited liability, the shareholders are not responsible for losses beyond the value of assets held in the corporation.

Branches are entities that do not have distinct legal character as they are parts of the operations of a corporation or partnership that derives profits from the branch and liable for all losses. Trusts are entities created by a person for beneficiaries who receive distributions of income and capital from the trust. Partnerships are companies that are jointly owned by investors – the partnership can be organised as limited liability partnership or not.

The way multinational companies structured depends on the usage of indirect financing structures. Normally, this business involves a corporate chain that is organised in groups with several tiers of ownership. Corporations set up multiple-tiered structures for a variety of reasons: to manage specific business separately for better management; to comply with government regulations that require separate entities to operate in a specific jurisdiction; and to reduce worldwide taxes for a multinational group especially with regard to corporate income tax and withholding tax. However, the types of multinational financial planning and tax policy affect the choice of financing structures (Mintz and Weichenrieder, 2010).

3. INTERNATIONAL CORPORATE TAX SYSTEM AND TAX CODES

3.1. International corporate taxation

As mentioned by Mintz and Weichenrieder (2008), international corporate taxation is focused on the treatment of outbound and inbound cross-border investments. It means that there is a complexity regarding special rules, regulations and concepts, such as controlled foreign company (CFC) legislation, passive income, interest allocation, excess and deficient tax credits, deferral, per-country limitation and thin capitalisation (TC) limitation. Taxes that are particularly relevant to cross-border financing decisions are related to income. As cross-border investment has to cope with at least two jurisdictions and tax systems with different taxes on company income, there is an incentive for multinationals to shift income in far-from-transparent ways to low-taxed entities.

3.2. International corporate tax system bases

3.2.1. Residency

The basis of taxation for a company connected to a jurisdiction depends on the critical concept of residency. Company residence is based on a legal connection, including place of incorporation and registration or economic or commercial connection such as effective or central management and control, tested by criteria such as where the board or the directors meet, where financial book are kept, etc. Differences in the tax treatment of residency status across countries can result in some anomalies giving rise to tax complexity and opportunities for tax planning.

3.2.2. Separate Accounting principles and Formula Apportionment

Separate Accounting, SA, and Formula Apportionment, FA, are the most used systems for taxation of profits of multinational companies for many countries. Out of these two, SA is the most common one. Under SA, total income by the multinational companies is divided among its affiliates based on each affiliate's accounts and the application of an arm's length pricing standard for intra-firm transactions. However, the price in intra-firm transactions is not easy to observe in the market. Therefore, SA does not reduce the incentive for multinational companies to shift income to the country with the lowest tax income rate by under-/over-invoicing the intra-firm transactions (Schjelderup, 2013).

FA, in the other hand, is perceived to limit the incentive of using transfer pricing to shift profits into low-tax countries as this system allocates the tax liabilities based on the apportion of assets, sales, and/payroll in each affiliate. The use of apportion system makes the amount of total

tax liabilities unchanged even though the multinational companies try to shift profits by transfer pricing. Under FA, however, firms can still shift profits to low-tax countries by adjusting their activities and thus, the weight that apportions profits to the low-tax countries. When a multinational company operates in an oligopoly market and uses decentralised decision-making, a subsidiary can decide the quantity in local markets while the parent firm decides the transfer price. If the parent firm sets a low transfer price to the subsidiary, the subsidiary becomes a low cost firm and it can sell in large quantity. In doing so, a larger share of profits is shifted and taxed in the low-tax countries. It implies that transfer pricing is not only used as an instrument to shift profits, but it also has a strategic value. Even though under certain circumstances, e.g. as explained, FA can create distortion in price and firms' activities, it is still favourable to curb transfer pricing (Nielsen, Raimondos-Møller and Schjelderup, 2001).

3.3. Double taxation treaties

Double taxation is defined as the imposition of comparable taxes in two (or more) tax jurisdictions on the same taxpayer in respect of the same subject and for identical periods. It has harmful effects on the international exchange of goods and service and cross-border movements of capital, technology and persons. Therefore, there is a need to eliminate this obstacle. OECD's Model Tax Convention on Income and on Capital provides guidance to solve this problem, and it is continuously updated to any new tax issues in the global economy (OECD, 2014).

To avoid this double taxation problem, exemption method and credit method are used. Huizinga et al (2009) explain the methods as follows. Consider a multinational company with parent company p and a subsidiary located in host country s . Both home and host countries can tax the subsidiary's income. First, the host country may levy a corporate income tax at rate t_s on subsidiary's income. Next, the host country levies a non-resident dividend withholding tax at rate w_s on the subsidiary's net-of-corporate-tax income upon repatriation of this income to the parent countries. The effective tax rate for the dividend is:

$$1 - (1 - t_s)(1 - w_s) \text{ or } t_s + w_s - t_s w_s \quad (3.1)$$

as the dividend is taxed twice, first as an income and second as a dividend.

Using an *exemption system*, when the dividend is repatriated, it is not taxed in the parent country as it is already taxed in the host country - assuming that the exemption is full. Thus, the overall international rate of taxation on the subsidiary's income is the same as expression (3.1).

However, home country can tax the worldwide income of its multinational companies and subject the received dividend to corporate income taxation at rate t_p . If there is no double taxation relief at all, the dividend brought to the parent country will be taxed at rate t_p . It implies that the effective tax rate becomes the accumulation of tax in the host country and in the parent country:

$$t_s + w_s - t_s w_s + t_p \quad (3.2)$$

Some countries apply an *indirect tax credit system* where both the corporate tax and the withholding tax paid in the host country are credited against the home corporate income tax. If the home country's corporate tax, t_p , is higher than the overall host country tax rate, the firm pays income tax in the home country at rate $t_p - [t_s + w_s - t_s w_s]$, i.e. the rest of tax amount that has not been paid in the host country due to lower tax rate. On the other hand, if the home country's corporate income tax rate is lower than the overall host country's rate, the firm is in excess of foreign tax credit, and will not pay tax in the home country. In this case, the combined, effective tax rate is then $t_s + w_s - t_s w_s$. With indirect tax credit system, the combined, effective tax rate is:

$$\max [t_p ; t_s + w_s - t_s w_s] \quad (3.3)$$

It implies that the firm has to pay effective tax rate that is equal or more than the home country tax rate.

Some home countries employ *direct tax credit system* and restrict the foreign tax credit to cover only host country non-resident withholding taxes. The multinational, then, has to pay tax in the parent country to the extent that t_p exceeds w_s , so that the effective tax rate is $t_s + (1 - t_s) \max[t_p, w_s]$.

Most countries have bilateral tax treaties to eliminate the double taxation of income, provide a basis for the exchange of information and dispute resolution among tax authorities, and agree to share of tax revenues by negotiating reduction in withholding tax, rates on dividends, interest, royalties and other cross-border flows of income (Mintz and Weichenrieder, 2008).

3.4. Deferred tax system

Dividends remitted to the parent company are subject to tax by the home country. Assuming no withholding tax on dividends, the home country tax payment for the remitted dividends is equal to $\frac{t^d D}{(1-t^f)}$, where D is dividends paid by the subsidiary to the parent; t^d refers to corporate tax rate in the home country; and t^f refers to corporate tax rate in the foreign country. The foreign tax credit is equal to the corporate income taxes deemed to be paid on distributed profits, $d(F^f(K^f) - rB^f)t^f$, where d refers to the dividend payout ratio of the subsidiary; $F^f(K^f)$ refers to production function for capital; r is interest rate; and B^f is foreign debt. If the profits measured for tax purposes by the home country are the same as that taxed by host country, then the dividend payout ratio is simply D divided by the after tax profits in the foreign country, $d = \frac{D}{[(F^f(K^f) - rB^f)(1-t^f)]}$. Therefore, the foreign tax credit is $\frac{t^f D}{(1-t^f)}$. If $t^d \geq t^f$, the repatriation tax to the home country is equal to:

$$\frac{t^d D}{(1-t^f)} - \frac{t^f D}{(1-t^f)} = \frac{(t^d - t^f)}{(1-t^f)} D \equiv \ominus D \quad (3.4)$$

The multinational company's income in the presence of deferral system is equal to:

$$P = \frac{(1-t^d)}{F^d(K^d) - rB^d} + \frac{(1-t^f)}{F^f(K^f) - rB^f} - \ominus D \quad (3.5)$$

The expression implies that the optimal financial strategy for the subsidiary is to defer the dividend payment to the parent in order to avoid the repatriation tax. (Fuest, Huber and Mintz, 2003).¹

3.4. International tax codes

In this part, the relevant taxation regulations in the United States, Ireland, Singapore, Puerto Rico and Norway will be discussed.

3.4.1. The U.S. corporate taxation

U.S. corporations are taxed at up to a 35 percent statutory rate on their worldwide income. This high tax rate gives an incentive for the U.S. companies not to repatriate offshore funds back to the United States (Levin and Coburn, 2012).²

¹ Theory in this sub chapter is based on Fuest, et al (2003).

² Most of the information in this sub chapter is taken from Levin and Coburn. (2012)

Subpart F

The U.S. statutory rate can be reduced through a mechanism such as tax provision that permits multinational companies to defer U.S. tax on earnings of their CFC³ until those earnings are brought back to the United States or repatriated as dividend (known as deferral). Deferral of tax on foreign income is restricted under Subpart F. It is only active income of a CFC that may be deferred until repatriated, but passive income earned by a CFC such as royalties, dividends and interest is subject to U.S. tax regardless of whether the earnings have been repatriated. Passive income taxation applies when companies are sufficiently controlled by nationals or residents. The U.S. definition is based on 50 percent or more ownership by U.S. nationals with at least ten percent ownership in the foreign corporation.

Subpart F was designed to prevent companies from manipulating their U.S. tax obligation by moving intangible assets that earn this type of passive income offshore. If a foreign subsidiary is organised in a low-tax jurisdiction to sell to customers in higher-tax jurisdictions, the sales profits will be subject to tax under Subpart F. An exception exists if the foreign subsidiary manufactures the products itself.

“Active financing exception” creates loopholes in the rules by allowing multinationals to avoid tax of their worldwide income by creating “captive” foreign financing and insurance subsidiaries (United States. Citizens for Tax Justice, 2012). A captive finance company is defined as a subsidiary whose purpose is to provide financing to customers buying the parent’s company product. It is usually wholly owned by parent company.⁴ In addition, there is a compromise about the deferral that creates incentives for U.S. corporations to leave funds offshore in the low-tax countries and increase their after-tax profits by using the funds for indefinite investments outside the United States.

Check-the-Box Regulations and the CFC Look-Through Rule

Check-the-Box Regulations issued in 1997 and the CFC Look-Through Rule enacted in 2004 have reduced the effectiveness of the anti-deferral rules of Subpart F and increased the offshore profit shifting in the last 15 years. Check-the-Box Regulations were designed to simplify tax rules

³ CFC means any foreign corporation with more than 50 percent of: (1). The total combined voting power; (2). The total value of the stock of such corporation.

⁴ The definition is taken from Investopedia website. Investopedia. (2015)

for determining whether an entity is a corporation, a partnership, a sole proprietorship, branch or disregard entity (DRE) for tax purpose (United States. IRS, 2015b).

The rules, however, had significant unintended consequences and opened the door for tax avoidance schemes. Under Subpart F, passive income paid from one separate legal entity to another separate legal entity – even if they were both in the same corporate structure – was immediately taxable. The implementation of Check-the-Box Regulations enabled a U.S. multinational company to set up a CFC subsidiary in a tax haven and direct it to receive passive income from a lower-tiered related CFC without incurring Subpart F income. It happens as the rules enabled the multinational to choose to have the lower-tiered CFC disregard or ignored for federal tax purpose. It implies that although the lower tier CFC is legally a separate entity, it would be viewed as part of the CFC shell and not as separate entity for tax purpose.

APB 23: Deferred Tax Liabilities on Permanently or Indefinitely Invested Foreign Earnings.

Accounting standard APB 23 gives another incentive to shift or keep profits offshore. It permits U.S. multinational companies to defer recognition of tax liability on foreign earnings for financial reporting purpose so that earnings are not reduced by the tax liability if they affirmatively assert that their foreign earnings are permanently or indefinitely reinvested. APB 23 presumes that all undistributed earnings of a subsidiary (including all earnings of a foreign subsidiary) will be transferred to the parent company, will be included in its consolidated income,⁵ and will be immediately as a tax expense for financial accounting purpose.

The presumption of transfer to the parent may be overcome, and no income taxes shall be accrued “if sufficient evidence shows that subsidiary has invested or will invest the undistributed earnings indefinitely...”⁶ This exception is referred to as “indefinite reversal”. A multinational company should be able to provide evidence of specific plans for reinvestment of undistributed earnings of a subsidiary. This evidence includes working capital forecasts and plans for long-term liquidity, capital improvements, and mergers and acquisitions (PWC, 2013).

The multinational is required to disclose the amount of reinvested foreign earnings in their annual form 10-K, filed with the SEC, and in the notes to the financial statements. These earnings can be labelled as “deemed to be permanently reinvested” or “indefinitely reinvested”.

⁵ ASC 740-30-25-3

⁶ ASC 740-30-25-3

By increasing the amount of foreign profits asserted as indefinitely reinvested offshore, U.S. multinational companies are able to increase their financial earnings by avoiding the reporting of increased tax liability on the financial statements, improving the earnings picture. Blouin et al (2011) study that permanently reinvested earnings reflect “*investment and tax incentives, but amounts reported as PRE (permanently reinvested earnings) are also used to manage earnings*”. Multinational companies favour the Indefinite Reversal Exception because it avails them of the ability consistently report higher earnings and lower effective tax rates, all else equal.

3.4.2. Corporate tax in Singapore

Singapore’s low tax rate, 17 percent⁷, and the generous tax incentive programmes have attracted international companies. The country is not a member of OECD, but has said that it would support the Base Erosion and Profit Shifting (BEPS) Report that OECD published in July 2013 (Armstrong, 2013). Singapore tax law only taxes income of a corporation that is derived from a source within Singapore or received in Singapore from outside Singapore. There is no capital gain tax in Singapore. Based on the regulation, tax on income would only apply for income that belongs to an entity located in Singapore. Hence, foreign businesses that are not operating in or from Singapore can bring their foreign income to Singapore without being taxed. A company would be deemed to be tax resident in Singapore if the “control and management” of its business is exercised in Singapore for the current year of assessment. Since January 1, 2003, Singapore has adopted the “one-tier corporate taxation system” in which corporate income will be taxed at the corporate level and this will be a final tax. It means that any dividends will be tax exempt in the hands of its shareholders. Royalties and other payments for the use or the right to use IP⁸ are subject to 10 percent withholding tax. However, this is the case if not derived by a non-resident through operations carried in Singapore (KPMG, 2013a).

3.4.3. Corporate tax in Ireland

A company resident in Ireland for tax purpose is liable to Irish corporate tax rate of 12.5 percent on its worldwide income, including business profits, dividends, interest, rents, royalties and capital gains (Deloitte, 2014). This is far lower than the one in the United States. If a U.S. company

⁷ since 2010

⁸ IP is the product or result of intellectual activity in the industrial, scientific, literary or artistic field. It is a generic term for two categories: industrial property (i.e. patents, trademarks, industrial designs, and geographical indications) and copyright that covers literary works, films, music, artistic works and architectural design) (Switzerland. World Intellectual Property Organization, 2015)

builds a factory in Ireland that generates \$10 million in profit, it pays \$1.25 million in Irish tax instead of the \$3.5 million that it would pay if it built the factory in Indiana, where then federal rate is 35 percent. But there are more benefits to come. Tax U.S. transfer pricing rules allow the Irish factory to book profits that rightly should have been taxed in the United States. Supposed that the Irish factory books \$30 million of profits in Ireland, it pays \$3.75 million in Irish tax, but at the same time, because it shifts \$20 million of profits from the United States to Ireland. It reduces its U.S tax by \$7 million. So the choice between locating a factory in Indiana or Ireland is the choice between paying \$3.5 million of U.S. tax or net tax of negative \$3.25 million.⁹ In effect, the U.S. Treasury is subsidizing investment in Ireland (Sullivan, 2013). Multinationals can further the tax benefits by shifting profits out of Ireland to zero-tax jurisdictions like Bermuda.

3.4.4. Puerto Rico

An international financial entity (IFE) operating in Puerto Rico under the Act by means of a Puerto Rico entity should not be subject to any taxes on its income from its eligible activities in Puerto Rico, other than the Puerto Rico income tax established in the tax decree and taxes imposed on dividends to the exempts business' shareholders residing in Puerto Rico. Upon repatriation, the distributed income would be subject to the tax imposed by the jurisdiction in which the owners of the Puerto Rico entity reside, if any. The decree is a contract between Government of Puerto Rico and the IFE (Commonwealth of Puerto Rico. Department of Economic Development and Commerce, n.d.).

3.4.5. Tax regulations in Norway

A company is regarded as resident in Norway when it is incorporated under Norwegian law and registered in the Norwegian Registry of Business Enterprise (i.e. *Brønnøysundregistrene*) or its central management and control is carried out in Norway. Resident companies are subject to corporation tax (27 percent)¹⁰ on worldwide profits and capital gains, while non-resident companies are subject to corporation tax on Norwegian sourced profits, including income derived from a permanent establishment in Norway.

For companies reside in Norway, all income derived from all source, as well as capital gains, are liable to Norwegian tax. All expenses incurred for the purpose of obtaining or securing taxable income are deductible. Dividend distributions are not deductible for tax purpose. Dividends

⁹ \$3.75 million of Irish tax minus \$7 million of lower U.S. tax.

¹⁰ from 2014

and capital gains distributed within EEA are tax exempt, meaning that there is no Norwegian withholding tax. However, for outside EEA, 15 percent withholding tax will be applied.

Double taxation relief is available under domestic law or in accordance with double taxation conventions entered into between Norway and foreign states. At present, double taxation conventions with 87 nations are in effect. Since 1992, Norway has practiced the credit system, in which income derived from a foreign source is considered tax liable income in Norway, but the tax payer is credited a tax relief based on tax paid in the state of source. Credit is limited to the rate of Norwegian tax levied on foreign income. Relief from double taxation under domestic law is available either by way of a double tax credit or by deduction of the foreign tax from the Norwegian corporation tax base.

From 2007, it is possible to carry forward unused credit up to five years. This means that tax paid on foreign income, in a year where the domestic income is nil and the maximum foreign tax credit is nil, can be carried forward the following five income years within each of the income categories (KPMG, 2014a).¹¹

Norway has adopted new regulation related to limitation of intra-group interest i.e. thin capitalisation (TC) rules, with effect from the financial year 2014. This regulation applies to limited liability companies, Norwegian branches of foreign companies and partnerships. It limits the intra-group deduction to an amount equal to 30 percent of tax-adjusted earnings before interest, taxes, depreciation and amortisation (EBITDA).

The rules apply to interest expenses from related parties (directly or indirectly hold 50 percent or more of the shares) and to loans guaranteed by related parties. However, payments to third parties also count towards the maximum deductible interest. The rules do not apply to companies with NOK 5 million or less in net interest costs (including interest on related-party and third party debt). The basis for the calculation is the taxable income including adjustment for group contribution. Group contributions are deductible for the contributor and taxable income for the recipient. Tax-exempt income such as dividends and gains on shares does not increase the basis for deduction. Only deductions for interest payments to related parties can be disallowed under the proposed rules. Disallowed related-party interest costs can be carried forward for up to ten years (KPMG International, 2014).

¹¹ Most of the information in this subchapter is taken from KPMG. (2014a)

3.5. Tax Havens and other secrecy jurisdictions

3.5.1. *Tax havens*

Gravelle (2010) points out that tax haven is not a define term, but in most usage it refers to a country – in many cases small ones – where non-residents can save taxes by conducting various investments, transactions, and activities. Attributes that make a country a tax haven include low or non-existent tax rules applicable to foreigners; strict bank and financial secrecy laws; and a highly developed communications, financial and legal structure. Many tax haven countries are small island nations, such as Bermuda, the British Virgin Islands, and the Cayman Islands.

Central feature of a tax haven is its laws and other measures that can be used to evade or avoid the tax laws or regulations of other jurisdictions. Minimisation of tax liability is an important element. This generally depends on (a) the use of paper or “shell” companies, trusts and other legal entities, and (b) routing and managing financial flows (Gravelle, 2010).

The OECD 1998 report defines a tax haven as a jurisdiction which has: (a) no or only nominal taxes and offers itself as a place to be used by non-residents to escape tax in their country of residence; (b) laws or administrative practices which prevent the effective exchange of relevant information with other governments on tax payer benefiting from the low or no tax jurisdiction; (c) lack of transparency; (d) the absence of requirement that the activity be substantial, since it would suggest that a jurisdiction may be attempting to attract investment or transactions that are purely tax driven.

Due to the imprecise definition of tax haven, there have been differences in the categorisation. OECD, the IMF, U.U. Senate and the Tax Justice Network (TJN) have their own definition of tax haven and it results in different designation of tax haven. The reason is the desire of many states to prevent their designation as a tax haven, for example, OECD's 2000 tax haven list does not include any of its member.¹² Some countries meet only one or few of the criteria as tax haven, for example the Netherlands (NOU (2009:19). Van Dijk, Weyzig and Murphy (2006) point out that the Netherlands exchanges information both through an extensive network of tax treaties and through EU's savings directive. However, it can be regarded as a tax haven because it has regulations which allow companies to reduce their tax in other countries by establishing shell companies there.

¹² Appendix 1 shows the designation of tax haven by various institution.

Tax haven causes distortion in economy as the discrepancy between real economic activity and what is only apparent is at the heart of the tax haven issue. Much of the economic activity that appears to be in tax havens actually occurs in another place. Thus, for example, much of the income reported by U.S.-controlled subsidiaries chartered in tax havens may have their true economic location either in some other foreign countries or in the United States (Gravelle, 2010).

Further, Gravelle (2010) mentions that U.S. firms can also use tax havens to shift income out of foreign countries where there are corporate income taxes to the zero-tax environment many tax havens offer. These techniques for shifting income include manipulation of transfer prices and the structuring of intra-firm lending and interest charges so as to shift income out of high-tax countries to tax havens (sometimes called “earnings stripping”)

The ability of firms to divert income from foreign locations to tax havens has implication for the real location of investment. Regarding the allocation of investment, the United States is a relatively “high tax” country. Thus, much of the income shifted to tax havens is likely shifted from countries whose taxes are lower than U.S. taxes. As a result, it is likely that tax havens on balance magnify the distorting effects of deferral, thus, further diverting U.S. investment to foreign location and in turn, reducing economic efficiency and U.S. national welfare. In addition, tax havens reduce tax revenue collections by capital-exporting countries. In the case of U.S. firms’ use of tax havens, the revenue loss can accrue both to the United States (in the case of income shifted from domestic sources) and other countries (in the case of income shifted from other countries with higher taxes). Tax havens flourish in part because of the lack of coordination in tax administration between non-haven, and that effort to suppress tax haven activities cannot be successful without solidarity among non-haven countries (Gravelle, 2010).

3.5.2. Secrecy jurisdictions

The term of secrecy jurisdiction is also used to describe places called tax havens, offshore financial centres or international financial centres. However, the description of secrecy jurisdictions is in three parts. Firstly, they are places that intentionally create regulation for the benefit and use of non-residents in their geographical domain. Secondly, they intentionally design the regulation for use by non-residents in their territories so that it undermines the legislation or regulation of another jurisdiction. Thirdly, they create a deliberate, legally backed veil of secrecy to ensure that those from outside the jurisdiction making use of its regulation cannot be identified to be doing so.

The definition implies that secrecy jurisdictions knowingly assist people from outside their domains break the law in the places where they live and make it as hard as possible to be discovered. It means that those secrecy jurisdictions are complicit in the law breaking process.

