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Application of transfer pricing

- efficiency and taxation

Author: *Ann Tonje Helland*

Masterthesis in Industrial Economics, University of Stavanger

Teaching supervisor: *Frank Asche, Professor, University of Stavanger*

1.0 Preface

This thesis is written in the spring 2010 and is the final thesis in my master degree in Industrial Economics at the University of Stavanger. This is a deepening of my specialization in Project Management.

First I want to show my gratitude to Ove Andre Aardal at Eni Norge AS for drawing my attention to the importance of transfer pricing.

I also would like to thank to my teaching supervisor Frank Asche for his professional direction and input on this thesis.

I would like to thank my family for their encouragement during this period, special to Elin for positive and skillful support. To my sweetheart thank you for all qualified help and back up through this work. And to my sweetest daughter, thank you for always putting a smile on my face.

Stavanger, 25 June 2010

Ann Tonje Helland

2.0 Content

3.0 Introduction

In modern economics corporations are more complex with several departments both domestic and abroad. This presents challenges one of them being inefficient departments that are running with no control over profitability. Interaction with society is another challenge, especially when it comes to taxes. Transfer pricing can be a tool to analyze and to get an overview of these challenges.

A transfer price is the price of a transaction of services or products between two or more related parties internally in an organization. The purpose of transfer pricing is to get the right picture of the profit result of each area, product and investment, and to motivate the involved to think more of cost and profitability (Bjerke 1997). It is also important for taxation.

There are different areas of application to transfer pricing. Large corporations with a number of departments need to measure each department's result. When direct control no longer can be used transfer pricing is a simple and efficient tool to get this measure (Saghaug et al 2009). In 1970 Albert O. Hirchman introduced a theory about internal market where the main idea was to treat every internal department as an external department. In 1995 Tom Colbjørnsen used this theory as a starting point for a discussion of which assumptions one can make about an internal market. He presents three main ideas. The first is that all departments in the corporation have to get deposed for external clients and/or internal clients. And the internal client can choose an external supplier if they want to. The second is that every department is responsible for their own result. The third and last assumption is that transfer pricing will regulate demand and offer between the departments in the country where the corporation has its headquarters (Colbjørnsen 1995). This gives the company an overview of each department's real result. Transfer prices are a good option to let the management and departments of large corporations know the price each unit charges for their services (Balsvik et al. 2009).

In a transaction between a mother- and a daughter company transfer prices are used. The total cost and revenue in the corporation are set but the price of the transaction will be affecting the distribution of the two parties income and cost, and thereby their profit. From this profit the tax demand will be calculated individually for the two enterprises. The Inland Revenue authorities need to consider the transfer price to get the correct profit and the correct

tax for each company (Bjerke 1997). The Norwegian Parliament passed new rules about reporting and documentation of transfer pricing in 2007. For many Norwegian companies this means that they are obliged to register and report their internal transactions in their tax form (Tax team 2009).

Multinational corporations use transfer pricing across frontiers internally in the company (Balsvik et al. 2009). In 2004 Christopher Bartlett, Sumantra Ghoshal and Julian Birkinshaw defined multinational corporations as companies that have direct investments of significance in several countries, and an active role in managing these investments. Because of rapid development of internal trading across borders transfer pricing has got more and more attention. This expansion is the result of globalization of investments and trading in multinational corporations and makes up 40 percent of the total international trade (Tang 1997). Manipulation of transaction prices has been used to move profit from one nation to another. The total corporation tax can be reduced if this transaction is from a nation with high tax to one with low tax (Balsvik et al. 2009). To put an end to this and to control tax income the Inland Revenue authorities have found it necessary to evaluate and adjust this price when necessary, to ensure that income and tax are correct (Bjerke 1997). There have been changes in many countries' regulations in transfer pricing and investigations about the transfer pricing procedures the corporations use have been intensified. OECD (Organization for economic co-operation and development) has published directives for transfer pricing, and following tax laws many countries have entered mutual agreements like APA - Advance Pricing Agreements (Gussiås 2006). Inland Revenues Authorities will also have an interest in transfer prices being used in transactions between countries with the same tax burden to be sure that the taxable income is divided correctly. But here there is a lower possibility for incorrect transfer prices since the corporation normally doesn't have any benefit of this (Bjerke 1997).

As an international standard for pricing of transactions between associated companies OECD has carried out the *Arm's length principle*. This is a standard that taxpayers and Inland Revenue Authorities in tax object have to act in accordance with. The Arm's length principle is that transfer prices between associated companies must be market price, the same price that would be set if the connection was independent.

Various practices are used to control market price. The most direct approach is called *Traditional Transactions Methods* and involves comparing transfer price with similar

transactions between independent parties. Here we have *Comparable Uncontrolled Pricing Method (CUP - method), Resale Pricing Method and Cost – Plus – Method.* These are normative methods and can be adjusted as long as the result is in accordance with the Arm's length principle.

In cases where Traditional Transaction Methods cannot be used there is *Profit based Methods* an alternative that is coming from profit in transactions between related companies. Here the *Profit Division Method* and the *Transaction Based Net Margin Method* satisfy the requirements in the Arm's length principle. These methods companies can utilize but they are not absolute (Berntsen 2008).

These methods can be used to find norm prices for gas internal in the corporation, between mother- and daughter companies and between units in a corporation. Since gas production is increasing and is a big part of the petroleum production in Norway a norm transfer gas price would help companies and the Inland Revenue Authorities to set the right transfer price for gas.

Before 1960 there was no knowledge of all the resources that existed in the Norwegian Continental Shelf. In 1969 the first big Norwegian oil field, Ekofisk, was discovered by the oil company Phillips. This was the start of a rapid development of small and large oil and gas corporations. Complex firms sprung up and new challenges came with this development. When there are transactions between departments domestically or abroad there will be a price of this transaction that will influence both the involved units but also the authorities. For crude oil there are norm prices set in the Petroleum Income Tax Law §4 (Anundskaas 2009) There are no norm prices for gas in any law. But in accordance to Tax Assessment Act § 4 -12 the companies are obligated to prepare a written documentation that give a foundation to evaluate sale price and terms in their transactions. Since the yearly production of gas is expanding (7.3 percent in 2009) and gas is a big part of the total petroleum production (42.9 percent in the first nine months in 2009) in Norway (Statistisk sentralbyrå. 2009), a standard transfer price for gas are of interest (Chapter 8).

Another industry that is using transfer prices as a measure for a correctly set transfer price is the fishing industry. Benchmarking is used to buy some percentage of a service or a product in a similar company to compare to own results to. Because of high information quality in this industry benchmarking is an easy and reliable way to motivate and control own

activity. This bench market information is used to compare prices and is one of the Comparable Uncontrolled Pricing Methods recommended by OECD as one of the leading international transfer pricing methods (Chapter 7).

In this thesis I will give an overview of what