Secrecy jurisdictions provide all facilitate of illicit financial flows, including those related to crime, piracy, counterfeiting, corruption, tax evasion and much more. These activities undermine the rule of law and threaten the stability of the world. Secrecy jurisdictions also undermine free trade by assisting illicit trade and creating opacity in which prevent the best location for production to be found so that world income is reduced. By seeking to force down the tax rate levied by democratically elected government, they undermine democracy. Secrecy jurisdictions create opacity and mistrust (United Kingdom. Tax Research, 2010).¹³

¹³ This sub chapter is based on UK. Tax Research. (2010)

4. TAX MINIMISATION STRATEGIES

As Gresik (2001) points out, a multinational corporation has several ways to structure its activities in order to minimise the taxation burden. This tax planning involves conventional decision to set up firms in a tax-efficient way, for example by using debt rather than equity or by exploiting the specific characteristics of multinationals. In this chapter these tax minimisation strategies will be discussed.

4.1. Transfer pricing

4.1.1. Definition

Tang (1993) defines transfer price as the price charged in transactions between related firms, for example between a parent company and its foreign subsidiary or between two affiliates. Transfer pricing is the system of laws and practices used by countries to ensure that goods and services transferred between related companies are appropriately priced, based on market conditions, such as profits are correctly reflected in each jurisdiction (U.S. Joint Committee of Taxation, 2010). Multinational companies normally set their transfer price based on either production costs or market prices. Principles regarding transfer pricing are largely build upon the principle of arm's length nature of transfers between related parties.

4.1.2. The use of transfer price

Eden (1998) mentions that there are both internal and external motivations for the multinational companies to establish transfer prices for intra-firm trade. Many foreign affiliates are run as profit centres where the rewards of the top management team depend on their affiliate's profits. The setting of the transfer price in this case is internally driven, as a way to both motivate managers and monitor subsidiary performance. Externally, multinational companies have to pay corporate income taxes on their domestic and foreign source income, necessitating that they set transfer price for intra-firm import of goods. Transfer price manipulation is the over-/under-invoicing of related party transactions in order to avoid government regulation or to exploit cross-border differences in tax rates. Desai et al (2004) point out that it is entirely possible for firms to adjust transfer prices in a tax-sensitive fashion without violating any laws.

There are several ways to transfer assets or services between a parent company and an offshore affiliate entity: an outright sale of the assets; a licensing agreement where the economic rights transferred to an affiliate in exchange for a licensing fee or royalty stream; sale of services

or a cost sharing agreement; and an agreement between related entities to share the cost of developing an intangible asset, which typically includes a “buy-in” payment. A “buy-in” payment is an initial contribution for the development already and undertaken and future payment for the continued development of the intangible assets. Hilten et al (2010) mention that the amount of the “buy-in” payment should be based on arm’s length value. The "buy-in" payment should be equal to the estimated market value of the pre-buy-in intangibles (calculated as of the date the cost sharing agreement becomes effective). Income-based methods are the most likely to be used in the valuation due to the available data of expected cash flow. However, valuation intangible assets are not easy as often there are no comparable assets in the market.¹⁴

The tax advantage associated with cost sharing is that (estimated) market prices are replaced by incurred costs. Suppose a company consists a parent and its subsidiary. The parent develops a patent for an intangible asset that can be sold by the parent and the subsidiary. When they enter cost sharing agreement, the subsidiary must pay the parent a fraction of the cost of developing the patent. This fraction is determined by the patent's relative benefit to the parent and the subsidiary. If there is no such agreement, the subsidiary has to make a royalty payment for each unit that the subsidiary sells. The royalty is equal to the estimated market value of the licence to sell the patented product. Both the subsidiary's royalty payment and cost sharing payment to the parent create taxable income to the parent and are tax deductible for the subsidiary. Therefore, if the parent operates in a higher tax jurisdiction than does the subsidiary, the firm can reduce its worldwide tax liability by using a cost sharing agreement. The existence of "buy-in" payment which is taxable income to the parent and is tax deductible to the sub does not reduce the attractiveness of cost sharing agreement. It is because the "buy-in" payment reduces the subsidiary's post-buy-in payments to the parent (Dye, 2008).

Income shifting can occur when a multinational company sells or licenses the foreign rights of intangible assets developed in the parent company to its subsidiary in a low-tax country (a subsidiary which in many cases was created for income shifting purpose). Once the foreign subsidiary owns the right, the profits derived from the technology become those of the subsidiary, not the parent (under the U.S. tax rules, the subsidiary must pay “arm’s length” prices for the rights, which means the subsidiary would have to pay the same amount for the assets that an unrelated third party would pay for the right).

¹⁴ Also mention in 5/16/2012, JP Morgan, “Global Tax Rate Makers”

The licence payment made by the subsidiary to its parent is taxable income, but the parent has an incentive to set the price as low as possible. If the price paid is low compared to future profits generated by the license rights, less income is taxable to the parent and the subsidiary's expenses are lower. Thus, the U.S. parent has successfully shifted taxable profits out of the United States to the low-tax subsidiary.

This method is formalised in the model pointed out by Schjelderup (2013). Imagine a multinational company with affiliates in country A and B. Both are monopolists and there is neither taxation nor other customs duties regarding import activities. In the situation where there is no regulation about the transfer price, the multinational objective is to maximise the global profits through the determination of the price.

Firm A produces goods Q_A and Q_B . Q_A is sold in country A at the price of $P_A(Q_A)$ giving revenue equal to $R_A(Q_A) = P_A(Q_A)Q_A$. Firm B imports goods B and sells them in country B at price $P_B(Q_B)$ so that revenue is given as $P_B(Q_B)Q_B$. Firm B has only a sales function so that the costs related to production of the goods is given by $C(Q_A+Q_B)$. The price that firm A charges for the goods B is an intern price, p . With the assumption that the profit function is concave, $\frac{\partial R}{\partial Q_i} > 0$ and $\frac{\partial^2 R}{\partial^2 Q_i} \leq 0$, and the cost function is convex, $\frac{\partial C}{\partial Q_i} > 0$ and $\frac{\partial^2 C}{\partial^2 Q_i} > 0$, the profit function for the two affiliates is:

$$\pi_A = R_A(Q_A) - C(Q_A+Q_B) + pQ_B \quad (4.1)$$

$$\pi_B = R_B(Q_B) - pQ_B \quad (4.2)$$

Maximised joint profit of the two firms is

$$\max_Q \{\pi_A + \pi_B\} = \max_Q \{R(Q) - C_A(Q) - C_B(Q)\},$$

$$\text{leads to the first order condition, } R'(Q) = C'_A(Q) + C'_B(Q) \quad (4.3)$$

In the centralised decision-making, transfer price has no real economic meaning as all that matters are the revenue and cost function, so that marginal revenue equals marginal cost. Transfer price is only an instrument to allocate profits between firm A and B after total profits have been maximised.

Further assumption is that firm A faces tax rate, t_A , in country A and firm B faces tax rate, t_B , in country B. After-tax function for each firm:

$$\pi_A = (1 - t_A) [R_A(Q_A) - C(Q_A + Q_B) + pQ_B] \quad (4.4)$$

$$\pi_B = (1 - t_B) [R_B(Q_B) - pQ_B] \quad (4.5)$$

The after-tax global profits:

$$\pi = (1 - t_A) [R_A(Q_A) - C(Q_A + Q_B) + pQ_B] + (1 - t_B) [R_B(Q_B) - pQ_B] \quad (4.6)$$

After-tax profit maximising function with respect to transfer pricing is given by the first order condition:

$$\frac{\partial \pi}{\partial p} = (1 - t_A)[Q_B] + (1 - t_B)[-Q_B]$$

$$\frac{\partial \pi}{\partial p} = (t_B - t_A)[Q_B] \quad (4.7)$$

In the situation where the corporate tax rates in both countries are equal (i.e. $t_B = t_A$), $\frac{\partial \pi}{\partial p} = 0$, the optimal transfer price, p^* , will be zero. If the corporate tax rate in country B is higher than in country A (i.e. $t_B > t_A$), $\frac{\partial \pi}{\partial p} > 0$, this will give an incentive to set the transfer price from firm A to firm B higher in order to shift profits from firm B (high-tax country) to firm A (low-tax country).

The optimal transfer price will be as high as possible until $\pi_B = 0$, so that $p^* = \frac{R_B(Q_B)}{Q_B}$.

In the case where each firm is a separate unit with powers of deciding on how much to produce and to which price, firm A will maximise its profits by choosing Q taking p as given, and firm B will maximise its own profits by setting p , taking into account the demand from division. This method, however, leads to double marginalisation problem where firm B behaves as a monopolist against firm A. The total result is lower profits overall compared to centralised decision-making.

To avoid the double marginalisation problem, a simple model *Cournot* competition is used. Under delegation the headquarter of the multinational, firm sets p but allows firms A and B to set Q_A and Q_B . This can be done by two stages: (i) the headquarter sets p to maximise global profit (i.e. $\pi = \pi_A + \pi_B$); (ii) both firm A and B observe p and taking p as given – choose their optimal level of sales.

The global profits from centralised-maximised after-tax profit:

$$\pi = (1 - t_A) [R_A(Q_A) - C(Q_A+Q_B) + \frac{R_B(Q_B)}{Q_B} \cdot Q_B] \quad (4.8)$$

Optimal level of quantity for each firm is found by deriving the function above with regard to quantity in each firm:

$$\frac{\partial \pi}{\partial Q_A} = (1 - t_A) \left[\frac{\partial R_A}{\partial Q_A} - \frac{\partial C}{\partial Q_A} \right] = 0 \quad \Leftrightarrow \quad \frac{\partial \pi}{\partial Q_A} = (1 - t_A)[MR - MC] = 0 \quad (4.9)$$

$$\frac{\partial \pi}{\partial Q_B} = (1 - t_A) \left[\frac{\partial R_B}{\partial Q_B} - \frac{\partial C}{\partial Q_B} \right] = 0 \quad \Leftrightarrow \quad \frac{\partial \pi}{\partial Q_B} = (1 - t_A)[MR - MC] = 0 \quad (4.10)$$

Both firms decide the quantity so that the marginal revenue is equal to the marginal cost in each firm ($MR_i = MC_i$). This is a maximisation strategy for a monopolist. However, due to the absence of regulations about transfer pricing, the multinational can set up the transfer pricing so that all profits in the high-tax country can be shifted to the low-tax country. If $t_A > t_B$, the transfer price from firm A to firm B will be set as low as possible in order to keep the profits in firm B. In the case that there is a transfer price restriction, the lowest transfer price a firm can use is the marginal cost and the highest is the market price.

4.1.3. Other transfer pricing manipulation methods.

Apart from transaction between two entities within the same group located in different tax jurisdictions, income shifting through transfer pricing can also be done by using shell company (located in a tax haven). The goods are sold to the shell company with a low price and then from there at higher price. This method will ensure an income transfer to the shell company from the rest of the group (NOU, 2009:19, p.67).

4.2. Thin capitalisation

Thin capitalisation refers to the situation in which a company is financed by means of debt instead of equity capital that is motivated by the structure of the income tax laws (Columbia Law Review, 1995). Thinly capitalised companies are sometimes referred to as "highly leveraged" or "highly geared" (OECD, 2012). The motive behind thin capitalisation is country tax rules that typically allow a deduction for interest paid or payable (i.e. debt tax shield)¹⁵ at the tax measure

¹⁵ Debt tax shield is defined as tax rate multiply by the amount payable interest

of profit. Therefore, the higher the level of debt in a company, the higher the amount of interest it pays (also the higher the debt tax shield) and the lower the taxable profit.

The manner in which a company is capitalised can have significant effect in the amount of profits it reports and the amount of tax it pays. Both domestic and multinational companies use the debt tax shield as a key driver in their capital structure. However, multinational companies are able to exploit the tax advantage of debt more aggressively than domestic companies by shifting debt from affiliates in low-tax countries to affiliates in high-tax countries (Møen et al, 2011). The exact effect on tax revenue of increased interest payments (i.e. debt tax shield) depends on withholding tax and the provision of any tax treaties in force.

4.3. Debt tax shield

Møen et al (2011) show that for multinational companies, it is optimal to use both internal and external debt to save taxes, and there are three debt tax shield effects that can be used; the standard debt tax shield effect and two effects related to international debt shifting: internal debt shifting and external debt shifting. The use of both internal and external debt is motivated by differences in national statutory tax rate in the countries where affiliates are located. The value of internal debt tax shield is maximised if internal lending is performed by a financial centre located in the country with the lowest effective tax rate. For external debt, the tax shield is maximised when multinational companies balance external debt across affiliates, taking into account the tax rate in all the countries where the group is present. It is profitable to use more debt in the affiliates located in a country where there is an increase in the tax rate. Since more debt will increase bankruptcy costs, it is necessary to reduce the use of debt in all other affiliates to keep the bankruptcy costs in check.

4.3.1. Standard debt tax shield

The standard debt tax shield is generated from the interest payment tax deductibility i.e. $\beta_1 \cdot t_i$, where $\beta_1 = \frac{r}{\mu + \gamma}$ (with r is the cost of capital, and μ and γ are positive constant); and t_i is the corporate tax rate in the country i . The higher the corporate tax rate in country i , the larger the external debt tax shield. In this case both domestic and multinational companies can benefit from the tax saving.

4.3.2. External debt shifting mechanism

The external debt shifting mechanism is given by the term $\beta_2 \cdot \sum_{j \neq i} p_j (t_i - t_j)$, where $\beta_2 = \frac{\gamma r}{(\mu + \gamma)\mu}$; $p_j = \frac{K_j}{\sum_j K_j}$, denotes the share of real capital employed in affiliate j in total real capital in the multinational company; and $(t_i - t_j)$ is the weighted tax difference between country i and other countries. For a given level of bankruptcy costs, C_f , it is optimal to allocate external debt in the affiliates that have the largest tax differentials in order to produce the highest absolute tax savings. A tax rate increase in one affiliate leads to an international shifting of external debt, increasing the debt-to-asset ratio in the affiliate experiencing the tax increase, but decreasing the debt-to-asset ratio in all other affiliates in order to keep the bankruptcy costs in check. It is crucial that the parent company guarantees for debt at the affiliate level. If it does not, then it is not optimal to shift external debt.

4.3.3. Internal debt shifting mechanism

The internal debt shifting mechanism is given by the term $\beta_3 \cdot (t_i - t_1)$, where $\beta_3 = \frac{r}{\eta}$ (with r is the cost of capital, and η is positive constant) and $(t_i - t_1)$ is maximum tax difference between effective tax rate in affiliate i and affiliate 1 (i.e. internal bank). It is profit maximising for a multinational company to use internal debt that can be provided by any affiliates. However, a tax efficient financing structure implies that it is the affiliate located in the country with the lowest effective tax rate that will be the financial coordination centre (i.e. internal bank) as the variable $(t_i - t_1)$ is the net tax advantage (i.e. maximum tax difference).

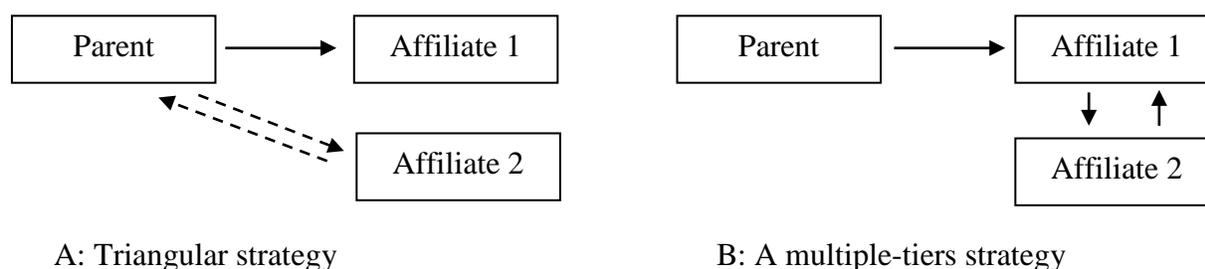
4.4. Chains of ownership

There are two methods of using chains of ownership to avoid home country taxes (Desai, Foley and Hines, 2002). Altshuler and Grubert (2002) outline the two strategies. First strategy shows that foreign earnings, instead of being repatriated, are used to purchase equity in other existing foreign affiliates. This is called "triangular strategy" because ownership of the indirectly held affiliate is split between the parent and one of its affiliates. The triangular strategy replaces or adds to the original equity from the parent in the indirectly help affiliate with earnings from operations of another foreign affiliate. As long as affiliates own at least ten percent¹⁶ of the other

¹⁶ Ten percent ownership makes the investment "active" from the U.S. tax system stand point.

foreign operations in which they invest, they can continue to defer U.S. taxation of their foreign income (in Desai et al, 2002, p.11).

The second indirect ownership strategy is when a multinational company uses retained earnings from foreign operations to capitalise its initial investments in new foreign affiliates. The parent company then has no direct ownership in the new foreign affiliate, instead owning it indirectly through one or more tiers of other foreign affiliates. The multiple-tiers strategy provides reallocation of earnings that would otherwise face repatriation taxes.



A: Triangular strategy

B: A multiple-tiers strategy

Figure 4.1. Use of chains of ownership to mitigate repatriation taxes.¹⁷

4.5. Other tax minimisation strategies.

4.5.1. Double Irish arrangement and Dutch sandwich

The double Irish exploits the different definitions of corporate residency in Ireland and the United States. Ireland taxes companies if they are controlled and managed in Ireland, while the U.S.' tax definition of tax residency is based on where a corporation is registered (Houlder, 2014).

Houlder (2014) explains further that exploiting the double Irish involves forming a pair of Irish companies to turn payments on IP into tax-deductible royalty payments. The U.S. parent company forms two Irish subsidiaries: IP-Holding and Operating Company. The IP-Holding is the first-tier Irish subsidiary. The U.S. parent company signs a contract giving European rights of its IPs to the IP-Holding. In return, the Irish subsidiary agrees to market the products in Europe or other jurisdictions outside the United States. Thus, all the non U.S. jurisdiction income - that previously would have been taxed in the United States - is taxed in Ireland instead. Then, the Irish subsidiary changes its headquarters to tax haven (e.g. Bermuda) as it is managed and

¹⁷ In the triangular strategy, the retained earnings of affiliate 1 are invested in the pre-existing affiliate 2, replacing the parent company's equity capitalisation of affiliate 2. Thus, the retained earnings of affiliate 1 are redeployed within the parent system without triggering repatriation taxes. In the multiple tiers strategy, the earnings of affiliate 1 are invested as the equity capitalisation of a new affiliate 2, effecting a redeployment of earnings within the parent system without triggering repatriation taxes.

controlled in Bermuda. While U.S. rules determine tax residency of a corporation based on its place of incorporation, Irish rules often determines tax residency based on the country where the company is managed and controlled. The result is that Ireland considers the company to be tax-resident in Bermuda, while the United States considers it to be tax-resident in Ireland. Hence, neither the United States nor Ireland will levy any tax to this IP-Holding.

The IP-Holding can licence the IP rights for royalty or licence fees to the Operating Company which is treated as disregarded under U.S. tax law - by filing a one-page form, so that the transaction will not trigger any tax payment for passive income. The Operating Company receives income from the use of assets outside the United States, but the taxable profits are low because the high royalty or licence fees paid to the IP-Holding; and these fees are tax-deductible expenses. Therefore, the effective tax rate is – perfectly legally – far below Ireland’s low rate 12.5 percent. Royalty payments received by IP-Holding are neither taxed by Ireland nor the United States until the money is eventually sent to the U.S. parent company.

It is even more alluring if it is used in combination with the “Dutch Sandwich”, in which the transfer between the two Irish firms is then routed via another subsidiary (i.e. shell company) in the Netherlands to further reduce the amount for tax paid. It happens as U.S. parent company, in addition to the two Irish subsidiaries, creates one Conduit Company incorporated in the Netherlands. This Conduit Company is also owned by the IP-Holding and sublicenses the IP. In this way the IP-Holding is the single owner of the Operating Company and the Conduit Company. The royalty payments are then transferred to the Conduit Company instead of directly to the IP-Holding, avoiding Irish withholding tax on royalty payments from Operating Company to IP-Holding in Bermuda. By using Double Irish Dutch sandwich, withholding taxes can be completely avoided as royalties paid from Ireland to the Netherlands are tax-free under EU Interest and Royalty Directive, and the Netherlands do not impose withholding tax on any royalty payments regardless the residence state of the receiving company. The tax liability of the Conduit Company is only a small fee payable for the use of the Dutch tax system (Fuest et al, 2013).

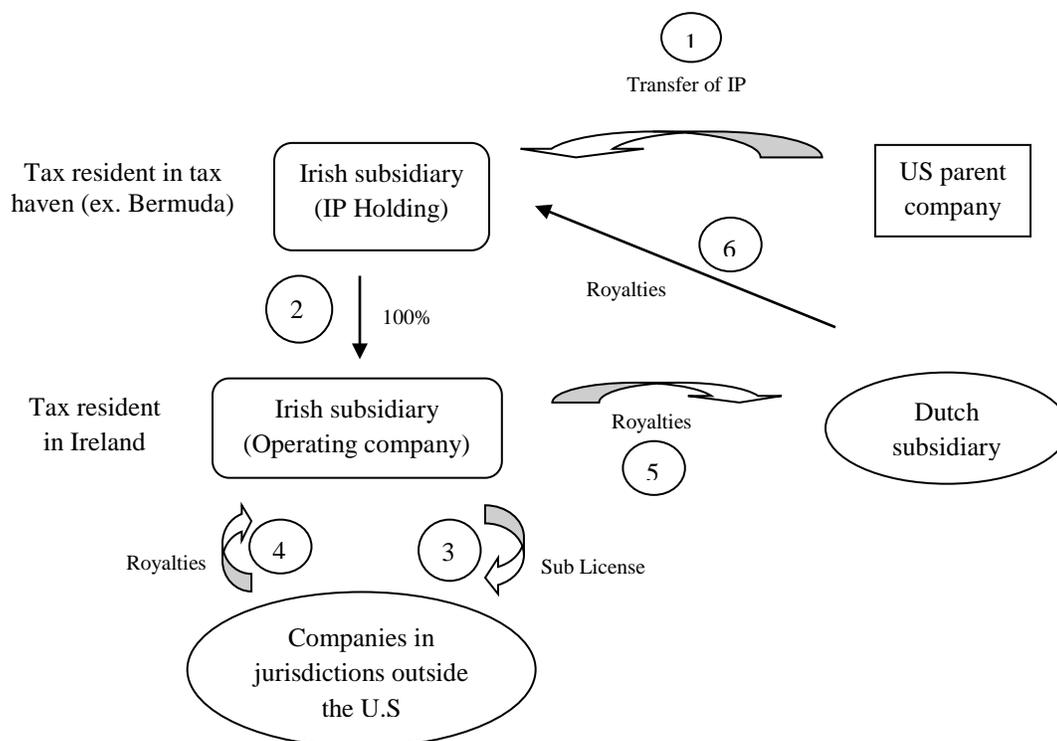


Figure 4.2. Double Irish and Dutch sandwich.

4.5.2. Holding company

Multinational companies may decide to establish a holding company for a range of reasons such as to manage a group of subsidiaries in a particular region by centralising financing, licensing, and management activities. A holding company also provides tax efficiencies in relation to withholding taxes on dividends and taxes on capital gains. Tax is a relevant factor in choosing the appropriate location for a holding company (Deloitte, 2015).

4.5.3. Trust

A trust is "a collection of assets where the formal and legal owner of the assets (the trustees or managers) have agreed to undertake to manage the assets for the benefit of those who, according to the basis for establishment (the foundation agreement or the trust agreement/trust deed) are designated as beneficiaries of the trust" (NOU, 2009:19, p.39). This definition implies that as legal instruments, trusts distinguish between formal ownership (legal ownership), which is held by managers ("trustees") and those who are entitled to benefits from its assets ("beneficial ownership"). The beneficiaries can be the founders of the trust, the settlors, or individuals that the settlors want to favour. The settlors or subsequent transfer may fund the trust when it is establis-

hed, but after the establishment, the fund of the trust can be transferred or provided by others (NOU, 2009:19, p.40).

Trusts enable the trustees, as the owner of the trust funds, to avoid taxes on the funds as the funds are not part of their personal wealth. Also, if the trustees go bankrupt, the creditors cannot target the funds. The trust funds do not form part of the wealth of the beneficiaries before the beneficiaries formally receive the contributions mentioned in the trust agreement. The beneficiaries will be liable for taxes only for funds that they receive. This situation means that during the period after the establishment and the valid transfer of the funds to the trust and before the funds are distributed to the beneficiaries, the trust funds have independent rights and obligations (NOU, 2009:19, p.40).

Despite all the fact, a trust is not an independent legal object. The ownership held by trustees is the same to an owner, but limited by the contents of the trust agreements. Trustees as the formal owner of the trust funds do not further their own interest, but act in the interest of the beneficiaries. If the trustees file a law suit, the beneficiaries bear the risk of the suit. The beneficiaries also bear all commercial and market risks for changes in the value of the trust as a consequence of the decision made by the trustees. The trust structure is unfamiliar and difficult to understand compared to Norwegian legal entities, especially the relationship between legal and beneficial ownership (NOU, 2009:19, p.40-41).

Trusts present opportunities to be abused for illegal purposes. The important thing here is keeping the existence of the trust secret, more over the one who is behind and controls the trust's funds. The purpose is to conceal who has the right to dispose the funds. Outsider should receive an impression that beneficiaries do not have the power to dispose the trust funds in order to claim that the trust funds are not owned and controlled by the beneficiaries, even though the truth is other way around. Therefore, tax havens are an important part of trusts as they are open to the establishment of trusts that allow to conceal structures due to their rules of secrecy. Without public registration of trust and trust beneficiaries, tax authorities and third parties will find difficulties in obtaining information about the assets located in trusts. Normally, a trust in tax haven does not own assets directly in the countries that are not tax havens. The trust will often become a top tier in a corporate chain of "exempted companies". Subordinate in tax havens, however, may own companies in countries that are not tax havens (NOU, 2009:19, p.42). At the

end of June 2007, there were 245 banks and trust companies licensed to do business in The Bahamas (The Central Bank of The Bahamas, 2015).

Since trusts are not registered publicly anywhere, the position of the trustee may be moved between various jurisdictions without formalities. However, the assets of the trust are not moved and they are located in subordinate companies across the world. Local agents fulfil the function of trustee. Concealed structures in tax havens often work with concealing mechanism in other states. The purpose is to operate through tax haven-based structure without being obvious to the outside world. Links to companies in the tax haven can be masked by using virtual addresses and mail drop-services. A related conduit company can also be established in a "respectable" country and used to conceal the underlying structure in tax havens (NOU, 2009:19, p.46).

4.5.4. Shell company

Garner (1999) defines a shell company as an entity that does not have active business and usually exists only in name as a vehicle for another company's business operation (in Kinner and Vona, n.d.). It is a corporation that exists mainly on paper, has no physical presence, no employees and produces nothing. In addition there are red flags to identify this type of company: no phone number, e-mail address, physical address, company logo, contact person and federal identification number. Shell companies are also referred as international business companies (IBC) (Transparency International, 2015).

Shell companies are very easy to form. The principal owner of the business, an attorney or an individual acting as a third-party may submit the filings for the company formation by mail, fax, e-mail or in person. The state makes decision to accept, suspect or reject the formation. The whole process takes time from five minutes to 60 days. It is usually formed in a tax haven or secrecy jurisdiction and its main purpose is to insulate the real beneficiary (beneficial owner) from taxes, disclosure or both (i.e. to take advantage of tax benefits). Delaware, Wyoming, and Nevada are the top three states for shell company formations, with Delaware being number one (Kinner and Vona, n.d.). Companies can run their international business through this shell corporation and they will not have to report the profits to their domestic government. By doing this, it looks like they are not making any significant money in their domestic market and the shell corporation is making all the money. Since the shell corporation is set up in the tax haven, they will pay very low taxes (Financial web, 2015).

The Netherlands is attractive as the location of shell companies due to Dutch tax regulations and an extensive network of tax treaties. These shell companies formally have an address and management in the country. However, the management can often be regarded as front person as the real leadership is located in another country (NOU, 2009:19).

There are several forms of a shell corporation: a corporation, a limited liability company (LLC), a partnership, or a sole proprietorship. Corporation and LLCs offer limited liability to owners of the company so that the owner's personal assets are not held accountable in lawsuits if any are brought against the company. However, LLC has its hybrid features namely limited liabilities to owners and the avoidance of double taxation (Kinner and Vona, n.d).

5. ANALYSIS OF RELEVANT LITERATURE

Multinational companies have the possibility to avoid tax or even evade tax by using simple methods or complex and advanced ones. This chapter will present the literature review on aggressive tax planning to know the methods used and the result from the previous analyses.

5.1. Transfer pricing.

Transfer pricing can be analysed using direct and indirect methods.

5.1.1. *Direct analysis*

According to OECD Transfer Pricing Guidelines for Multinational Enterprises and Tax Administration, traditional transaction methods are considered as the most direct means to establish whether the conditions in the commercial and financial relations between associated enterprises are at arm's length. The reason is that any differences in the price used in the transactions within a multinational company from the price in the comparable outside (uncontrolled) price indicate the deviation of transfer price from the arm's length principle.

In the real life, however, this is very difficult to find and to prove. Multinational companies try to hide or not to disclose their transfer pricing, especially when it deviates from the arm's length principle. Another important reason is when there is no comparable product in the uncontrolled (external) market, so that comparison becoming impossible.

Both theoretical and empirical evidences suggest that multinational companies with affiliates in different tax jurisdictions have the incentive to shift taxable income from high-tax jurisdiction to low-tax jurisdiction through the use of transfer prices (Tran, 2014). Using monthly data on U.S. international trade price between 1997-1999, Clausing (2003) finds that there is a relationship between countries' tax rates and the prices of intra-firm transactions, in which lower tax rate in a country will lower U.S. intra-firm export price and increase U.S. intra-firm import price. The result indicates that a tax rate one percent lower in a country destination/origin is associated with intra-firm export price that are 1.8 percent lower and intra-firm import price that are 2.0 percent higher. This finding is consistent with theoretical predictions regarding tax-motivated income shifting behaviour.

Swenson (2001) studies the prices of U.S. imports and tax changes in the United States and abroad from 1981-1988 and finds that five percent decline in foreign tax rates causes 0.024 percent increase in import price of the affiliates.

5.1.2. Indirect analysis

Research on transfer pricing and income shifting typically relies on publicly available data. This data limitation leads to the focus on indirect evidence of income shifting. Many papers use proxy such as reported income, tax payments and intra-firm exports (Swenson, 2001). Alternatively, the level of profits in the various group companies can indicate whether prices between them are unreasonable, i.e. manipulated transfer pricing (NOU, 2009:19, p.67).

Cross sectional analysis done by Grubert and Mutti (1991) indicates that the observed pattern of reported profits in high- and low-tax countries is consistent with income shifting behaviour. The analysis is done using 1982 data on a cross-section of 33 countries. The result shows that total imports are greater from location in which U.S. multinational companies face low-tax rate. In addition, lower taxes lead to disproportionately large increases in trade with affiliates, due to the tax benefits of intra-company trade.

Gordon and Hines (2002) acknowledge that economic studies examining tax motivated intra-firm trading provide only indirect evidence that transfer prices are a tool for tax minimisation. Jacob (1996) provides indirect archival evidence of a negative association between intra-firm trade volume and tax costs for multinationals, consistent with transfer price and being used as a mechanism for tax reduction. Dischinger (2007) shows that if the difference in the statutory corporate tax rate of an affiliate and its parent increases by ten percentage points, the unconsolidated pre-tax profits in the affiliate company will decrease by approximately seven percent. Wheeler (1988) describes U.S. tax courts cases where income was apparently shifted for tax reason.

In Norway, Balsvik et al (2009) show that profits are being shifted from high- tax countries into Norway, and out of Norway to lower tax countries. Using data from three different databases, namely *Brønnøysundregistrene (The Register of Business enterprises)*, *SIFON-registeret* and *Skattedirektoratet* from 1992-2005, they find empirical result of aggressive use of transfer pricing by multinational companies that results in total loss of tax revenue as high as 30 percent of total possible tax income from these multinational companies. Earlier, Langli and Saudagaran (2004) also report that more than 50 percent foreign-owned companies within manufacturing and trading have profit margin which is 2.6 percent lower compared to Norwegian-owned companies during year 1993-1996.

Using panel data technique, Møen and Tropina (2009) find out that average profit margin for multinational companies is 5.2 percentage points lower than Norwegian domestic companies (5.3 percentage points compared to 10.5 percentage points). After controlling factors such as age, size and leverage level, industry, share of capital and fiscal year, profit margin of foreign-owned multinational companies is 3.6 percentage points lower than Norwegian domestic companies. Controlling for unobserved company-specific fixed effect, the estimate difference increases to 4.5. They find that profit margin of Norwegian-owned multinational companies is 0.9 percentage points lower than Norwegian domestic companies. Again, controlling for unobserved company-specific fixed effect, the estimate difference increases to 2.5. Using assumption that the estimated difference of profit margin is due to manipulation of intern price, the lost of tax revenue might be as high as 40 percent of possible tax income or around NOK 7.5 billions.

5.2. Optimisation of capital structure

Taxes are thought to influence corporate decisions in many ways. The reason is its ability to deduct interest payments from taxable income due the tax-favoured status of debt (Graham, 2011). The possibility to use debt can further benefit multinational companies due to lower effective capital costs compared to the domestic companies.

5.2.1. Analysis of total debt

Huizinga et al (2008) shows in their empirical analysis that tax changes lead to debt rebalancing. Using data from 32 European countries from years 1994-2003, the result shows that for a multinational with equal size of affiliates in two countries, a 10 percent tax increase in one country will increase the debt-to-asset ratio in that country by 2.4 percent. On the other hand, the debt-to-asset ratio in the other country will decrease by 0.6 percent.

Under firm-specific benefit functions, Graham (2000) calculates the value of the capitalised tax benefits of debt finance for the U.S. case is equal to 9.7 percent of firm value. The typical firm could double tax benefits by issuing debt until the marginal tax benefit begins to decline.

Alworth (1988, chapter 5) and Keen (1991) show that whenever there is tax difference between home and host country, there is a tax advantage for multinational companies to shift profits from the higher tax country to the lower tax country by debt shifting (or interest payments). Jog and Tang (2001) confirm that following the U.S and Canadian tax reform (Canada became a country with relatively high-tax rates), significant changes occurred in debt

levels of multinational companies in Canada. Their aggregate result shows a reduction in taxes from foreign controlled corporations (FCCs) in Canada as a proportion of total corporate revenues. This reduction is consistent with the increase in debt-to-asset ratio. Since U.S.-controlled corporations (USCCs) control a significant fraction of Canadian corporate assets and operating income, the evident debt-shifting policies adopted by USCCs benefited the United States at the expenses of Canadian tax revenues. In aggregate, there was around \$3.5 billion loss on Canadian tax revenues due to the debt shifting.

Hines and Hubbard (1990), Collins and Shackelford (1992), Froot and Hines (1992), Grubert (1998) and Altshuler and Grubert (2003) provide evidence that U.S. multinational financial structure and the pattern of intra-firm interest and other income flows are consistent with tax minimization objectives. Using German data, Ramb and Weichenrieder (2004) find that the financial structure of foreign affiliates in Germany are partly tax motivated, i.e. the leverage decision is affected by the size of German tax rate.

5.2.2. Analysis of internal and external debt

Desai, Foley and Hines (2004) examine the use of debt in the affiliates of U.S. multinational companies. Using data from three benchmark surveys, they have access to data on a total of 32,000 affiliates and 3,600 parents. They find evidence that tax rates strongly affect the use of debt by affiliates, in which 10 percent higher tax rates are associated with 2.8 percent higher debt-to-asset ratios. Internal debt is particularly sensitive. While the estimated elasticity of external borrowing with respect to tax rate is 0.19, the estimated elasticity of borrowing from parent companies is 0.35. Multinational affiliates are financed with less external debt in countries with underdeveloped capital market or weak creditor rights due to higher local borrowing costs. These affiliates substitutes three-quarters of the reduced external borrowing with debt from parent company. In this case, it seems that multinational companies utilise internal capital markets to overcome imperfections in external capital markets.

Møen et al (2011) point out that the key driver for both domestic and multinational companies' capital structure is the debt tax shield. However, multinational companies have the advantage in utilising debt shifting mechanism both internal and external debt. They find out that a 10 percentage point of tax increase in an affiliate located in country with the highest tax rate will reduce the debt-to-asset ratio in the low-tax country by 1.4 percentage points and increase the debt-to-asset ratio in the high-tax country by 4.6 percentage points.

5.2.3. *The use of internal debt.*

Buettner and Wamser (2013) confirm that internal debt is used more by multinationals with affiliates in low-tax countries and increases with the spread between the host country tax rate and the lowest tax rate among all affiliates. Mintz and Weichenrieder (2005) find that a one percentage point increase in the host country's tax rate raises leverage in wholly-owned foreign affiliates by about 0.4 percentage points. Most of the effect comes from increased intra-firm borrowing (i.e. internal lending) and not from third party debt. Further, Overesch and Wamser (2010) confirm that there is a significant impact of tax-rate differentials on the use of inter-company debt.

5.3. The use of chains of ownership

Desai, Foley and Hines (2002) show that indirectly owned foreign affiliates exhibit strong tax effect in which 10 percent higher tax rates is associated with 12.0 percent lower FDI and 1.4 percent lower returns on assets. American firms finance their foreign operations indirectly through chains of ownership which now account for more than 30 percent of aggregate foreign assets and sales. These ownership chains are particularly concentrated among European affiliates. In addition, Huizinga et al (2008, p.5) also mention that in practice, multinational companies may be able to avoid bilateral withholding taxes through triangular arbitrage involving a conduit company in a third country.

5.4. The use of holding company, trusts and tax havens

Weichenrieder and Windischbauer (2008) point out that, multinational companies may reduce their tax liability abroad by granting intra-company loans to their foreign affiliates. Some loopholes in tax regulation (such as the preference for holding companies) allow them to do that and to work around thin capitalisation rules. By the use of such holdings, multinational companies may shift debt from productive affiliates to holdings (Ruf and Schindler, 2012).

Huizinga et al (2008) look at different methods to transfer profits from subsidiaries to the parent company and find out that withholding tax has a bigger effect on debt than the tax rate in the home country. This may imply that subsidiaries would prefer to defer the repatriation of the profits and try to use a third country to work around the repatriation tax.

Desai, Foley and Hines (2006) point out that larger, more international firms, and those with extensive intra-firm trade and high R&D intensities, are the most likely to use tax haven. The

evidence suggests that the primary use of affiliates in larger tax haven countries is to reallocate taxable income, whereas the primary use of affiliates in smaller tax haven countries is to facilitate deferral of U.S. taxation of foreign income. Firms with sizeable foreign operations benefit the most from using tax haven. Evidence shows that American firms are more likely to establish new tax haven operations if their non-haven investments are growing rapidly – one percent greater sales and investment growth in nearby non-haven countries is associated with a 1.5 to 2 percent greater likelihood of establishing a tax haven operation.

5.5. Conclusion

Relevant literature review shows that multinational companies, mostly the American ones try to minimise the tax liability using the methods mentioned in the theory part. In Norway, however, the intensity of this practise is less well-documented. One of the reasons can be the fact that Norwegian tax rate is among the average and that there has not been so much focus on research about this particular topic both for Norwegian multinational companies or foreign-owned multinational companies operating in Norway.

6. CASE ANALYSIS: MICROSOFT CORP.

In this section, analysis of Microsoft Corp. is performed to show how a multinational company minimises its tax liability. Focusing on one firm gives real and explicit example on how tax consideration affects the decision of the firm's business strategy.

Compared to Apple Inc. and Google, Microsoft Corp. received less attention in their tax planning. However, on May 21, 2013, Business Insider published that Microsoft had a massive system by which to avoid taxation. Microsoft Corp. and other U.S. corporations used the flaws in the international corporate tax regime to minimise their tax exposure. According to the full senate report on September 20, 2012, the company had reported income of \$23.2 billion, but with a federal tax liability of only \$3.11 billion paid as an effective rate of 13.4 percent. This was much lower than the statutory corporate tax rate of 35 percent in the United States. Day (2014) wrote that Microsoft Corp. sued IRS for details of tax probe. The main issue was transfer pricing between Microsoft's subsidiaries. IRS was investigating this issue as Microsoft Corp.'s effective tax rate in June 2014 was 21 percent below the U.S. statutory corporate tax rate.

In their Annual Report 2014, Microsoft Corp. made statement as follows:

'Our effective tax rate was lower than the U.S. federal statutory rate primarily due to earnings taxed at lower rates in foreign jurisdictions resulting from producing and distributing our products and services through our foreign regional operations centres in Ireland, Singapore, and Puerto Rico.'

(Microsoft annual report 2014, p.29)

However, they did not go further in details on how they managed to lower the effective tax rate through their worldwide operation. Therefore, using Microsoft Corp. annual reports, public financial information, i.e. Orbis database and *Brønnoysundegistrene*, and other printed and online public information available, the tax minimisation strategies used and the effects of these practices will be discussed.

6.1. Background

Microsoft Corp. is a worldwide leading technology firm that generates revenue: by developing, licensing, and supporting a wide range of software products and services; by designing, manufacturing, and selling devices related to computing; and by delivering online advertising to global

customers.¹⁸ Microsoft refers to Microsoft Corp. and its affiliates, including Microsoft Mobile Oy, a subsidiary of Microsoft that develops, manufactures and distributes Lumia and Asha and Nokia X mobile phones and other devices.¹⁹

The firm was founded in 1975. On June 25, 1981, it was incorporated in the state of Washington. Then, it was reincorporated in the state of Delaware on September 19, 1986, and reincorporated in the state of Washington on November 1, 1993 (Levin and Coburn, 2012). Bill Gates, the co-founder of the firm is the Technology Advisor's Board of Director.²⁰

As of June 30, 2014, Microsoft employed 128,000 people worldwide (in which 62,000 are in the United States and 66,000 internationally), and reported revenues of \$86,833 million. Of the total employees: 44,000 were in product R&D; 33,000 in sales and marketing; 23,000 in product support and consulting services; 20,000 in manufacturing and distribution; and 11,000 in general and administration. Microsoft does more than 85 percent of the R&D in Redmond, Washington, the United States.

6.2. Microsoft's global structure

Microsoft began establishing a complex network of interrelated foreign entities to facilitate international sales and reduce U.S. and foreign tax. They established three regional operating centres in tax havens: Dublin, Ireland; Singapore; and Humacao, Puerto Rico.²¹ There are roles assigned to each of these operation centres: Microsoft Ireland has a role for licensing, manufacturing, operations and logistic and is responsible for retail sales to Europe, the Middle East and Africa (EMEA); Singapore is for operations and logistics and responsible for retail sales in Asia and Pacific; and Puerto Rico is for manufacturing and responsible for retail sales in North and South America, including the United States (Levin and Coburn, 2012). In addition, there is an operation centre for licensing and operation in Reno, Nevada,²² a tax haven in the United States.

Microsoft makes effort to maximise profits held in these operating centres in order to reduce the tax liabilities (Levin and Coburn, 2012). The firm confirms this effort in its statement in their annual report. It seems that tax minimisation is the main consideration in structuring the global operation.

¹⁸ United States. Microsoft Corporation. (2014a) Annual report 2014.

¹⁹ United States. Microsoft Corporation. (2014b) Revenue and Headcount.

²⁰ United States. Microsoft Corporation. (2014b) Revenue and Headcount.

²¹ United States. Microsoft Corporation. (2014c)

²² United States. Microsoft Corporation. (2014a)

6.3. Microsoft's tax payment

Stated in their annual report, Microsoft pays taxes that are lower than U.S. statutory tax. As showed in table 6.1, in the fiscal year 2014 and 2013, Microsoft reported \$5,746 million and \$5,189 million in taxes on taxable income of \$27,820 million and \$27,052 million. The amount of tax paid was 20.65 percent and 19.18 percent respectively (i.e. 14.35 and 15.82 percentage points lower than the U.S. statutory tax rate of 35 percent).

Year	2014	2013
Operating revenue (turnover)	86,833	77,849
Costs of goods sold	21,722	16,494
Other operating expenses	37,331	34,799
Financial P/L	40	496
Taxable Income	27,820	27,052
Tax	5,746	5,189
Net Income	22,074	21,863

(\$ millions)

Table 6.1. Microsoft tax payment in 2014 and 2013

As a multinational firm, Microsoft deals with different tax rates and regulations in all its affiliate locations worldwide. Most of these tax rates are lower than the U.S. statutory tax rate. This fact is the starting point on how Microsoft end up paying taxes which are lower than 35 percent.

The following sections will analyse how Microsoft minimise the tax liabilities.

6.4. Deferral

Microsoft is one of the U.S. multinational companies with the largest amount of money held offshore after Apple Inc. Table 6.2 shows the amount of the foreign cash held outside the United States for the biggest U.S. multinational companies. Looking at it enlarges the magnitude of the loss in tax revenue for the U.S. government. In 2013, Microsoft with \$76,400 million held offshore gave estimated deferred tax bills of \$24,400 million²³. It implies tax rate paid offshore cash at 3.1 percent.²⁴

²³ United States. Microsoft Corporation. (2013)

²⁴ To calculate the tax rate paid abroad, the estimated tax bill is divided by the total amount kept offshore. The number is then multiplied by 100 equals the U.S. tax rate the company would pay if it repatriated that foreign cash. Since company receives dollar-for-dollar credits for taxes paid to foreign governments, the tax rate paid abroad is the difference between 35% - the U.S. statutory corporate tax rate – and the tax rate paid upon registration. (i.e. 35% - (\$24,400/\$76,400 * 100) = 3.06%)

Company	Amount Held Offshore (\$millions)
Apple Inc.	111,300
Microsoft Corp.	76,400
Google	38,900
Oracle Corp.	26,200
Intel	20,000
Dell	19,000

Table 6.2. Cash booked offshore by top technology companies for tax purposes 2008 and 2013 (Phillips, Wornhoff, and Smith, 2014).

As seen on the table 6.3, Microsoft has been increasing the cash reserve outside the United States and around 90 percent²⁵ of the total cash are left overseas, particularly in tax havens. This “offshore” cash is not taxable and will only be taxed when it is repatriated into the United States. It implies that the U.S. government suffered from tax loss amounted as high as \$27,895 million²⁶ per 2014 and received only \$2,103 million²⁷ in tax revenue from the cash that was repatriated.

Year	2010	2011	2012	2013	2014
Total cash	36,788	52,772	63,040	77,022	85,709
Foreign cash	Not available	45,379	54,660	70,480	79,700
Foreign cash as a % of total cash	--	85.99%	86.71%	91.51%	92.99%

(\$ millions)

Table 6.3. Cash and equivalents, Short term investments.²⁸

In their annual report, Microsoft states:

*'We earn a significant amount of our operating income outside the U.S., which is deemed to be permanently reinvested in foreign jurisdictions.
.... We currently do not intend nor foresee a need to repatriate these funds.'*

(Microsoft annual report 2014, p.34).

By stating the intention in keeping the foreign income outside the United States permanently and using it for investment in the foreign subsidiaries, Microsoft is able to defer tax liability on this foreign income, utilising accounting standard APB 23. However, a Wall Street Journal Investigation found that over 90 percent of Microsoft's “offshore” cash were actually invested by its offshore subsidiaries in the U.S. assets like Treasuries, allowing the company to benefit from the

²⁵ Average percentage in year 2011-2014 based on table 6.3.

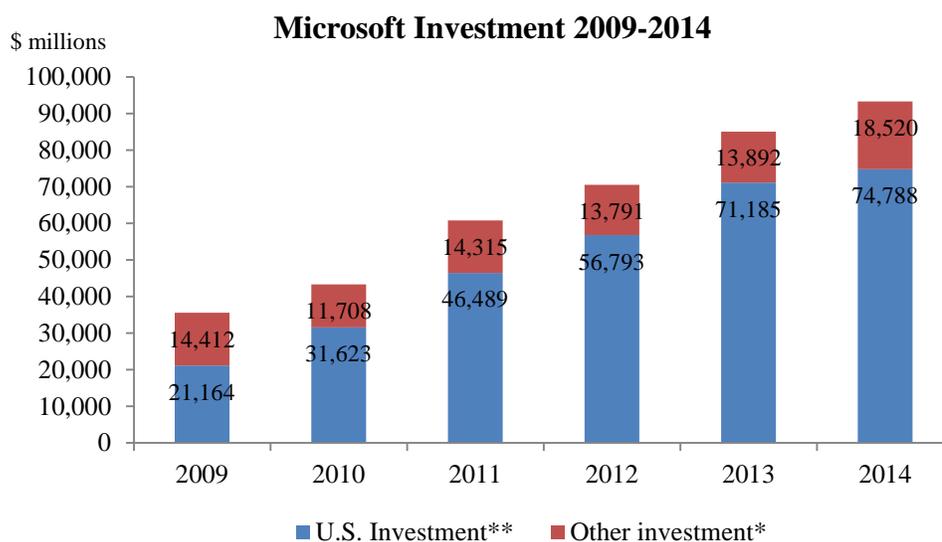
²⁶ \$ 79,700 million * 0.35 = \$ 27,895 million

²⁷ (\$ 85,709 million - \$ 79,900 million) * 0.35 = \$ 2,103 million

²⁸ United States. Microsoft Corporation. (2014a).

stability of the U.S. financial market without paying taxes on those profits (Phillips et al, 2014). Further, Microsoft also mentioned that approximately 84 percent of the “offshore” cash were invested in U.S. government and agency securities, 5 percent were invested in corporate notes and bonds of U.S. companies, and 1 percent were invested in U.S. mortgage backed security.²⁹

Figure 6.1 shows that the portion of the U.S. investment had increased from 59 percent in 2009 to 80 percent in 2014. Comparing the increase in the total investment and the U.S. investment from 2009 to 2014, the former increased by 162 percent, while the latter increased by 253 percent. The other investment itself only increased by 28.5 percent. It implies that more and more “offshore” cash were brought back to the United States in the form of investment. It is clear that a U.S. multinational company such as Microsoft can always find a way to bring back the profits to the United States without being subject to repatriation tax.



* including cash, mutual funds, commercial paper, certificates of deposit, foreign government bonds, municipal securities, common and preferred stock and other investments.

** U.S. government and agency securities, mortgage-backed security and corporate notes and bonds.

Figure 6.1. Microsoft investment 2009-2014.

Microsoft also uses the foreign cash to acquire their foreign subsidiaries. For tax purpose, Microsoft acquired Skype (headquartered in Luxembourg at the time of acquisition) through Round Island One. By using this "triangular strategy", Microsoft owned Skype, but they did not have equity in Skype as Microsoft used the foreign cash from other affiliates held by Round Island One to make the payment. This transaction was "active" investment as Round Island One

²⁹ United States. Microsoft Corporation. (2014a).

had more than ten percent ownership (in fact the ownership was 100 percent). Therefore, Microsoft could still defer the U.S tax on the foreign income. Another earlier transaction using "multiple-tiers strategy" was when Microsoft established MACS Holdings to own MOPR, but then passed the ownership of MACS Holdings to Round Island One.

In the other hand, Microsoft defers the costs in the United States (Gleckman, 2013). These costs included R&D, sales and marketing, and general and administrative expenses.³⁰ Microsoft products are mostly developed in the United States in the main R&D facilities in Redmond, Washington. However, through cost sharing agreement,³¹ Microsoft U.S. only contributes 35 percent of the total R&D costs, even though Microsoft U.S. pools and books the world-wide R&D costs in its consolidated financial report.

As shown in table 6.4, pooling the R&D costs in the United States reduced Microsoft taxable income, thus, reduced the tax payments. Through this strategy, Microsoft managed to reduce the total tax payment by \$8,339 million³² for year 2009-2014. This was the amount the U.S. government lost in their tax revenue.

Year	2009	2010	2011	2012	2013	2014
Pooled R&D costs	9,010	8,714	9,043	9,811	10,411	11,381
Increase in revenue if the R&D cost is not pooled	5,857	5,664	5,878	6,377	6,767	7,398
Effective tax rate (%)	26.50	25.00	17.53	23.75	19.18	20.65
Increase in tax payment	1,552	1,416	1,030	1,515	1,298	1,528

(\$ millions)

Table 6.4. Pooled cost in the United States.³³

6.5. The use of subsidiaries in tax havens.

Microsoft reported 10 subsidiaries in tax havens in 2007, but disclosed only five in 2013. These subsidiaries were located in Ireland (3), Luxembourg (1) and Singapore (1). During the same period, the company increased the amount of money held offshore from \$6.1 billion to \$76.4 billion. The estimated U.S. tax bill on this offshore cash is \$24.4 billion, implying a tax rate of just 3.1 percent³⁴ to foreign government on those profits. It suggested that most of the cash was booked in tax havens (Phillips et al, 2014). The same method is common for other U.S. multi-

³⁰ United States. Microsoft Corporation. (2014a)

³¹ This topic is discussed further in chapter 6.6.1

³² $1,552 + 1,416 + 1,030 + 1,515 + 1,298 + 1,528 = 8,339$ (\$ millions)

³³ Data is taken from Microsoft Annual Report

³⁴ For calculation, see footnote 26 in chapter 6.4

national companies that hold the money offshore where most of them having subsidiaries in tax haven as shown below.

Company	Number of tax haven subsidiaries
Apple Inc.	3
Microsoft Corp.	5
Google	2
Oracle Corp.	6
Intel	13
Dell	79

Table 6.5. Top technology companies with their tax haven subsidiaries (Phillips et al, 2014).

Microsoft also uses the subsidiaries in tax havens as operation centres (see chapter 6.2). The purpose of locating the operation centres in these tax havens and low tax jurisdiction is to minimise the tax liability on the income received.

6.6. Internal pricing (transfer price)

6.6.1. "Buy-in" and cost sharing agreement

Microsoft transfers the IP economic rights to the subsidiaries located in foreign tax havens, i.e. Ireland, Bermuda and Puerto Rico (later they are called IP-Holding entities).³⁵

Entity name	Country registration	Economic rights
Flat Island Company	Ireland	Economic rights to IP for certain products in EMEA
Microsoft Ireland Research (MIR)	Ireland	Economic rights to IP for certain products in EMEA
Microsoft Asia Island Ltd. (MAIL)	Bermuda	Economic rights to IP for certain products in Asia Pacific
Microsoft Operation Puerto Rico (MOPR)	Puerto Rico	Economic rights to IP for certain products in the America

Table 6.6. Microsoft non-U.S. subsidiaries that own or share economic rights to any IP developed in the US (Levin and Coburn, 2012).

A worldwide cost sharing agreement between Microsoft and these IP-Holding entities is formed to facilitate this transfer. Cost sharing agreement is chosen because transfer of full-fledged intangible triggers taxation due to its hidden reserves and future incomes generated by the intangible (Fuest, et al, 2013). In this agreement, Microsoft pools its worldwide R&D costs while each of the IP-Holding entities pays a portion of the R&D costs based on the their portion

³⁵ Microsoft only transfer the IP's economic rights, the right to profit from the intellectual property. The ownership of the IP and the legal enforce patent protection is still in the Unites States.

of global revenue. Microsoft's Irish operating centres account for 30 percent of the firm's global revenue, so MIR contributes 30 percent of the cost of R&D to the global cost share pool; Microsoft's Puerto Rico operating centre (MOPR) contributes 25 percent; Microsoft Singapore operating centre (MAIL) contributes 10 percent; and Microsoft U.S. contributes 35 percent.³⁶ Microsoft Ireland, Microsoft Singapore, and Microsoft Puerto Rico, then, each obtain the right to sell retail products in their respective regions. This cost sharing contribution also grants them the rights licence of Microsoft products to manufacturers (Levin and Coburn, 2012).

In the cost sharing agreement, participating subsidiaries must make a "buy-in" payment first time they join in. As mentioned in the theory part, a "buy-in" payment is an initial contribution for the development already and undertaken and future payment for the continued development of the intangible assets. The amount of the "buy-in" payment should be based on arm's length value. However, due to the unavailability of comparable intangible assets in the market, valuation of Microsoft's IPs is not easy. Therefore, this payment can be used as the first step to transfer the profit from the United States to the three IP-holding entities by setting the payment lower than the arm's length value. In addition, the agreement takes place while the intangible assets are still in the development stage, making the "buy-in" payment lower due to the uncertainty of the future economic value that the assets will generate.

For Microsoft, the approximate "buy-ins" for each entity was: MAIL \$4 billion; MOPR \$17 billion; and MIR \$7 billion (Levin and Coburn, 2012). These payments, however, were difficult to check in term of their accordance to the arm's length principle. In addition, these "buy-in" payments were structured to be paid in several years, so that the IP-Holding entities could get annual profits paid to them out of proportion to what they paid (Rubin, 2012).

This payment amount created a dispute between IRS and Microsoft in 2014. The reason was because IRS thought that the "buy-in" payment was too low based on the standards in the regulation at that time. The original agreement gave the right to the IP-Holding entities to "make or sell rights". However, as there were activities for new intangibles development in the IP-Holding entities, IRS argued that the "buy-in" payment should have been higher (August, 2014).

Once the Microsoft's IP rights are transferred offshore, the IP-Holding entities do not sell Microsoft products directly to customers. In Ireland and Singapore, the economic rights are

³⁶ The portion of Microsoft's business responsible for licensing Microsoft products to manufacturers that pre-installation Microsoft software is operated primarily out of the United States.

immediately relicensed to a different Microsoft subsidiary (later it is called operation entity) (see table 6.7) at a substantial mark-up, which then manufactures the products for then being sold to a combination of affiliated and third party entities. In addition, these operation entities pay royalty to the IP-Holding entities. However, the royalty payments are not disclosed. More details on this production process will be discussed in part 6.7.

	Acquiring (operation) entity	Country registration	Entity receiving payment	Rights acquired	Date acquired
1	Microsoft Ireland Operation Ltd (MIOL)	Ireland	Microsoft Island Research (MIR)	Licence agreement to distribute certain products in EMEA	July 1, 2007
2	Microsoft Operation Pte Limited (MOPL)	Singapore	Microsoft Asia Island Ltd. (MAIL)	Licence agreement to distribute certain products in Asia Pacific	April 3, 2004
3	Microsoft Ireland Research (MIR)	Bermuda	Flat Island Company	Licence agreement to distribute certain products in EMEA	July 1, 2007

* Royalty payments are undisclosed

Table 6.7. Microsoft non-U.S. subsidiaries (operation entities) received the licence rights and paid royalties to non-U.S. IP-Holding entities for the development or acquisition of rights in IP (Levin and Coburn, 2012).

Microsoft U.S. also charges royalty payments from the IP-Holding and the operation entities for some other IP rights that are not included in the cost sharing agreement. As the tax rate in the United States is higher than all of the paying royalty subsidiaries, Microsoft does not have any incentives to shift the profits to the United States. Therefore, the royalty payments are low (table 6.8).

	Acquiring entity	Entity receiving payments*	Rights acquired	Type of agreement	The amount 2011
1	Microsoft Operation Pte Ltd.	Microsoft	Economic rights to IP for certain products in EMEA	Cost share agreement	undisclosed
2	Flat Island Company	Microsoft	Licence agreement to distribute certain products in India	Licence	\$183
3	Microsoft Asia Island Ltd.	Microsoft	Economic rights to IP for certain products in Asia Pacific	Cost share agreement	\$1,034
4	Microsoft Asia Island Ltd.	Microsoft	Economic rights to IP for certain products in Asia Pacific	Cost share agreement	\$153

5	Microsoft Operations Puerto Rico, LLC	Microsoft	Economic rights to IP for certain products in the Americas	Cost share agreement	\$1,900
6	Microsoft Operations Puerto Rico, LLC	Microsoft	Economic rights to IP for certain products in the Americas	Licence	\$435
7	Microsoft Ireland Research (MIR)	Microsoft	Economic rights to IP for certain products in EMEA	Cost share agreement	\$2,053
8	Microsoft Ireland Research (MIR)	Microsoft	Economic rights to IP for certain products in EMEA	Cost share agreement	\$548

Table 6.8. Microsoft non-U.S. subsidiaries that paid royalties to U.S. Microsoft entities for the development or acquisition of rights to or interest in any IP (Levin and Coburn, 2012).

6.6.2. Indirect analysis

In analysing the irregularities in the transfer pricing, analysis on profit margins of the affiliates and its relation with the statutory tax rates in the countries the affiliates located is performed.

Table 6.9 shows the average statutory corporate tax rate and profit margin from 2009-2013. The decision to use the average value is due to changes in tax rate in some countries (e.g. Germany and Sweden). The changes are assumed to affect the allocation of profits through transfer pricing. Average profit margin is calculated for the correspondent years. One drawback in this method is that the changes in tax rate might take years to have effect on the profit shifting.

Company	Country	Profit margin ³⁷	Tax rate ³⁸
MICROSOFT CORP	US	35.81 %	35.00 %
MICROSOFT ENGINEERING CENTER PARIS	France	-3.20 %	33.33 %
MICROSOFT RESEARCH & DEVELOPMENT FRANCE SAS	France	-3.03 %	33.33 %
MICROSOFT CORP. (INDIA) PVT LTD	India	13.91 %	33.22 %
BRANCH OF MICROSOFT COLOMBIA INC	Colombia	12.03 %	31.40 %
MICROSOFT S.R.L.	Italy	12.61 %	31.40 %
MICROSOFT IBERICA SRL	Spain	10.35 %	30.00 %
MICROSOFT DEUTSCHLAND GMBH	Germany	14.95 %	29.45 %
MICROSOFT NEW ZEALAND LIMITED	New Zealand	13.35 %	28.80 %
MICROSOFT NORGE AS	Norway	22.08 %	28.00 %
MICROSOFT SYSTEM MARKETING. LTD	UK	27.32 %	25.80 %
MICROSOFT AKTIEBOLAG	Sweden	18.64 %	25.44 %
MICROSOFT B.V.	Netherlands	12.81 %	25.20 %
MICROSOFT OESTERREICH GMBH	Austria	16.05 %	25.00 %

³⁷ Profit margin = P/L before tax divided by sales multiply by 100

³⁸ Average statutory tax rate for period 2009-2013 is calculated based on statutory corporate tax rate from KPMG

MICROSOFT DEVELOPMENT CENTER COPENHAGEN APS	Denmark	22.98 %	25.00 %
MICROSOFT (MALAYSIA) SDN BHD	Malaysia	11.50 %	25.00 %
MICROSOFT KOREA INC.	Rep. of Korea	17.53 %	24.20 %
MICROSOFT HELLAS S.A.	Greece	13.93 %	23.00 %
MICROSOFT ESTONIA OU	Estonia	12.09 %	21.00 %
MICROSOFT SLOVAKIA, S.R.O.	Slovakia	13.84 %	20.33 %
MICROSOFT HRVATSKA D.O.O.	Croatia	12.49 %	20.00 %
MICROSOFT HOLDINGS PTE. LTD.	Singapore	21.99 %	19.33 %
MICROSOFT HUNGARY COMPUTER TECHNOLOGY SERVICING AND TRADING LIMITED LIABILITY COMPANY MICROSOFT HUNG	Hungary	12.36 %	18.40 %
MICROSOFT OPERATIONS PTE.LTD	Singapore	5.64 %	17.20 %
MICROSOFT LATVIA SIA	Latvia	11.76 %	15.00 %
MICROSOFT BOSNA I HERCEGOVINA D.O.O. SARAJEVO	Bosnia & Herzegovina	24.96 %	10.00 %

Table 6.9. Average tax rate and profit margin in some of Microsoft subsidiaries 2009-2013.³⁹

As mentioned in the previous section, Microsoft has operation centres in Luxembourg, Singapore, Puerto Rico and Ireland. However, the financial data available is only for subsidiaries in Singapore. There are only Microsoft Round Island One and Microsoft Flat Island company, two subsidiaries in Ireland among 22 subsidiaries listed by Orbis, that have key financial information (i.e. revenue, profit margin, number of employees, etc). But this information is back in 2004. For the subsidiaries in Luxembourg, there are six listed by Orbis, but only Microsoft Luxembourg S.A.R.L. that provides financial information until 2012. The average profit margin from 2008-2012 is 4.49 percent with corporate tax rate of 28.88 percent.⁴⁰ It limits the overview of how Microsoft allocates the profits across the world, but at the same time it shows that these countries as tax havens give protection to Microsoft in terms of secrecy on its financial reports. It raises a red flag that these countries are used to allocate most of the profits or channel these profits to another tax haven with more profitable taxes.

The table is sorted out based on tax rate from the largest to the smallest. If Microsoft shifts the profits from high-tax countries to low-tax countries, the profit margin should increase when the tax rate decreases. Figure 6.2. shows that there is a negative trend between tax rate and profit

³⁹ Data for tax rate is taken from KPMG corporate tax rate table and profit margin is taken from Orbis.

⁴⁰ Based on Orbis database

margin. However, this trend should be tested statistically by using more samples that in this case might not be easy as there are many subsidiaries that do not disclose their financial data publicly. Therefore, a conclusion that Microsoft shifts the profits from high-tax countries to low-tax countries based on the relation between tax rate and profit margin alone cannot be drawn.

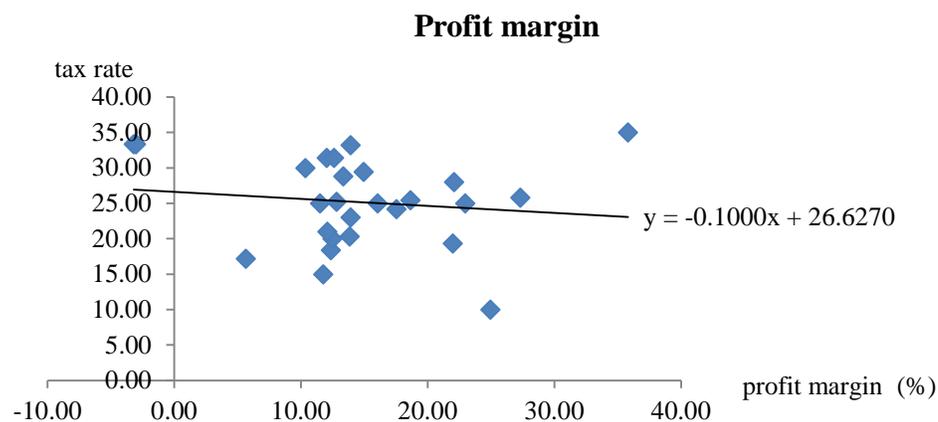


Figure 6.2. Relationship between tax rate and profit margin

Nonetheless, there are some issues to be noticed here. Subsidiaries in Bosnia and Herzegovina pays tax at the rate of 10 percent and the profit margin is almost double compared to the other subsidiaries that are located in countries with higher (almost double) tax rate. The parent company, Microsoft in the United States still has the highest profit margin compared to the other non U.S. subsidiaries. But again, as there is no information from the subsidiaries in Ireland (i.e. MIOL), Luxembourg and Puerto Rico (i.e. MOPR LLC), it is hard to show that the profit margin in these countries are much higher than in the United States and other non-tax havens.

The last available data from Microsoft Round Island One in Ireland is 2004, reporting profit margin at 39.91 percent with a tax rate of 12.5 percent.⁴¹ Even though Microsoft parent company pays 35 percent statutory corporate tax rate, in reality the effective tax rate is far below that.

Profit margin for Business Software and Services industry is 19.9 percent⁴² and Microsoft's profit margin has been 22.15 percent on average for the last five years. Compared to the peer companies such as Oracle, Apple and Qualcomm, their profit margins are 26.75, 24.16 and 27.78 percent respectively.⁴³ All of these companies do have subsidiaries in tax havens. However, looking back to the Microsoft Round Island One's profit margin which was as high as 39.91

⁴¹ Based on Orbis database

⁴² Based on Yahoo Finance (<http://biz.yahoo.com/ic/m/msft.html>) accessed on March 23, 2015.

⁴³ Based on TCharts (http://ycharts.com/companies/MSFT/profit_margin)

percent in 2004, there is a possibility that this profit margin is higher now. Microsoft Round Island One is still active,⁴⁴ but without public financial data disclosure.

6.7. Production and distribution

As mentioned, Microsoft has managed to lower their effective tax rate through their foreign regional operation centres in Ireland, Singapore and Puerto Rico. Their production and operation are discussed as follows.

6.7.1. Puerto Rico

Microsoft Operation Puerto Rico LLC (MOPR) is a legal entity that runs Microsoft's Puerto Rican regional operating centre. MOPR is a wholly owned Microsoft CFC. It maintains a production facility in Puerto Rico and is responsible for the manufacturing and replication of retail software.

MOPR was established in 2005 in response to the elimination of Section 936, a section in IRS which stated that income earned by U.S. firms from operations in U.S. possessions was effectively exempt from federal corporate income taxes (U.S. GAO, 1993). Microsoft established MOPR with funds from a wholly-owned Irish affiliate, Round Island One, to make MOPR owned by Microsoft's Irish group. To realise this plan, Microsoft established MOPR and Bermuda holding entity called MACS Holdings (MACS). MACS served as the sole owner of MOPR. The U.S. group then transferred the ownership of MACS to Round Island One in a non-taxable transaction under section of 368 of the Internal Revenue Code (Nitti, 2014). As the owner of MOPR, Round Island One paid for construction of Puerto Rican manufacturing facilities and MOPR's cost sharing obligation. In addition, MOPR received \$1.6 billion in equity from its Irish parent.

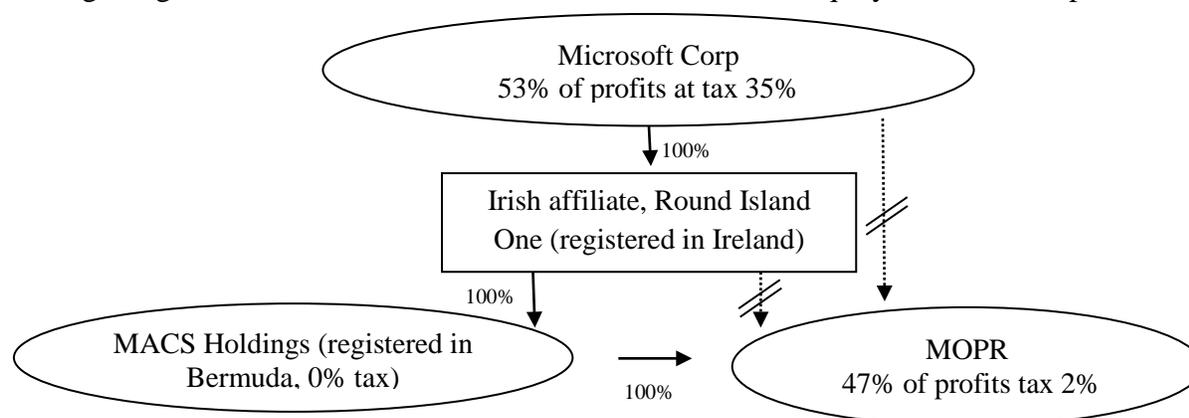


Figure 6.3. MOPR ownership structure.

⁴⁴ Based on Orbis database

Through cost sharing agreement, MOPR manufactures, duplicates and sells Microsoft software and physical products. MOPR sells the individual copies to entities in the United States as part of a distribution agreement. The U.S. subsidiaries purchase the products in Puerto Rico, transport them to the United States mainland, and then sell them to consumers. The report from the U.S. Committee on Homeland Security and Governmental Affairs mentions that the U.S. entities retain 53 percent of the gross profits and send the remaining 47 percent to MOPR in Puerto Rico where it is taxed at pre-negotiated rate at around two percent.⁴⁵

This structure is not designed for business or manufacturing purpose, but for minimising tax on sales of product sold in the United States. In 2011, MOPR paid Microsoft U.S. \$1.9 billion as part of MOPR's cost sharing obligations. MOPR then reported \$4 billion in profits in 2011, which was taxed at 1.02 percent. For this year only Microsoft reduced its tax payment by \$1.36 billion.⁴⁶ During three years when the firm was surveyed by the Subcommittee on Homeland Security, Microsoft saved over \$4.5 billion in taxes on goods sold in the United States by using this structure (Levin and Coburn, 2012).

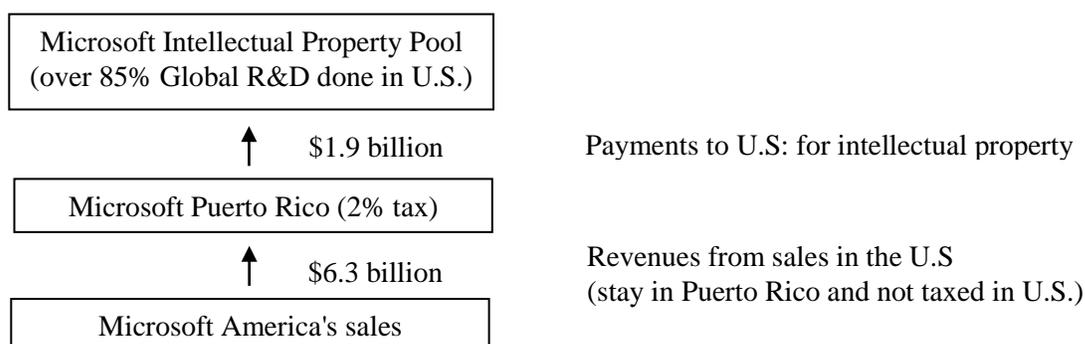


Figure 6.4. Microsoft Intellectual Property Payments (Puerto Rico) in 2011.⁴⁷

It would have been possible to calculate the tax saving that Microsoft gain, i.e. the tax revenues that the U.S. government loses had there been data on this. Unfortunately, there is no financial data available for MOPR from Orbis. However, it is mentioned that offshore profits through Puerto Rico office saves \$4 million a day in taxes (Birrel, 2014). It means that in a year, the U.S. government loses \$1.46 billion on tax revenue. This amount is only from one Microsoft offshore office, not from the all three and the other U.S. multinational companies.

⁴⁵ Most of the information in this sub chapter is taken from Levin and Coburn (2012)

⁴⁶ \$4 billion * (0.35-0.0102) = \$1.3592 billion

⁴⁷ Based on preparation by the U.S: Permanent Subcommittee on Investigations, September 2012.

6.7.2. Ireland

Microsoft coordinates all product sales for EMEA areas through a group of entities in Ireland. Microsoft Round Island One is a wholly owned Microsoft CFC which operates in Ireland. It owns Microsoft Ireland Research (MIR), a trust company and a wholly owned disregarded CFC located in Ireland.⁴⁸

MIR entered cost sharing agreement with Microsoft Corp. and relicensed its IP rights to another wholly-owned, disregarded subsidiary, MIOL, for \$9 billion in 2011. There was no tax payment for this licence payment from MIOL to MIR because under the check-the-box regulations, MIOL was a disregarded entity of MIR. It means that licence payment made by MIOL to MIR is ignored as for tax purpose they are not considered to be payments between separate entities. MIOL, then, manufactures and sells copies of the Microsoft products.⁴⁹

Through this structure, MIR reported \$4.3 billion of profits in 2011, with an effective tax rate of 7.2 percent. In the same year, MIOL reported profits of \$2.2 billion and an effective tax rate of 7.3 percent (Levin and Coburn, 2012). In 2014, MIOL revenue was \$22.2 billion. It reported pre-tax profit of \$1.4 billion, with effective tax rate of 14.4 percent and tax bill of around \$221.5 million⁵⁰ (U.S. Microsoft Corp, 2015b). This tax was lower than it would have been in the United States.

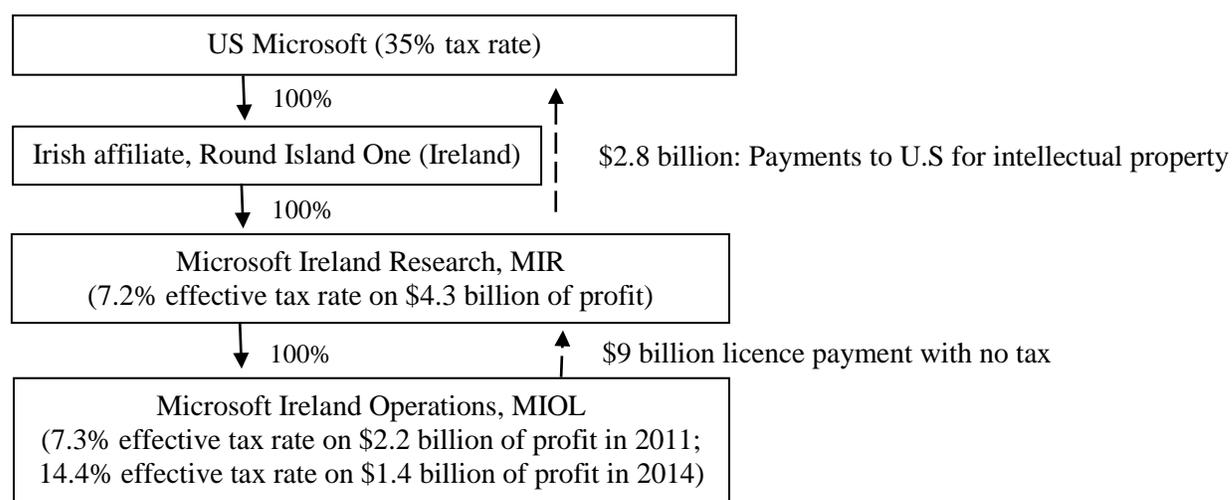


Figure 6.5. MIOL ownership and intellectual property payment

⁴⁸ Based on Orbis database.

⁴⁹ Most information is taken from Levin and Coburn, 2012.

⁵⁰ €204 million*1.0859 \$/ €= \$ 221.52 (exchange rate is taken from Bloomberg on April 2, 2015)

Microsoft also owns a large U.K. operation through Round Island One. However, the company was able to avoid reporting profits on the sales in the Britain in 2004 by showing that it did not have “permanent establishment” in the United Kingdom; that the U.K. operation was called marketing with Ireland-based sales staff and that profits was made in Britain, but real business was done from Ireland (Simpson, 2005).

6.7.3. Singapore

Asian sales are coordinated through a group of entities located in Singapore. This group entered into a global cost sharing agreement via MAIL. MAIL is an indirectly wholly-owned subsidiary of Microsoft Corporation which is located in Bermuda (Nokia Corp., 2014). It shares 10 percent of Microsoft’s global R&D expenses, but conducts no R&D activities. As a part of this agreement, MAIL paid \$1.2 billion to the U.S. parent in 2011.

MAIL licenses the right to sell Microsoft products in Asia directly to a Singapore entity, MOPL for \$3 billion. MAIL and MOPL are both wholly-owned disregarded CFCs owned by Microsoft Singapore Holdings Pte.Ltd., a wholly-owned CFC of Microsoft Corp.

The Singapore group had licensed Microsoft’s products directly from Microsoft U.S. via MOPL before MAIL was founded in 2003. In 2004, when MAIL entered into the cost sharing agreement with Microsoft U.S with the fund from Singapore Holdings Pte.Ltd., MOPL terminated its licence agreement with Microsoft U.S. and entered into a licence agreement with MAIL. Microsoft saved \$1,050 million because no tax payment to the United States was made for this transaction as both affiliates were disregarded CFCs (Levin and Coburn, 2012).

Even though MAIL is a shell company with no employee, in 2011 it reported \$1.8 billion in earnings and effective tax rate of 0.3 percent. The status of the company is still active, but recent financial data is not available in the Orbis database. This is not surprising as it is a shell company and located in Bermuda. In 2011, MOPL generated \$4.8 billion in revenues from the sale of Microsoft products and a profit of \$592 million with an effective tax rate of 10.6 percent. From this operation, Microsoft reduced its tax bill by \$2.43 billion on passive income payments between MIOL and MIR (Levin and Coburn, 2012).

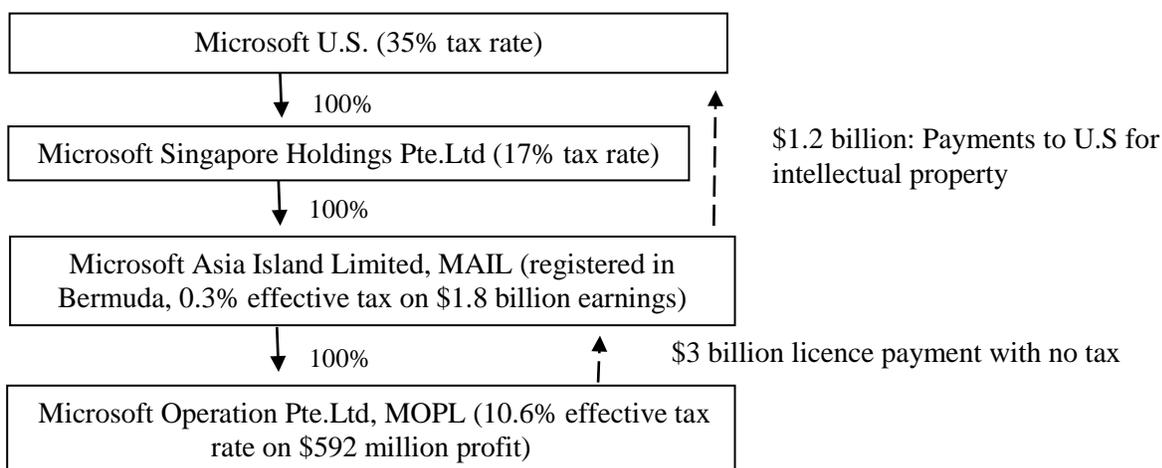


Figure 6.6. MIOL ownership and intellectual property payments in 2011

This structure saved Microsoft from tax payment on the \$3 billion of licence income that MAIL received from MOPL. At the same time, by having MOPL licences from MAIL, Microsoft can transfer the profit from Singapore to Bermuda without being taxed by the U.S. government as these both affiliates are disregarded CFC owned by Microsoft Singapore Holdings Pte.Ltd.

6.7.4. Nevada

Within the United States, Microsoft uses its subsidiary in tax haven state, Nevada, to manage the rights and copyrights of Microsoft's products (Simpson, 2005). There is no tax on corporate income including royalty income of IP in Nevada (U.S. Tax Foundation, 2015). Therefore, Microsoft assigned this subsidiary with role of licensing, the same role as Round Island One, for tax minimisation purpose. This purpose was acknowledged by Microsoft's Executive Vice President and General Counsel Brad Smith in 2004: "...to put Microsoft Licensing Incorporated in Nevada in part to recognize the lower tax rate that was in place there...." (Reifman, 2014). The Nevada unit, Round Island LLC, is the corporate parent of Round Island One (Simpson, 2005). However, search in the Orbis database gave a result that Round Island One LLC is a Single location company without information about any related companies. At the same time, as previously mentioned, Round Island One is owned by RI Holdings, registered in Bermuda. This inconsistency in ownership structure increases the conviction of tax minimisation plan. Either way around the result would be whether the profits end up in Bermuda or in Nevada (both are tax havens) untaxed by the U.S. tax authorities.

6.8. Thin capitalisation

Debt is tax deductible, but not equity. Therefore, as mention in the theory part, debt is preferred to equity. By loading the affiliates in the high-tax countries with debt and at the same time reducing debt in the affiliates in the low-tax countries, Microsoft can gain higher net debt tax shields. This method of debt shifting can be done by using internal and external debt. However, due to the unavailability of the data that provide this differentiation, total debt is used in the analysis. This is based on the assumption that the debts stated in the annual report are total debt.

In the consolidated annual report 2014, Microsoft Corp. as the parent company has the financial structure as shown in figure 6.7.

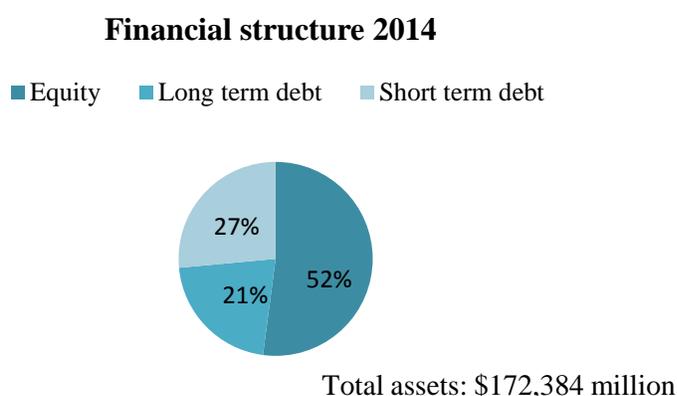


Figure 6.7. Consolidated financial structure 2014

At parent level, Microsoft has a high ratio of equity accounted for 52 percent. However, the equity ratio in affiliate level can be different because as an international company, Microsoft has the ability to shift debt externally and internally across its affiliates globally.

Table 6.10 shows average statutory corporate tax rate and equity ratio in each subsidiary in different countries. Consistent with the theory of the incentive of using debt, higher tax rate should lead to higher debt-to-asset ratio (i.e. lower equity ratio). Microsoft Development Centre Copenhagen APS has the highest equity ratio of 97.57 percent with the tax-rate of 25 percent in Denmark, while the lowest equity ratio of 18.04 percent is found in Italy with the tax-rate of 31.40 percent. Only looking at the distribution, it is hard to see the significant sign that tax-rate is the driving force in using debt.

Company	Country	Tax rate	Equity
MICROSOFT DEVELOPMENT CENTER COPENHAGEN APS	Denmark	25.00 %	97.57 %
MICROSOFT BOSNA I HERCEGOVINA D.O.O. SARAJEVO	Bosnia and Herzegovina	10.00 %	88.81 %
MICROSOFT HUNGARY COMPUTER TECHNOLOGY SERVICING AND TRADING LIMITED LIABILITY COMPANY MICROSOFT HUNG	Hungary	18.40 %	65.36 %
MICROSOFT SYSTEM MARKETING LIMITED	United Kingdom	25.80 %	64.64 %
MICROSOFT CORPORATION (INDIA) PVT LTD	India	33.22 %	58.80 %
MICROSOFT HRVATSKA D.O.O.	Croatia	20.00 %	58.54 %
MICROSOFT SLOVAKIA, S.R.O.	Slovakia	20.33 %	58.33 %
MICROSOFT HOLDINGS PTE. LTD.	Singapore	19.33 %	57.75 %
MICROSOFT LATVIA SIA	Latvia	15.00 %	57.62 %
MICROSOFT CORP	United States	35.00 %	53.71 %
MICROSOFT IBERICA SRL	Spain	30.00 %	52.45 %
MICROSOFT NEW ZEALAND LIMITED	New Zealand	28.80 %	49.13 %
MICROSOFT B.V.	Netherlands	25.20 %	48.49 %
BRANCH OF MICROSOFT COLOMBIA INC	Colombia	31.40 %	44.06 %
MICROSOFT OPERATIONS PTE.LTD	Singapore	17.20 %	40.58 %
MICROSOFT ESTONIA OU	Estonia	21.00 %	38.56 %
MICROSOFT (MALAYSIA) SDN BHD	Malaysia	25.00 %	37.94 %
MICROSOFT ENGINEERING CENTER PARIS	France	33.33 %	35.68 %
MICROSOFT OESTERREICH GMBH	Austria	25.00 %	33.69 %
MICROSOFT DEUTSCHLAND GMBH	Germany	29.45 %	31.81 %
MICROSOFT AKTIEBOLAG	Sweden	25.44 %	30.69 %
MICROSOFT KOREA INC.	Rep. of Korea	24.20 %	29.80 %
MICROSOFT NORGE AS	Norway	28.00 %	22.39 %
MICROSOFT HELLAS S.A.	Greece	23.00 %	21.93 %
MICROSOFT RESEARCH & DEVELOPMENT FRANCE SAS	France	33.33 %	19.25 %
MICROSOFT S.R.L.	Italy	31.40 %	18.04 %

Table 6.10. Equity ratio vs. tax rate⁵¹

Plotting the table into figure 6.7 gives more clear trend that equity ratio has a negative relationship with tax rate (i.e. positive relationship between tax rate and debt ratio). However, this trend is only a sign that Microsoft may use debt shifting to maximise its profit globally. This finding should be investigated further with more detailed data on both internal and external debt to ensure its validity.

⁵¹ Tax rate data is taken from KPMG Corporate Tax Rate and Equity Ratio is from Orbis database. The value is average value between 2009-2013

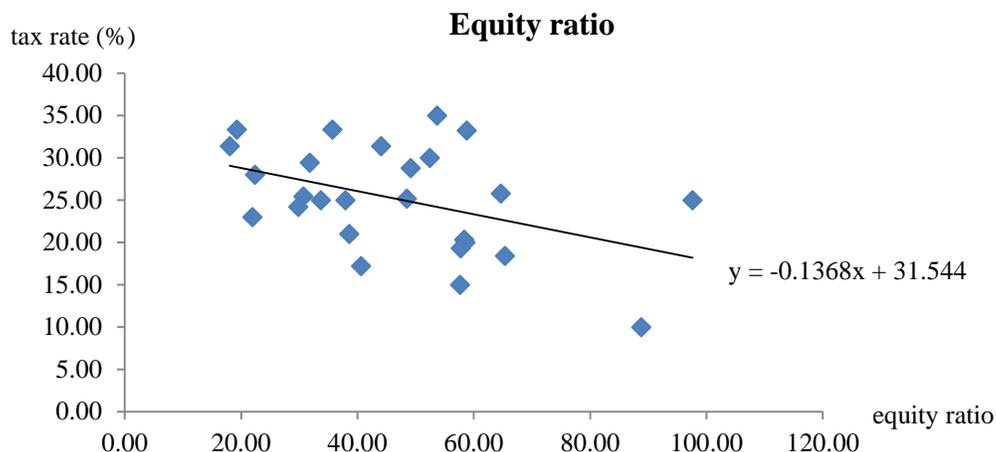


Figure 6.8. Equity ratio vs. Tax rate

6.9. Subpart F avoidance

Passive incomes, such as royalty and licence income, earned by foreign affiliates of the U.S multinationals are subject to immediate taxation and not eligible for deferral. However, if transaction on passive incomes is done between two disregarded CFCs under the check-the-box for tax purpose, the taxation under Subpart F is not triggered. This is what Microsoft uses.

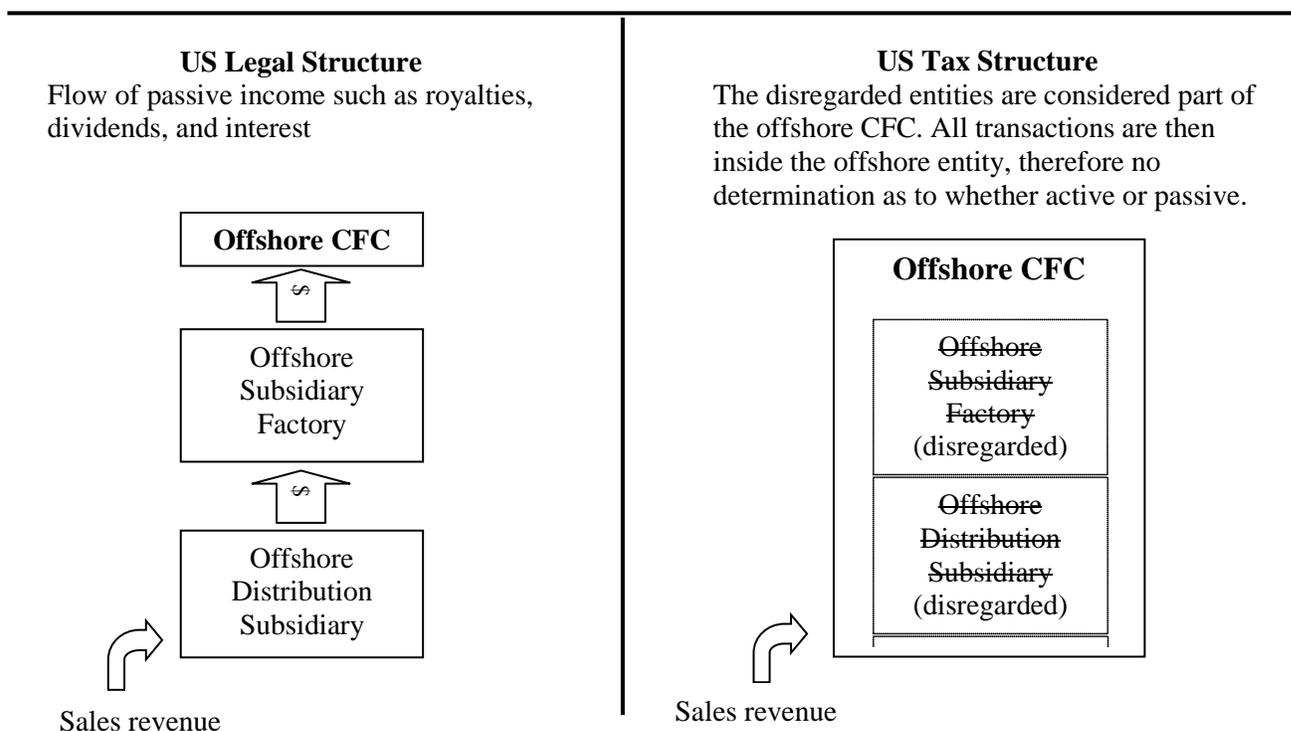


Figure 6.9. Disregarded CFC (Levin and Coburn, 2012).

6.10. Licensing and royalty revenue

Microsoft's licensing revenue comes from product revenue, including purchase through volume licensing programs, licenses sold to original equipment manufacturers (OEMs) and retail packaged product. This is one of the main business activities of Microsoft. Microsoft licenses the products to the customers through the wholly-owned subsidiaries operated in the geographic areas where the customers located. As mentioned before, these subsidiaries obtained the right to further sell and license Microsoft products from the IP-Holding entities.⁵² However, as Microsoft has moved the IP rights outside the United States, namely to the IP-Holding entities, most of the licensing revenue from outside the United States ends up in the country where these IP-Holding entities located, i.e. tax havens.

Licensing revenue from EMEA is booked in Ireland at MIOL, from Asian area in Singapore at MOPL, and from North and South America in Puerto Rico at MOPR. Microsoft does not disclose the financial report of these three wholly-owned subsidiaries in the country level. Therefore, it is not possible to calculate how much licensing revenue that they receive and how much tax saving that Microsoft gains in each operational area/country (i.e. the tax loss for the U.S. government). One thing for sure is that Microsoft pays less tax on this licensing revenue as the effective tax rates in these three countries are lower than in the United States.⁵³

In the annual report 2014, Microsoft reported that licensing fee made up about 50 percent⁵⁴ of the total revenue in Device and Consumer segment and 85 percent⁵⁵ in Commercial segment. The proportion of licensing revenue is high. Having this revenue booked in Ireland, Singapore and Puerto Rico with their low tax rate, gives a significant reduction in Microsoft's tax liabilities.

Microsoft has their own program regarding vendor royalty license and distribution agreement for their independent software vendors (ISV) in each geographic area, but there is no disclosure about the royalty/licence fee the ISV has to pay to Microsoft authorized distributors (U.S. Microsoft Corp., 2015a).

Microsoft enters cost sharing agreement with the operation centres. This allows Microsoft to transfer the IP rights to the IP-Holdings and keep most of the royalty and licence fees received from the customers and partner in these operation centres as the only obligation from these

⁵² Microsoft Annual Report 2014

⁵³ United States. Microsoft Corporation. (2014a).

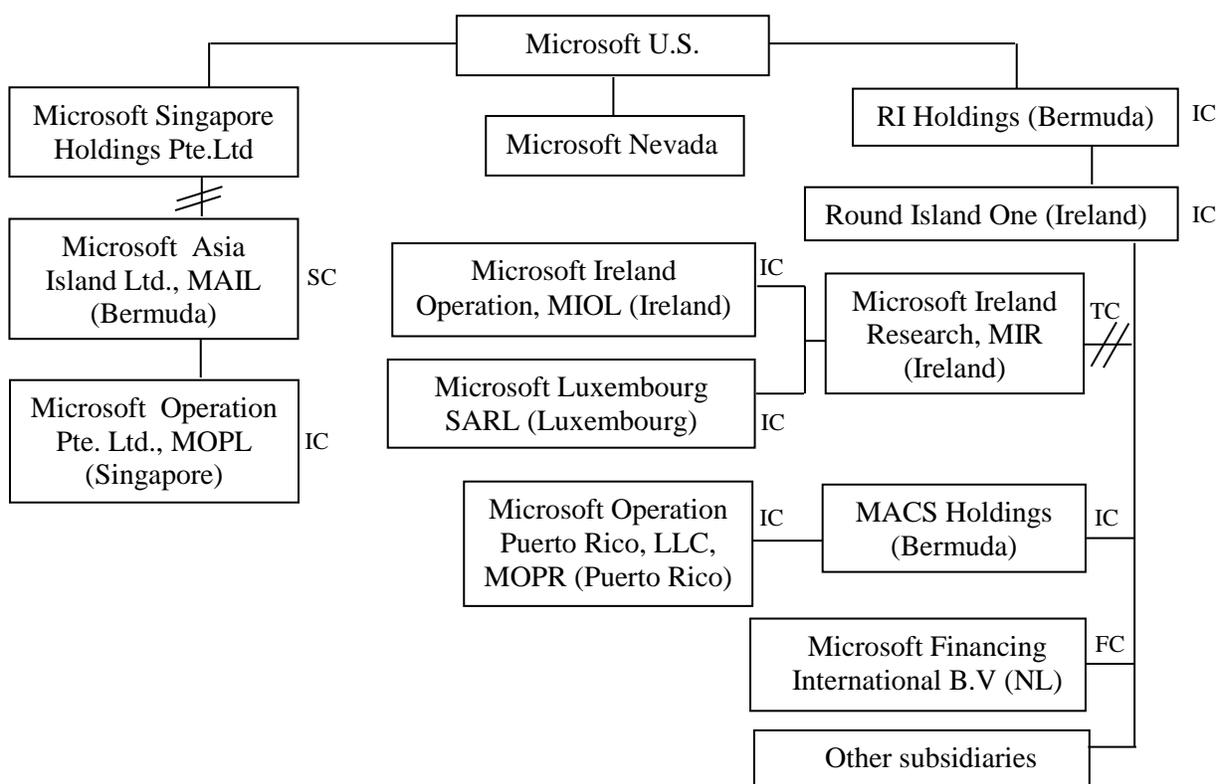
⁵⁴ \$18.803mill/\$37.674 mill = 50%

⁵⁵ \$42.027mill/\$49.574 mill = 84.78%

operation centres is to pay the portion of the R&D costs they are assigned for. Therefore, the income received by these operation centres will not affect the amount of this R&D cost portion that in a sense is a replacement for usual royalty.⁵⁶ However, royalty is used to license the use of products to an external company such as Samsung (Mayton, n.d.).

6.11. Complex and advance company structure.

Microsoft manages the funding for the establishment of their wholly-owned affiliates in Ireland and Puerto Rico through Round Island One, a wholly-owned Irish affiliate (i.e. Microsoft CFC) which is owned by RI Holdings. RI Holdings pays no tax as it is located in Ireland, but registered in Bermuda. Hence, neither U.S nor Irish authorities will levy any tax from this affiliate. At the same time the tax rate in Bermuda is zero.



* FC: Financial company; IC: Industrial company; TC: Trust company; SC: Shell company

* // : CFC disregard for tax purpose

Figure 6.10. Microsoft's operation centre structure.⁵⁷

⁵⁶ Royalty is normally paid in a percentage of sales revenue or an amount per product sold.

⁵⁷ The figure is based on the data found in Orbis database

Figure 6.10 shows Microsoft's operation centre structure in the tax havens. Microsoft owns RI Holdings, a holding company with industrial company status registered in Bermuda. Registrar of Company (ROC) owned by Bermuda Government shows that RI Holdings has been registered in Bermuda since 2006 (Bermuda. ROC, n.d.). Through this holding company, Microsoft owns Microsoft Round Island One in Ireland, which owns MIR (Ireland), MACS (Bermuda), Microsoft Flat Island Company (Ireland), Microsoft Financing International B.V. (Netherlands), Skype (Ireland), Skype Ireland Technologies Holdings (Ireland), and Microsoft Global Finance Ltd. (Ireland). None of these subsidiaries disclose their financial report, except the subsidiary in the Netherlands that mentions only the amount of assets and the numbers of its employees which are seven.⁵⁸ Microsoft Financing International B.V. is likely to be used as a shell company in the double Irish Dutch sandwich.

All the profits from licensing and sales in EMEA market are received by MIOL. MIOL is owned by MIR, however, both subsidiaries are disregarded CFCs owned by Round Island One. Therefore, the transfer of profits to Round Island One will not trigger any U.S. taxation on passive income. Ireland will not tax this transfer as Round Island One is the owner of MIR. From Round Island One, the profits need to be transferred to RI Holdings in Bermuda. In order to avoid withholding tax, the profits are routed to Microsoft Financing International B.V. in the Netherlands before being transferred to RI Holdings.

Profits from the American market are received by MOPR. These can be channelled to MACS Holdings in Bermuda or further to Round Island One in Ireland then to RI Holdings using double Irish Dutch sandwich. MOPL owned by MAIL in Bermuda receives profits from Asia Pacific market. In the end all the profits would end up in the operation centre or in Bermuda.

Even though Microsoft owns these affiliates, the possibility to form disregarded CFC makes the ownership more complicated as these affiliates belong to Microsoft, but for tax purpose they are independent entities. For example, MOPR in Puerto Rico owned by Microsoft through MACS Holdings that is owned by Microsoft Round Island One. Search in Orbis shows Microsoft as the majority owner of MOPR, even though for tax purpose MOPR is a disregarded CFC of Microsoft. In addition, amongst 942 subsidiaries that Microsoft has, only 431 that provide

⁵⁸ Orbis database

information about Microsoft ownership, while the rests are labelled as “single location” with no information about the shareholder, or owned by another shareholder which is not Microsoft.⁵⁹

6.12. Transparency

Microsoft operates as a complex network of interconnected entities controlled by Microsoft Corp. in the United States. This network includes the subsidiaries that are registered in tax havens. The reluctance of Microsoft to disclose the structures and holdings makes it difficult to identify them and to understand how they relate to each other. Microsoft reduced the reported number of subsidiaries from 10 in 2007 to 5 in 2013, eliminating subsidiaries that are considered significant or "material". The Wall Street Journal calls the phenomenon as the "incredible vanishing subsidiary". In addition, there are only 112 out of 942 affiliates that disclose their key financial report.⁶⁰ Technology is the worst industry and the United States is the worst country in terms of organisational transparency. Microsoft scores 3.4 (0 is least transparent and 10 is most transparent) in the corporate reporting transparency based on the unweighted average of results in anti-corruption programmes, organisational transparency and country-by-country reporting (Transparency International, 2014).

6.13. Conclusion

Microsoft avoids the tax liabilities in United States by using three vehicles in international tax avoidance: deferral, transfer pricing and check-the-box. Deferral allows Microsoft to avoid U.S. withholding tax on foreign income until foreign earnings are brought back to the United States. In practice, Microsoft keeps around 90 percent of the foreign cash offshore indefinitely in the operation centres in tax havens. However, this foreign cash is, in fact, brought back to the United States untaxed in the form of investment done by the foreign subsidiaries in the U.S. financial market. At the same time, Microsoft pools the R&D cost in the United States.

Transfer pricing is used to shift profits from the United States to the IP-Holding entities. Almost all value of the Microsoft's products is in the patents and other IPs. Using cost sharing agreement and "buy-in" payment, Microsoft manages to transfer the IPs economic rights to IP-Holdings entities in Ireland, Puerto Rico and Singapore with low transfer price as it is done in the early stage of the development of the intangible assets. In this way, Microsoft can shift the profits

⁵⁹ Orbis database

⁶⁰ Orbis database

received from licensing the IP rights to the customers to these affiliates. In addition, having the licensing operation from the tax haven in Nevada also reduces the tax payment for the passive income of the IP received in the United States as there is no income tax in this state.

By selling the products through the operation centre in Puerto Rico, Microsoft is able to divert almost half of its gross profit from American market to Puerto Rico.

By using the form of disregarded CFC and check-the-box, combined with the complex and advanced company structure and low organisational and financial report transparency, Microsoft is able to avoid tax payments for transactions between the disregarded CFC. It allows Microsoft to keep moving the IPs to low-tax jurisdictions without paying tax for the transactions. Tax liabilities are also reduced by using double Irish Dutch sandwich involving Microsoft Financing International B.V. in the Netherlands, Round Island One in Ireland and RI Holdings in Bermuda.

7. CASE ANALYSIS: MICROSOFT IN NORWAY

This chapter presents the analysis of Microsoft's operations in Norway with purposes to find and show any indications that point out the use of aggressive tax planning. If so, how Microsoft conducts this strategy.

7.1. Microsoft subsidiaries in Norway

Based on Orbis database, Microsoft has 16 subsidiaries in Norway. However, only four of the 12 active subsidiaries that provide financial information. These subsidiaries are: Microsoft Norge AS, Microsoft Development Center Norway AS, Microsoft Holdings Norge AS, and Microsoft Domains Norge AS (figure 7.1). Further, analysis will focus on these four active subsidiaries.

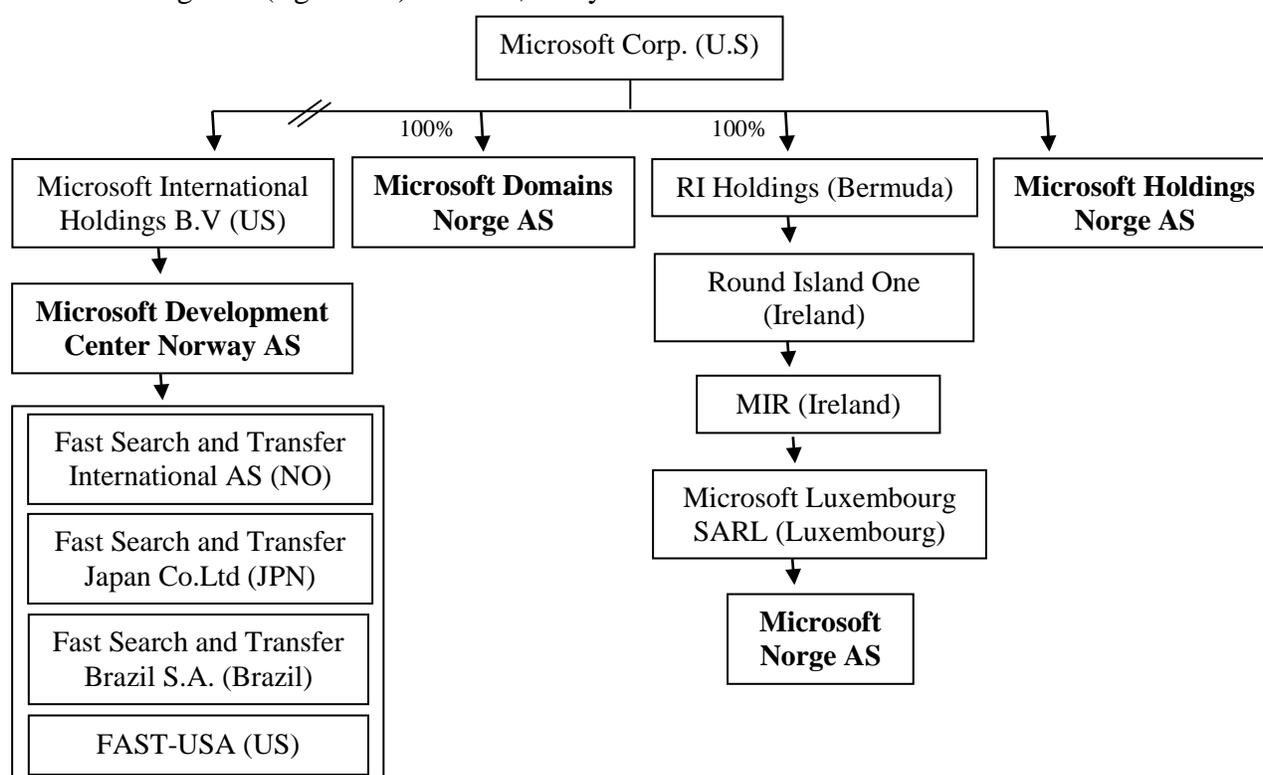


Figure 7.1. Ownership structure for Microsoft subsidiaries in Norway.

7.2. Microsoft Norge AS

Microsoft Norge AS is a limited liability company (AS form in Norwegian) with 297 employees in 2014 and share capital of NOK 100,100 in 2013. The company was incorporated in 1990 and registered at *Brønnøysundregistrene* in 1995. Microsoft owns Microsoft Norge AS through Microsoft Luxembourg International Mobile S.A.R.L, a subsidiary registered in Luxembourg.⁶¹

⁶¹ Orbis database

Microsoft Norge AS engages in distributing, licensing, and supporting a range of software products and services for different types of computer devices.⁶² However, its most important task is to arrange its partner to work on the best premises to sell Microsoft's software and solutions to the customers in Norway. There are more than 2000 partners, and around 400 of these are also developing software based on Microsoft technological platform. The partners purchase Microsoft products directly from the European facility in Ireland.⁶³

7.2.1. Operation analysis

The revenue of Microsoft Norge AS is mainly the commission/provision (these two terms will be used interchangeably throughout the thesis) from the parent company, Microsoft U.S, through MIOL in Ireland.⁶⁴ The commission, which is six percent,⁶⁵ is based on the sales of Microsoft products in Norway. The sales revenue from Norwegian market, however, is not booked in Norway. It is rather booked in Ireland through Microsoft Luxembourg Mobile S.A.R.L.

Eirik Lae Solberg, communication director for Microsoft Norge AS at that time, mentioned in the article by Computer World (2008) that Norwegian customers were billed by MIOL. He explained that the licenses the partners sold were produced and distributed by Microsoft in Ireland, and MIOL had no activity in Norway (Solli, 2008). This fact made the practice legal, looked from the residence-based tax regulation perspective in Norway.

However, some of the partners, in fact, are developing software based on Microsoft platform. It is assumed that this software is a part of and used for Microsoft R&D activities. The implication would be indirect value added activities in Norway. Thus, the profits from this activity should be taxed in Norway. The issue would be how to calculate these profits.

Luxembourg has IP-regime that provides 80 percent exemption from corporate income tax of 29.22 percent (since 2013)⁶⁶ for net positive income and capital gains derived from IP acquired or created after 31 December 2007. Thus, the effective tax rate is reduced to 5.84 percent (KPMG, 2013). In addition, there is a possibility to have a pre-agreement with the tax authority to get an agreed tax rate that is advantageous for Microsoft. Microsoft channels the sales revenue from Norwegian market to Luxembourg, taking advantage of lower tax rate there. From Luxem-

⁶² Orbis database

⁶³ Financial report from *Bronnøysundregistrene*, 2013

⁶⁴ Financial report from *Bronnøysundregistrene*, 2013

⁶⁵ see chapter 7.2.2

⁶⁶ KPMG. (2015) Corporate tax rates table.

bourg, the income can be shifted to Ireland without paying any withholding tax due to the tax treaty between Luxembourg and Ireland. In this way, Microsoft reduces taxes paid for the income from Norwegian market for about 6.66 percentage points.⁶⁷

Through this structure, the sales revenue in Norwegian market is not taxed in Norway. According to residence-based taxation of the income, this practice is legal (Green, 1993). However, it also implies loss of tax revenue for the Norwegian tax authorities with the thought that the income is generated in Norway and that there are value-added activities in the form of R&D performed by Microsoft Norge AS partners.

7.2.2. Commission agreement

There is no publicly available information about the amount of commission that Microsoft Norge AS receives from MIOL. Even contact with management of Microsoft Norge AS does not give any result as they mention that it is not accessible for public and that the calculation is rather complicated and different for each partner.⁶⁸ There are descriptions about the general licence, royalty agreement and commission, but none of them disclose the exact amount or calculation. The only available information states that license or royalty agreement consists of an initial lump of royalty payment. Then, there will be a certain percentage that the subsidiaries will receive as commission based on the sales. Based on Microsoft Affiliate Program page in Microsoft website, table 7.1 shows a list of the provision received by partners for Norwegian market.

Product	Provision
Software	10 %
<i>Office 365 monthly</i>	<i>100 %</i>
Office 365 yearly	10 %
Xbox	5 %
Windows Phone	5 %
Surface	4 %
Hardware	2 %

Table 7.1. Provision based on product (Microsoft Corporation, 2015a).

Using the assumption that a partnership is a long-term relationship, i.e. excluding the Office 365 monthly, unweighted average commission is calculated. The average commission is six

⁶⁷ $12.5\% - 5.84\% = 6.66\%$

⁶⁸ Based on the answer by CFO Microsoft Norge AS, Anita Huun, regarding the question about the commission.

percent.⁶⁹ Further, with an assumption that Microsoft Norge AS receives the same commission as the partners, it is possible to calculate the total sales in Norway based on the commission stated in the annual report

Table 7.2 shows that from year 2009-2014,⁷⁰ only NOK 3,472 million of the total sales in Norwegian market which were NOK 57,865 million, were recognised as commission revenue for Microsoft Norge AS. For the same period, Microsoft Norge AS paid NOK 310.5 million in tax to the Norwegian tax authorities. If total sales in Norwegian market had been recognised as the revenue for Microsoft Norge AS, i.e. taxable income, the tax payment would have been NOK 15.4 billion. Dividing the tax paid, i.e. NOK 310.5 million by the taxable income if the sales revenue in Norwegian market had been included would have given effective tax rate of 0.56%.⁷¹

MSFT NORGE AS	Average	Total
Revenue from commission	578,645,592	3,471,873,550
Provision	6 %	6 %
Total sales	9,644,093,194	57,864,559,167
Revenue from service	144,444,981	866,669,887
Total revenue	9,788,538,176	58,731,229,054
Operating costs	575,205,270	3,451,231,622
Net financial	16,421,970	98,531,820
Taxable income	9,229,754,875	55,378,529,252
Tax rate	27.83 %	
Tax liabilities	2,570,888,220	15,425,329,321
Tax paid	51,753,123	310,518,738
Tax saving	2,159,135,097	15,114,810,583
Effective tax rate	0.56%	0.56%
Reduction in tax liabilities	97.98%	97.99%

Table 7.2. Revenue and tax payment of Microsoft Norge AS 2009-2014 (in NOK).⁷²

Total tax saving for Microsoft for the period would have been NOK 15.1 billion or NOK 2.5 billion annually; this amount was the tax loss for the Norwegian tax authorities due to the loopholes in tax-residency based regulation exploited by Microsoft legally. This causes a question and attention in term of taxing rights and what the Norwegian government and international tax law

⁶⁹ $(10\%+10\%+5\%+5\%+4\%+2\%) \div 6 = 6\%$

⁷⁰ see appendix 3.b. for the calculation formula

⁷¹ $\text{NOK } 310,518,738 \div \text{NOK } 55,378,529,252 = 0.56\%$. This is rather based on a strong assumption that the sales revenue in Norway would have been able to be taxed by Norwegian tax authority

⁷² see appendix 3 for more details calculation

can do to regulate this practice. The question is shifted to moral perspective, as this practice is legal per today's tax regulation.

7.2.3. Cost analysis

There is no cost directly related to goods for Microsoft Norge AS as the products sold are directly from MIOL. Most of the operating costs are related to salary and other operating costs needed to support Microsoft partners in Norway (e.g. service transactions with related parties). As shown in table 7.3, the average portion of these costs is 79% of the total revenue booked for Microsoft Norge AS. These costs reduce the taxable income and therefore reducing the tax liabilities.

MSFT NORGE AS	Average (NOK)	Percentage
Revenue	723,090,573	100%
Salary	332,524,723	46%
Other operating cost	237,817,146	33%
Total costs	1,293,432,442	79%

Table 7.3. Average costs 2009-2014

Allocation of the costs in Microsoft Norge AS rather than in MIOL is not without purpose. The tax rate in Norway is higher than in Ireland. Thus, even though these costs are related to the activities done for MIOL, it is more profitable to book the costs in Microsoft Norge AS as they will create more reduction in tax payment for Microsoft in total.

7.2.4. Tax payments

Despite the effort to reduce tax liabilities in a global level by Microsoft, the effective tax rate for Microsoft Norge AS is higher than the statutory corporate tax rate in Norway (table 7.4). A possible explanation for this can be some costs that are not tax deductible. Another reason might also be that higher effective tax rate would make Microsoft Norge AS look less suspicious in the public eye for the practice in avoiding the income tax in Norway.

MSFT NORGE AS	2009	2010	2011	2012	2013	2014
Income before tax	216,564,378	192,106,078	125,062,384	113,538,732	163,212,283	175,045,316
Tax paid	66,645,820	59,520,415	43,200,163	38,919,041	50,934,278	51,299,021
Effective tax rate	30.77 %	30.98 %	34.54 %	34.28 %	31.21 %	29.31 %

Table 7.4. Effective tax rate of Microsoft Norge AS 2009-2014

7.2.5. Thin capitalisation

High statutory tax rate in Norway gives incentive for Microsoft to finance the subsidiaries in the country with internal debt - reducing the taxable income, thus, reduces the tax liabilities (i.e. through internal debt tax shield). Aforementioned in the chapter 5.8, 52 percent of Microsoft Corporation's financial structure consists of equity, but in the subsidiary level, it can be different.

Data found in the financial report between 2009-2014 mention that Microsoft Norge AS has no debt to financial institutions. However, having an assumption that all the debt they have as internal debt might not be justifiable as there is not enough information to support that. Annual report 2009 explicitly mentions that 62 percent of the short term debt consist of internal debt (i.e. NOK 312.06 million). This is 55 percent of the total debt and 4.8 times higher than the equity (table 7.5).

From year 2010 until 2014, there was no explicit information about the internal debt. At the same time, the reports mentioned that the changes in the total debt were due to the changes in the intercompany debt, i.e. internal debt. This implies that Microsoft Norge AS still maintained the use of internal debt. It is hard to find out where and how they structured this internal debt. Therefore, the amount of internal debt is calculated based on the amount for 2009 and the changes mentioned in the reports, except for the year 2014 where the changes in debt was due to correction against pension obligation (table 7.5). The external short term debt is calculated as the difference between the total short term debt and the internal short term debt.

MSFT NORGE AS	2009	2010	2011	2012	2013	2014
<i>Long term debt</i>	65,049,941	78,148,234	71,545,485	51,473,450	64,121,465	0
External	65,049,941	78,148,234	71,545,485	51,473,450	64,121,465	0
Internal	0	0	0	0	0	0
<i>Short term debt</i>	502,401,452	400,272,665	475,116,970	232,021,458	262,587,415	646,897,305
External	190,341,452	177,243,159	183,845,908	203,917,943	191,269,928	319,512,858
Internal	312,060,000	223,029,506	291,271,062	28,103,515	71,317,487	327,384,447
Changes in debt	0	-89,030,494	68,241,556	-263,167,547	43,213,972	320,188,425
<i>Total debt</i>	567,451,393	478,420,899	546,662,455	283,494,908	326,708,880	646,897,305
Equity	64,669,029	53,645,324	67,320,859	161,750,919	287,110,211	32,679,421
Debt/Equity	8.77	8.92	8.12	1.75	1.14	19.80
Internal/equity	4.83	4.16	4.33	0.17	0.25	10.02
Internal DTS	87,376,800	62,448,262	81,555,897	7,868,984	19,968,896	88,393,801

Table 7.5. Debt of Microsoft Norge AS 2009-2014

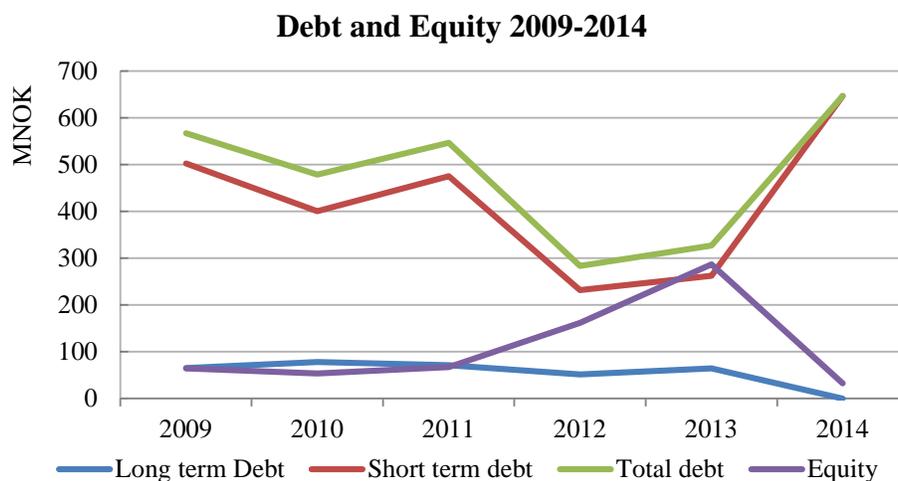


Figure 7.2. Debt and equity of Microsoft Norge AS 2009-2014

The capital structure of Microsoft Norge AS mainly consists of debt; this is the opposite of what Microsoft Corp. presents. During the period of 2009-2014, the average leverage (i.e. debt-to-equity ratio) was 8.08 and the average internal debt-to-equity ratio was 3.96. The latter implies that the internal debt is almost four times bigger than the equity. Ruf and Schindler (2012) calculated safe-harbour ratio of internal debt-to-equity ratio in EU countries in 2008 which was 3.4:1.⁷³ It implies that any interest expenses on internal debt exceeding the safe-harbour cut-off are not tax deductible. In this case, Microsoft Norge AS exceeds the harbour by 0.56. Due to the unavailability data on the interest rate that Microsoft Norge AS pays for the internal debt, net internal debt tax shield cannot be calculated. However the internal debt tax shield for the period is NOK 347.6 million.⁷⁴

Since most of the financing comes from debt, especially short term debt, a closer look to the assets is necessary to see how the debt is used in the subsidiary. Figure 7.3. shows that Microsoft Norge AS is using a moderate approach in its financing as the current assets are financed by short-term debt and fixed assets are financed by long-term debt (Brigham and Ehrhardt, 2014).

⁷³ Calculation is based on Dourado and de la Feria (2008, table 1)

⁷⁴ Calculated using tax rate of 28% for 2009-2013 and 27% for 2014

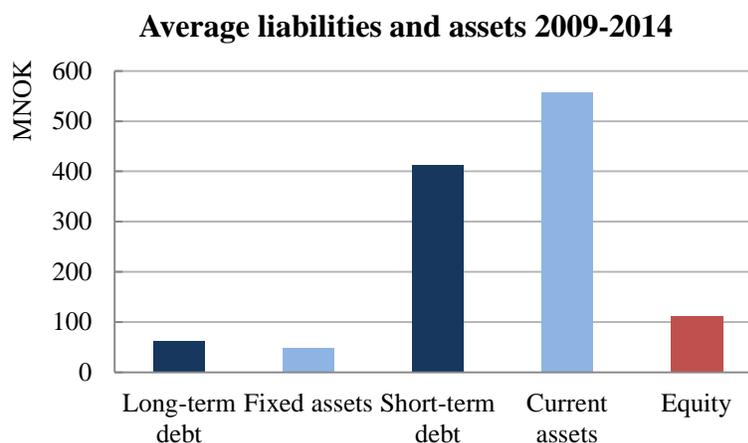


Figure 7.3. Average liabilities and assets of Microsoft Norge AS 2009-2014

7.2.6. Interest income and expenses.

Even though Microsoft Norge AS mentions the use of internal debt, the information available is very limited (see part 7.2.5). From the available information, table 6.4 summarises the interest received and paid by Microsoft Norge AS for period 2010-2014.

Year	2010	2011	2012	2013	2014
Receivables from MS Global Finance (IE)*	0	0	0	426,509,000	529,714,000
Interest income from MS Global Finance	7,790,694	0	0	6,245,906	7,790,694
Interest rate from MS Global Finance	-	-	-	1.46 %	1.57 %
Receivables from Microsoft Corp. (US)*	425,070,752	528,233,000	343,309,000	84,498,000	52,306,000
Interest income from Microsoft Corp (US)	0	9,836,000	8 893 000	0	0
Interest rate received from Microsoft Corp.	0.00 %	1.86 %	2.59 %	0.00 %	0.00 %
External debt	255,391,393	255,391,393	255,391,393	255,391,393	319,512,858
Other interest expenses**	235,299	285,188	728,474	91,677	112,280
Interest rate paid for external debt	0,09 %	0,11 %	0,29 %	0,04 %	0,04 %
Internal debt	223,029,506	291,271,062	28,103,515	71,317,487	327,384,447
Interest expenses to related company	0	0	0	0	0

* For the purpose of the analysis, receivables are treated as loan given by Microsoft Norge AS, i.e. internal debt.

** Assumed to be paid to external lender

Table 7.4. Interest income and payment by Microsoft Norge AS 2010-2014

The incomplete data make it difficult to make any conclusion on whether Microsoft Norge AS uses interest payment to reduce taxable income in Norway by allocating internal debt in this subsidiary. Microsoft Norge AS received internal debt from MS Global Finance Ltd. (before September 2001, it was known as Microsoft Round Island Two), a financial entity in Ireland

owned by Microsoft Round Island One. The internal debt was booked for year 2013 and 2014. However, in 2010 there was interest income from internal debt that did not show up in the balance sheet. This is puzzling as it raises question on what this money for. In the opposite, even though Microsoft Norge AS received internal debt from Microsoft Corp. in 2010-2014, the interest income was booked only in 2011 and 2012. Without any further detail information, as said, it is not easy to explain what happened.

Even though there is internal debt, there is no information about interest expenses related to this debt. The annual reports do not disclose this expenses in their notes. This is inconsistent with their explicit statement about the use of internal debt within the subsidiary.

Based on the information available it is difficult to know or conclude how Microsoft Corp. use Microsoft Norge AS in terms of debt shifting. The fact that the interest income in this subsidiary is higher than the interest expenses leads to a speculation that it is used to channel the money from Microsoft in the United States to Norway, as the tax rate in Norway is lower than in the United States. However, it does not make sense if MS Global Finance Ltd. wants to move its profit to Norway through interest payment. For the first reason, Irish tax rate is much lower compared to Norwegian. For the second, MS Global Finance Ltd. is a financial entity that has a function to finance other subsidiaries and not another way around.

7.2.7. Sub conclusion

Microsoft Norge AS is mainly used by Microsoft to support the partners in Norway. Even though some of these partners are developing software using Microsoft platform, the firm claims that there is no value-added activities in Norway. As a result, there is no sales revenue booked in Norway as the goods sold is directly from Ireland and Microsoft Norge AS' revenue is the six percent commission received from MIOL based on total sales in Norwegian market. This practice is legal per-today based on the residence-based tax regulation. The sales revenue in Norwegian market is booked in Ireland (MIR) via Luxembourg (Microsoft Luxembourg S.A.R.L) to avoid Irish income tax.

Microsoft books the cost for the activities done for MIOL by Microsoft Norge AS in Norway and finances this subsidiary by debt (debt-to-asset ratio in 2014 is 19.80). This reduces the tax burden for the operation in Norway. The findings regarding the use of debt shifting to minimise the tax liabilities is unsure due to the limited information.

7.3. Microsoft Development Center Norway AS

The company (herein referred to as “MDCN AS”) was established on July 16, 1997 in Oslo. The business of MDCN AS is to conduct R&D for Microsoft against compensation. It is a wholly owned subsidiary of Microsoft through Microsoft International Holdings B.V.⁷⁵ Based on Orbis database, Microsoft International Holdings B.V. is the global ultimate owner (GuO) of MDCN AS, and there is no information about its connection with Microsoft Corp. Financial information is also not available. This leads to a suspicion that Microsoft International Holdings B.V. is a shell company registered in one of the tax haven state in the United States.

7.3.1. Operation analysis

MDCN AS is and will continue to be financed by Microsoft. In addition, MDCN AS is a parent company in the Group with subsidiaries as shown in the figure 7.1.

MDCN AS was known as FAST Search & Transfer AS before it was acquired by Microsoft in April 2008 for \$1.3 billion in cash.⁷⁶ The acquisition was done through MACS Holdings Limited, Microsoft's wholly owned subsidiary registered in Bermuda.⁷⁷ After acquiring 97.37 percent of all the FAST shares outstanding, MACS Holdings Limited initiated acquisition of the remaining shares. MACS Holdings Limited also intended to delist FAST share from the Oslo Stock Exchange after the acquisition completed (Oslo Børs, 2008). From January 1, 2009, FAST sold all the IP for \$266 million to Proclarity International B.V., a company owned by Microsoft. This transaction exempted MDCN AS from preparing the consolidated financial report.⁷⁸ Based on Orbis database, Proclarity International B.V. is no longer active as it has changed its name to Microsoft International Holdings B.V., an industrial company registered in the Netherlands, but operates as a full service holding firm.⁷⁹ The name of this Dutch registered holding company is the same as the GuO of MDCN AS. It causes confusion in analysing MDCN AS' real owner.

Even though MDCN AS is located and registered in Norway, the revenue is mainly from sales of service activities in North-America (97%). This can be done mainly through FAST-USA.

⁷⁵ Financial report from *Bronnøysundregistrene*, 2013

⁷⁶ United States. Microsoft Corporation (2008)

⁷⁷ Financial report from *Bronnøysundregistrene*, 2007

⁷⁸ Financial report from *Bronnøysundregistrene*, 2009

⁷⁹ Orbis database

MDCN AS	2010	2011	2012	2013	Average in percentage
Norway	9,000,000	4,256,000	9,171,000	5,171,000	3 %
North-America	210,726,000	218,247,000	247,502,000	330,450,000	97 %
Total revenue	219,726,000	222,503,000	256,673,000	335,621,000	100%

Table 7.5. Revenue based on geographic area.⁸⁰

By moving the revenue from the activities in the United States to Norway, Microsoft can reduce its tax liabilities as the tax rate in Norway is lower.

7.3.2. Commission agreement

MDCN AS entered a new agreement with Microsoft in 2008. As a result, from July in the same year, MDCN AS would no longer perform its own R&D activities and became subcontractor of the R&D activities for Microsoft. As a benefit, MDCN AS received a revenue of "sales of service" and would no longer have R&D cost; this would reduce the cost. From June until July 2008, there was no activation of intangible assets and NOK 34 million in R&D was charged as an expense. It reduced the taxable income substantially and saved the tax payment for NOK 9.52 million.⁸¹ The net effect was profit shifting from Microsoft in the United States to Norway.

7.3.3. Cost Analysis

As table 7.6 shows, the average total cost for 2010-2013 was 111 percent. It implies that MDCN AS run deficit in its operation. However, Microsoft keeps the subsidiary. One reason might be that Microsoft uses MDCN AS to shift the revenue from the operation in the United States to Norway (as shown in table 7.5) to reduce the income tax and at the same time to get the tax revenue due to the loss.

MDCN AS	Average cost (NOK)	Percentage
Revenue	256,103,000	100 %
Salary	218,843,250	85 %
Other operating cost	64,970,500	30 %
Total costs	283,813,750	111 %

Table 7.6. Operating cost of MDCN AS 2010-2013.⁸²

⁸⁰ Financial report from *Bronnøysundregistrene*

⁸¹ NOK 34 million * 0.28 = NOK 9.52 million

⁸² Financial report from *Bronnøysundregistrene*

7.3.4. Tax payments

As mentioned in part 7.2.1, most of MDCN AS comes from North-America. By registering the revenue in Norway, Microsoft reduce the taxes by seven percentage points.⁸³ As seen in the table 7.7, effective tax rate for 2010 was 166.28 percent. However, it had decreased and in 2013 it was even less than zero (i.e. -15.27%). Clear conclusion cannot be made based on this data, but it seems that shifting the revenue from North-America to Norway combined with high operating cost in Norway is profitable for Microsoft in reducing the tax liabilities, i.e. through lower effective tax rate.

MDCN AS	2010	2011	2012	2013
Income before tax	-51,914,000	255,937,000	50,728,000	-111,011,000
Tax	86,322,000	79,415,000	8,252,000	-16,954,000
Effective tax rate	166.28 %	31.03 %	16.27 %	-15.27 %

Table 7.7. Effective tax rate 2010-2013

7.3.5. Thin Capitalisation

MDCN AS provides limited information about their debt in the annual report. In year 2009, the internal debt was NOK 1,969 million, consisted of NOK 5.553 million long-term internal debt and NOK 1,963 million short-term internal debt. The internal long-term debt was received from Fast Search & Transfer do Brazil S.A. and supposed to be paid in several years.

It is expected that MDCN AS will be loaded with internal debt from related companies located in the countries with lower tax rate. However, in 2009, it was only NOK 1.118 million internal debt which came from Microsoft Global Finance Ltd, a financial entity previously named Round Island Two Limited - a holding company registered in Ireland. Microsoft Global Finance Ltd. is exempted from filling its own account. It is owned by Microsoft Round Island One (Ireland) that again is owned by RI Holdings (Bermuda) that is wholly owned by Microsoft (United States). From year 2010 until 2013, the total debt decreased (average debt is NOK 368.3 million) and there was barely any internal debt reported.

7.3.6. Interest income and expenses

Internal debt and investment in its subsidiaries generate interest income as shown in the table 7.8. Investment in the subsidiaries is the major financial fixed assets owned by MDCN AS. It seems

⁸³ 35% - 28% = 7%

that Microsoft tries to keep the assets outside the United States by investing the profits in the subsidiaries both in Norway and outside Norway through MDCN AS.

MDCN AS	2010	2011	2012	2013
Interest income from group companies	28,593,000	43,505,000	32,779,000	27,480,000
Other interest income	330,000	201,000	104,000	32,000
Received group contributions from subsidiaries	7,315,000	276,663,000	0	0
Sum group related activities	36,238,000	320,369,000	32,883,000	27,512,000

Table 7.8. Interest income and expenses of MDCN AS 2010-2013.

7.3.7. Sub conclusion

It seems that Microsoft uses MDCN AS mainly to shift the revenue from North America to Norway in order to avoid high tax rate in the United States. The acquisition itself was a way in using the foreign cash that was held in MACS Holdings Limited in Bermuda. Despite the revenue and interest income receives, MDCN AS run deficit for the period of 2010-2013. This combination and the limitation of data available make it difficult to make a justifiable conclusion. The speculation can be that Microsoft uses MDCN AS for the R&D purpose and finances the cost using the shifted revenue from the North American market.

7.4. Microsoft Holdings Norge AS

It is a holding company wholly owned by Microsoft that operates from the same address as Microsoft Norge AS. The company was incorporated in June 2006 with a purpose to oversee ownership, including purchase and sale of Microsoft domain rights in Norway and other related activities. Since the establishment, there has been no employee and only one person on the Board.⁸⁴ The available annual report in year 2009-2014 stated only costs and no revenue, i.e. negative income. It also implies that there was no tax liabilities (shown in table 7.9).

MICROSOFT HOLDINGS NORGE AS	2009	2010	2011	2012	2013	2014
Income before tax	-36,819	-18,750	-31,296	-28,306	-22,645	-12,500
Tax	0	0	0	0	0	0
Effective tax rate	0 %	0 %	0 %	0 %	0 %	0 %

Table 7.9. Revenue and tax payment of Microsoft Holdings Norge AS.

Since 2009, the amount of equity had been reduced and hit a negative state from 2011 until 2014, where the debt-to-equity ratio was -1, i.e. debt financing replaced the equity completely.

⁸⁴ Financial report from *Bronnøysundregistrene*, 2013

There was no long term debt. However, the short term debt consisted of external and internal debt, in which the internal debt increased substantially especially from Microsoft Norge AS.

MICROSOFT HOLDINGS NORGE AS	2009	2010	2011	2012	2013	2014
Long term debt	0	0	0	0	0	0
Short term debt	15,480	1,072	30,318	59,231	82,323	95,247
Other creditors (external debt)	n.a	n.a	0	28,306	22,645	22,645
Microsoft Global Finance Ltd (group company)	n.a	n.a	1,714	2,321	2,768	3,192
Microsoft Norge AS (group company)	n.a	n.a	28,604	28,604	56,910	69,410
Equity	27,912	5,613	-30,318	-59,231	-82,323	-95,247
Debt-to-equity ratio	0.55	0.19	-1.00	-1.00	-1.00	-1.00

Table 7.10. Debt of Microsoft Holdings Norge AS

7.5. Microsoft Domains Norge AS

It is a wholly owned subsidiary by Microsoft with the same function as Microsoft Holdings Norge AS. It was incorporated on March 1, 2007 and there has been no employee.⁸⁵ Like Microsoft Holdings Norge AS, this company also has negative income and debt (i.e. negative equity) and zero effective tax rate.

MICROSOFT DOMAINS NORGE AS	2009	2010	2011	2012	2013	2014
Income before tax	-34,231	-18,750	-31,296	-28,306	-22,645	-12,500
Tax	0	0	0	0	0	0
Effective tax rate	0 %	0 %	0 %	0 %	0 %	0 %

Table 7.11. Revenue and tax payment of Microsoft Domains Norge AS.

The financing structure for this subsidiary has moved to debt from 2012, and hit the debt-to-equity ratio of -1 in 2014. The debt was only short term debt, but there was no information whether this debt was internal or external one.

MICROSOFT DOMAINS NORGE AS	2009	2010	2011	2012	2013	2014
Long term debt	0	0	0	0	0	0
Short term debt	0	0	0	4733	5,866	47,992
Equity	74,300	53,200	17,959	-12,847	-35,492	-47,992
Debt-to-equity ratio	0.00	0.00	0.00	-0.37	-0.17	-1.00

Table 7.12. Debt Microsoft Domains Norge AS

⁸⁵ Financial report from *Bronnøysundregistrene*, 2012

Sub conclusion

The analysis finds that both Microsoft Holdings Norge AS and Microsoft Domains Norge AS book only cost and do not have any revenue; it results in zero tax liabilities. Per 2014, the financing structure consisted only debt. It seems that Microsoft combines the allocation of operation cost in Norway and high leverage to these two subsidiaries for the purpose of tax minimisation, even though the amount involved is quite small. However, it is not clear how these two subsidiaries related to other Microsoft subsidiaries for tax minimisation purpose. Possible future development can lead to the utilisation of these two subsidiaries for cost allocation in order to capture the tax revenue in Norway.

8. TAX REGULATIONS AND FUTURE DEVELOPMENT

There are tax regulations and actions to mitigate aggressive tax planning and tax avoidance. The aim is to align the tax paid with the real economic activities reducing the tax loss suffered by tax authorities in the countries where the economic activities are done.

The relevant tax regulations and actions, especially for multinational companies, will be discussed in this chapter.

8.1. Debt shifting and thin capitalisation regulations.

8.1.1. *Thin capitalisation rules*

The way a company is capitalised affects the amount of profit reported, and thus the tax it pays. Therefore, rules limiting the amount of interest that can be deducted in calculation of a company's profit for tax purpose are introduced. The purpose is to impede profit shifting across border through excessive debt (OECD, 2012).

There are two approaches in TC rules: (a) using a maximum amount of debt on which deductible interest payments are available, and (b) using a maximum amount of interest that may be deducted by reference to the ratio of interest (paid or payable) to another variable (OECD, 2012). Ruf and Schindler (2012) explain further that the TC rules can be applied in a specific and non-specific way. Specific TC rules directly tackle the use of internal debt, while non-specific TC rules do not only focus on internal debt, but confine the use of debt in general.

The example of non-specific TC rules is earning-stripping rules restricting the deductibility of domestic interest expenses established in 1989 in the United States. The rules deny deductibility of "excessive" interest expenses exceeding 50 percent of a company's earnings before interest, taxes, depreciations and amortisation (EBITDA) if debt-to-asset ratio is above a safe-harbour⁸⁶ of 1.5:1, and if excessive interest is paid to a related party outside the scope of the U.S. income tax. Germany extended these rules in 2008, and since then has denied the deductibility of "excessive interest expenses" (regardless of whether paid on internal or on external debt) exceeding 30 percent of a company's EBITDA from the domestic tax base. Unlike the earning-

⁸⁶ Safe-harbour ratio means that TC rules do not apply as the defined ration (e.g. debt-to-asset ratio) remains within the safe-harbour ratio. If the safe harbour ration is exceeded, TC rules deny the interest deductibility for excessive debt from shareholders with significant influence on management, i.e. shareholders having direct or indirect voting right amount to 25% or 50% depending on the regulation in each country.

stripping rules, Germany dropped the use of safe-harbour. In 2008, the average safe-harbour ratio of internal debt-to-equity in EU countries was 3.4:1 (Ruf and Schindler, 2012).

From January 1, 2014, Norway has introduced the TC rules that limit the intra-group deduction to an amount equal to 30 percent of tax-adjusted EBITDA as discussed in part 3.6. The TC rules replaced the arm's length principle that was based on a case-by-case assessment. By using TC rules, the limitations encountered in the arm's length principle due to limited information and administrative cost can be reduced (Ruf and Schindler, 2012).

The application of TC rules is expected to limit international debt shifting and decrease the debt-to-asset ratio of domestic affiliates of multinationals. However, these benefits come with a cost of reduction in domestic investment, because TC rules increase the domestic cost of capital and negatively affect a country's position in competing internationally for mobile capital. It implies that the decrease in debt-to-asset ratio will increase the tax revenue, but the reduced investment will eventually have a negative effect on the tax revenue (Ruf and Schindler, 2012).

8.1.2. Controlled-Foreign-Company Rules

A potential alternative is CFC rules mentioned by Ruf and Schindler (2012). The rules prevent the application of tax-exemption rule as "passive income" is immediately being included in the corporate tax base of the multinational's headquarters if the income is generated from non-productive activities and the multinational has an ownership of at least 50 percent. Thus, if CFC rules are applicable, passive income will be taxed at headquarter corporate tax rate regardless the location of the income is effectively accrued.

Further, the same authors mention that CFC rules do not adversely affect a country's position when competing internationally for mobile capital as the rules only affect the multinationals headquartered in the country where the CFC rules apply. However, they will harm the competitiveness of domestic multinationals relative to foreign competitors.

In the United States, similar rule is called "Subpart F". However, the issuance of Check-the-box tax regulations and CFC Look-Through Rule has reduced the effectiveness of the Subpart F. (Levin and Coburn, 2012).

8.1.3. Allowance for Corporate Equity and Comprehensive Business Income Tax.

Traditional corporate income tax systems give tax advantage to debt over equity resulting in problems related to the preference of using debt. Therefore, there is a consideration in eliminating

the tax advantage of debt by using a fundamental tax reform. Two options are available: allowance for corporate equity (ACE) recommended by Institute for Fiscal Studies (1991) or enforce a comprehensive business income tax (CBIT) suggested by the U.S. Department of Treasury (1992) (Ruf and Schindler, 2012).

Ruf and Schindler (2012) explain that ACE system alters interest deductibility of debt with a notional deduction for equity employed equivalent to the "risk-free" rate of return. It taxes only economic ("supernormal") profits and leaves the normal rate of return on capital free of tax at firm level. ACE does not distort marginal investment, but when tax revenue effects and capital mobility are taken into account, the advantage of ACE becomes unclear. The use of ACE requires an increase in corporate tax rate or other taxes because ACE reduces the corporate tax base. For this reason, CBIT works better. CBIT denies tax deductibility of any financing cost, so that both the return on equity and the interest on debt are taxed at firm level at the corporate tax rate. This, unfortunately, will distort the marginal investment, but, on welfare grounds, CBIT enlarges the corporate tax base and allows for cutting taxes on other accounts. If the changes are done in the corporate tax rate, they can lead to lower effective average tax rate in the country where the CBIT is applied. This will attract multinationals, discrete investment and shifted profits. Both ACE and CBIT should decrease firms' leverage and eliminate debt shifting, as replacing equity by debt or shifting interest income to low-taxed affiliates does not reduce tax payments. Belgium and Italy have introduced the ACE system and showed a decrease in leverage by about three to five percent on median.

8.1.4. Effect of debt shifting and thin capitalisation regulations

The introduction of TC rules in Norway will have significant effect on multinationals both domestic and internationals operating in Norway. The rules will reduce firm's leverage in general and internal leverage in particular. The Norwegian tax authorities will be able to decide the eligibility for tax deduction on interest expenses of a firm faster and in a more simple way than using the case-to-case assessment. For Microsoft Norge AS, the limited data on the interest expenses makes it difficult to justify the direct effect of the TC rules applied. It is expected that Microsoft and other multinationals operating in Norway will reduce their internal leverage to avoid the additional cost as a consequence of exceeding the threshold.

The Subpart F should have had an effect on Microsoft tax liabilities for the intra-group transaction, but due to the possibility to form disregarded-CFC subsidiaries, the function of

Subpart F is neutralised. In this case, the U.S. government should find a solution in solving the problem.

8.2. Profit shifting regulations

Compared to TC rules, regulations about transfer pricing have its hard time especially in terms of the guidance for the arm's length principle. This is due to the development of the economy, product types and business models that are steps forward compared to the existing regulations. This gap creates a situation where multinationals, especially the ones with focus on technology, can shift their profits and avoid taxes "legally".

8.2.1. BEPS (*Base Erosion and Profit Shifting*)

BEPS refers to tax planning that exploits gaps in tax rules to artificially shift profits to low or no-tax locations where there is little or no economic activity, resulting in little or no corporate tax being paid. The gaps are the result of the inability of national tax laws to keep up with global corporations, movement of capital and the development of the digital economy (OECD, 2012).

To address this challenge, 15 specific actions are being developed in the context of the OECD to equip government with needed domestic and international instruments. The first of measures and reports were launched in September 2014 and were expected to be completed in 2015. In February 2015, OECD and G20 countries agreed on three key elements to enable the implementation of the BEPS Project. This will give countries the tool to make sure that profits are taxed in the location where economic activities generating the profits are performed and where the value is created (OECD, 2012).

One of the central motivations here is the desire to align a multinational company's profits with value creating activities. The focus is the intangible assets that often are a value key driver. From a legal perspective, the intangible assets can be owned anywhere. However, the flow of income to the legal owner resided in a low-tax jurisdiction is considered inappropriate in general. Therefore, OECD is trying to find a certain category in developing protection and exploitation of intangibles. This process aims to reduce and prevent the profit shifting to the control party located in low-tax jurisdiction through transfer pricing (Dykes, 2014). For Microsoft, this will affect the business strategies that they have at the moment as they will no longer able to shift the profits to the tax havens. Most of the profits will be forced to be booked in the United States and other location where the R&D and other value creating activities are performed.

There are still some challenges for OECD in forming the transfer pricing guidance. However, the combination of increased transparency in terms of the alignment of profits and operational substance, combined with OECD guidance and increased tax authority's awareness will put a pressure on the strategies that multinationals use for holding and exploiting their IPs (PWC, 2015a). Microsoft has been under the investigation of IRS on the issue of transfer pricing. Depending in the result of this investigation, they might be forced to change their cost sharing agreement and do the transactions between its subsidiaries using price that follows the arm's length principle.

8.2.2. The Foreign Account Tax Compliance Act (FATCA)

FATCA was enacted in March, 2010 by Congress to target tax non-compliance by U.S. taxpayers using foreign accounts. It focuses on reporting by U.S. taxpayers about certain foreign financial account and offshore assets (U.S. IRS, 2015a). It requires foreign financial institutions (FFIs) to report to the IRS information about financial accounts held by U.S taxpayers, or by foreign entities in which U.S. taxpayers hold a substantial ownership interest (U.S. Department of The Treasury, 2014). If the FFIs do not enter into an agreement with the U.S tax authorities to provide such information, payment with American source will be deducted by 30 percent of U.S. tax (Skatteetaten, n.d.).

Norway and the United States signed the agreement on improved international observance and the tax liability and the implementation of FATCA on April 15, 2013 and it has been applied since July 1, 2014. It implies that Norwegian financial institutions have to identify U.S. account holders and report account information to the Norwegian tax authorities to be sent forward to the U.S. tax authorities (Skatteetaten, n.d.). Norwegian institutions covered by the rules must register with the U.S. tax authorities (IRS) before January 1, 2015 to be awarded a global identification number (GIIN) and be listed on the list of participating financial institutions (Finans Norge, 2014).

Internationally, the focus on tax evasion and efforts to prevent this practise is increasing. While FATCA only applies to Americans, there are also international agreement on automatic exchange of tax information within OECD, EU and G20 (Finans Norge, 2014). In October 2014, the Council of the EU (ECOFIN) reached an agreement on a revised directive in the field of taxation that expands the scope of the automatic exchange of tax information including interest, dividends and other income as well as account balances and sales from financial assets. This

"European FATCA" will be effective per January 1, 2016, with the first exchange of information will be in 2017 (except for Austria). The Luxembourg government has decided to commit to this directive. The question will be on the effects of this reform for the taxation in Luxembourg (KPMG, 2014). Formalisation of the tax clearance process will create extra cost for taxpayers to compensate the process done by tax authorities. Regarding transfer pricing, the article 56 of the Luxembourg Income Tax Law will be amended in order to comply more explicitly with the arm's length principle that will be applied for both resident and non-resident parties. Further, companies involved in intra-group transactions will be required to provide detailed general information and documentation on transfer pricing. If the transactions do not meet the arm's length principle, the profits generated will be determined in accordance with normal market conditions and taxed accordingly (EY, 2014).

Bermuda as a tax haven signed IGA Model 2, the alternative agreement on implementation of FATCA in December 2013 (PWC, 2015b). However, if the Bermuda holding company is like the one in Cayman Islands which is not an FFI, FATCA will have no effect on this entity (Conyers Dill and Pearman, 2015). It implies that Microsoft's holding companies registered in Bermuda will be non-financial foreign entities (NFFEs) for the purpose of FATCA. They are not subject to registration or reporting requirements, but they will be required to self-certify their status to financial institutions and other withholding agents with whom they maintain accounts to avoid FATCA withholding. However, in general, FATCA will increase the transparency of the assets owned by U.S. multinationals, including Microsoft. This will give easier access for the U.S. tax authorities to put pressure on the U.S. multinationals to comply with the U.S. tax regulations.

8.3. Tax transparency

8.3.1. Tax Transparency Package

Linked to the agenda to tackle tax fraud and evasion, the European Commission has a priority to fight against corporate tax avoidance where the important element is tax transparency. At the moment, the level of this transparency is low. It leads to the practice of tax avoidance unchallenged. The lack of information on the impact of one country's tax regimes on the others is often unknown, and therefore, the possible loopholes in national tax regimes are often unnoticed.

To increase the tax transparency, on March 18, 2015, the Commission introduced Tax Transparency Package with key element of automatic exchange of information between Member

States of their tax rulings. A tax ruling is a confirmation given by tax authorities to taxpayers on how their tax will be calculated. Rulings are not problematic, and granting them is not illegal or against EU law, but problems can arise if the tax rulings facilitate or even incentivise aggressive tax planning.

The proposal requires national tax authorities to send a short report to all other Member States on all advance cross-border tax rulings and advance transfer pricing arrangements that they have issued. This should be done in every three months. There are other tax initiatives: assessing the feasibility of new transparency requirements for companies, such as the public disclosure of certain tax information by multinationals; reviewing the Code of Conduct on Business Taxation to make it more effective and transparent tax competition; repealing the Savings Tax directive to prevent any legal uncertainty for tax authorities and businesses, and; quantifying the scale of tax avoidance and evasion to help in making better policy against it (European Commission, n.d.a).

8.3.2. Country-by-country reporting.

Multinational companies are able to exploit loopholes in domestic and international tax laws to shift profits from one country to another, often using tax haven, with a goal to reduce or even eliminating tax liabilities. It can be done due to the lack of clear and transparent information about the operation of these multinationals. They report profits, revenue, taxes paid, number of employees and subsidiaries, but this is done in a consolidated level, so that it is almost impossible to understand their operation in a specific country (Financial Transparency Coalition, n.d.).

Country-by-country reporting (CBCR) makes multinational corporations break down their results for each country. This is essential for transparency requirement so that citizens in each country know what the multinational corporations and their affiliates are doing in the country. CBCR requires each multinational corporations to provide information about the name of each country it operates, the name, performance and tax charge of all its subsidiaries and affiliates, details of the cost and net book value of its fixed assets and details on its gross and net assets in each country. As most countries use International Accounting Standards, it is a cost-effective route to create a change in global corporate transparency with benefits that are beyond the tax purpose. CBCR will make transfer price manipulation, if exists, clear.

As mentioned in chapter 6 and 7, the limitation of financial information in each country where Microsoft operates makes it difficult to perform the analysis needed to show the proof of aggressive tax planning and tax avoidance. The subsidiaries, especially the ones located in the tax

havens are granted for exemption in submitting their financial report. In addition, the tax havens protect their secrecy in terms of ownership and assets. Without any information of these subsidiaries, it would be impossible to know about the subsidiaries' activities and compliance. In terms of tax avoidance, it is impossible to quantify the tax revenue loss for countries affected. Microsoft does not provide any financial information in their operation centres, the places where the profits are concentrated. Relying only on the consolidated annual report they present would be impossible to know what they do exactly in these operation centres. The enforcement of CBCR will reveal the true activities of these subsidiaries.

8.4. Common Consolidated Corporate Tax Base

The Common Consolidated Corporate Tax Base (CCCTB) is a single set of rules that companies operating within the EU can use to calculate their taxable profit. The system was proposed by the European Commission on March 16, 2011 (European Commission, n.d.b). CCCTB is calculated using apportion mechanism with a three-factor formula: labour (consisting of equal weighted payroll and number for employees), assets (without intangibles and financial assets and inventory) and sales (measured "at destination"). Focusing on sales, it is mentioned that "sales by origin" could be easily manipulated because the place of shipment to third parties is easy to control. Similar risk is found in the "sales by destination". However, tax planning in this type of sales has less possibilities as companies cannot control the location of consumers as they can with the location of assets and employees (European Commission, 2007).

The concept of sales by destination is currently not in use for allocating taxing rights on corporate income among various jurisdictions. However, it can be argued that "demand" is an income generating factor since companies make profit only in so far as their output is sold. The role of a sales factor in the formula is to represent the demand side in the generation of income, and for that, it has to be measured at destination. The location is determined by the place where the sales to the third parties occur, i.e. final place of delivery.

Norway is a member of Single Market through EEA-agreement, but it is not an EU member. CCCTB limits the Member States within EU. This limitation of the territorial scope is described as "CCCTB water's edge" (European Commission, 2005). It implies that subsidiaries of Norwegian multinationals located within EU will be able to calculate their income on the basis of CCCTB rules, but subsidiaries of European multinationals located in Norway cannot do the same and will base the calculation on separate accounting approach (European Commission, 2011).

Thus, the CCCTB will not affect Norway directly unless special measures are taken to make it applicable, for example, through an agreement between EU and Norway (Hjort, J.B., Isaksen, K. and Lystad, R.S. in Lang et al, 2010).

If Norway enters such agreement with EU for the application of CCCTB, the apportionment approach will affect the tax calculation for Microsoft Norge AS as the sales revenue in Norwegian market will be taxed in Norway following the "sales by destination" factor. As mentioned in the master thesis by Olsen and Høgalmen (2013), based on their discussion with Tax Justice Network, other technological multinationals doing sales through internet like Apple Inc. will also be affected. So far, their sales are taxed (if it is taxed at all) on the basis of "sales by origin" where the country of origin is often tax haven such as Ireland.

8.5. The recent actions

In October 2014, The Irish government decided to close one of the world's best-known corporate tax loopholes "Double Irish". Ireland will change its tax code and require all Irish-registered companies to be tax residents in Ireland (Schechner, 2014). From January 2015, Irish-registered firms will automatically be deemed to be tax resident in Ireland, bringing Irish law in line with U.S. and British rules. Companies already incorporated in Ireland will have until 2020 to comply with the new rules (Reuters, 2014). The decision came as a result of heavy pressure from other governments and the EU (Schechner, 2014). This change will definitely affect Microsoft as RI Holdings will have to be registered in Ireland for tax purpose and it will no longer be able to be used to channel the profits to Bermuda.

While EU is still pursuing new rules to end tax avoidance by multinational companies, it is further mentioned that Ireland would introduce measures to persuade international corporations to stay in Ireland and that it would not change its low 12.5 percent corporate tax rate. A patent box used by the U.K. and the Netherlands was mentioned as a possible alternative (Schechner, 2014).

9. CONCLUSION

The thesis has explained various tax minimisation strategies, i.e. deferral, transfer pricing, check-the-box, thin capitalisation, advance company structure and the use of tax havens, that multinational companies use, both internationally and within Norway. The tax regulations and recent actions to prevent and reduce aggressive tax planning and tax avoidance and how they will affect multinational (in particular technological) companies in the United States and in Norway have also been discussed.

By analysing the relevant literature, there is empirical evidence that multinational companies use the aforementioned strategies for tax minimisation purpose. Deferral is used by many U.S. multinationals to avoid U.S. withholding tax. Transfer pricing and check-the-box go hand in hand in order to transfer IPs from the United States to the tax havens. Thin capitalisation is utilised to capture the positive tax saving due to tax rate differences. By using advanced company structure and tax havens, multinational corporations can shield the tax minimisation practice from the tax authority and from the public. This is due to the lack of transparency and the secrecy protection that is given by the tax havens.

Analysis of Microsoft international operation has shown that they deferred around 90 percent of the foreign income in the operation centres in tax havens, avoiding U.S. withholding tax. Transfer pricing was used to shift profits to the IP-Holding entities in Ireland, Puerto Rico and Singapore through cost sharing agreement and "buy-in" payment. In this process, licence payment and check-the-box were used to transfer profit without paying U.S. tax for passive income. Advanced corporate structure with the use of shell and holding company in the tax havens (e.g. Double Irish Dutch sandwich) was used to shift the profits to Bermuda and Nevada. Regarding thin capitalisation, it was difficult to show its utilisation for tax minimisation purpose due to unavailable information.

Microsoft operation in Norway seemed to be used for tax minimisation purpose by allocating operating costs in Norway and booking only commission revenue that is based on the sales in Norway, instead of total sales in Norway itself. It might also be that Norwegian subsidiaries is used to transfer revenue from North America, avoiding U.S. tax rate.

Reviewing the corporate income and tax regulations, fighting against aggressive tax planning is the focus of international policy makers and national governments. More countries have applied the thin capitalisation regulations, including Norway. ACE- and CBIT-systems are

intended to eliminate the incentive of using debt. BEPS Project and FATCA are focusing in preventing profit shifting. Transparency is an important criterion in the fight against the tax avoidance. Therefore Country-by-Country Reporting and Tax Transparency Package are important in increasing the transparency of multinationals activity in each country the multinationals are operating in. It is proposed that the apportion mechanism used in CCCBT, particularly the one regarding factor formula "sales by destination", can have a real effect on curbing the tax avoidance by multinational technological companies.

Development and the effort to tackle tax avoidance combined with the pressure from governments and international organisations such as EU and OECD are met positively by some tax havens, e.g. Ireland and Luxembourg. However, there will still be other strategies that a country can offer to multinationals to attract them to invest in the country. The question is whether tax regulations are able to prevent any upcoming challenges in tax minimisation effort done by multinationals.

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APPENDICES
Appendix 1.

Tax haven and related terms - designations by various institutions (NOU 2009:10, p.19-21)

	OECD 2000	IMF 2008	US Senate	Tax Justice Network 2007
<i>The Caribbean and Americas</i>				
Anguilla	x	x	x	x
Antigua and Barbuda	x	x	x	x
Aruba	x	x	x	x
Bahamas	x	x	x	x
Barbados	x	x	x	x
Belize	x	x	x	x
Bermuda		x	x	x
British Virgin Islands	x	x	x	x
Cayman Islands	x	x	x	x
Costa Rica		x	x	x
Dominica	x	x	x	x
Grenada	x	x	x	x
Montserrat	x	x		x
Netherlands Antilles	x	x	x	x
New York				x
Panama	x	x	x	x
St Lucia	x	x	x	x
St Kitts & Nevis	x	x	x	x
St Vincent and the Grenadines	x	x	x	x
Turks and Caicos Islands	x	x	x	x
Uruguay				x
US Virgin Islands	x			x
<i>Africa</i>				
Liberia	x			x
Mauritius	x	x		x
Melilla (Spain)				x
Seychelles	x	x		x
São Tome é Principe				x
Somalia				x
South Africa				x
<i>Middle East and Asia</i>				

Bahrain	x	x		x
Dubai				x
Hong Kong		x	x	x
Malaysia (Labuan)		x		x
Lebanon		x		x
Macau		x		x
Singapore		x	x	x
Tel Aviv				x
Taipei				x
<i>Europe</i>				
Alderney	x		x	x
Andorra	x	x		x
Belgium				x
Campione d'Italia				x
London				x
Cyprus	x	x	x	x
Frankfurt				x
Gibraltar	x	x	x	x
Guernsey	x	x	x	x
Hungary				x
Iceland				x
Ireland		x		x
Ingushetia				x
Isle of Man	x	x	x	x
Jersey	x	x	x	x
Latvia			x	
Liechtenstein	x	x	x	x
Luxembourg		x	x	x
Madeira (Portugal)				x
Malta	x	x	x	x
Monaco	x	x		x
Netherlands				x
San Marino				
Sark	x		x	x
Switzerland		x	x	x
Trieste				x
Turkish Republic of Northern Cyprus				x
<i>Indian and Pacific Ocean</i>				
Cook Islands	x	x		x

Maldives				x
Marianas				x
Marshall Islands	x	x		x
Nauru	x	x	x	x
Niue	x	x		x
Palau		x		
Samoa	x	x	x	x
Tonga	x			x
Vanuatu	x	x	x	x
Total	40	46	35	72

Appendix 2.Subsidiaries in Norway.⁸⁷

No	Subsidiaries	Status	Type	Financial data	Owner	Country
1	Microsoft Norge AS	Active	IC	Yes	Microsoft Luxembourg International Mobile SARL	Norway
2	Microsoft Development Center Norway AS	Active	IC	Yes	Microsoft International Holdings B.V.	US
3	Microsoft Holdings Norge AS	Active	IC	Yes	Microsoft Corporation	Norway
4	Microsoft Domains Norge AS	Active	IC	Yes	Microsoft Corporation	Norway
5	Microsoft Corporation LTD	Active		No	Not disclosed	Norway
6	Microsoft Corporation	Active		No	Not disclosed	Norway
7	Microsoft Corporation	Active		No	Not disclosed	Norway
8	Microsoft Luxembourg International Mobile SARL	Active	IC	No	Not disclosed	Norway
9	Microsoft MSN Norge AS	Dissolved		-	-	-
10	Nordholmen Micro-soft	Active		No	Sole trader	Norway
11	Microsoft Subscription Centre	Dissolved		-	-	-
12	Microsoft Ireland Operations Ltd	Active	IC	No	Branch	Norway
13	Microsoft Advanced Network Users Society	Dissolved		-	-	-
14	Microsoft Server 2003 Geir Staele	Dissolved		-	-	-
15	Microsoft Global Resources	Active (branch)		No	Not disclosed	-
16	Microsoft technology User Group	Active		No	Not disclosed	Norway

⁸⁷ Orbis database

Appendix 3.

a. Revenue and tax payment of Microsoft Norge AS 2009-2014 (in NOK).

MSFT NORGE AS	2009	2010	2011	2012	2013	2014
Revenue from commission	588,762,974	600,751,442	556,220,288	595,973,879	626,494,225	503,670,742
Provision	6 %	6 %	6 %	6 %	6 %	6 %
Total sales	9,812,716,233	10,012,524,033	9,270,338,133	9,932,897,983	10,441,570,417	8,394,512,367
Other revenues	110,584,328	144,449,039	134,369,733	140,882,975	183,907,991	152,475,821
Total revenue	9,923,300,561	10,156,973,072	9,404,707,866	10,073,780,958	10,625,478,408	8,546,988,188
Operating costs	521,029,871	580,360,920	575,392,959	631,772,609	653,356,787	489,318,476
Net financial	38,246,946	27,266,517	9,865,322	8,454,487	6,481,319	8,217,229
Taxable income	9,440,517,636	9,603,878,669	8,839,180,229	9,450,462,836	9,978,602,940	8,065,886,941
Tax rate	28%	28%	28%	28%	28%	27%
Tax liabilities	2,643,344,938	2,689,086,027	2,474,970,464	2,646,129,594	2,794,008,823	2,177,789,474
Tax paid	66,645,820	59,520,415	43,200,163	38,919,041	50,934,278	51,299,021
Tax saving	2,576,699,118	2,629,565,612	2,431,770,301	2,607,210,553	2,743,074,545	2,126,490,453
Reduction in tax liabilities	97.48 %	97.79 %	98.25 %	98.53 %	98.18 %	97.64 %

b. Calculation formula

MSFT NORGE AS	Formula
Revenue from commission (a)	Annual report
Provision (b)	6 %
Total sales (c)	$100 \div (b) * (a)$
Revenue from service (d)	Annual report
Total revenue (f)	$(c) + (d)$
Operating costs (g)	Annual report
Net financial (h)	Annual report
Taxable income (i)	$(f) - (g) + (h)$
Tax rate (j)	27.83 %*
Tax liabilities (k)	$(i) * (j)$
Tax paid (l)	Annual report
Tax saving (m)	$(k) - (l)$
Reduction in tax liabilities	$(m) \div (k)$

* average for year 2009-2004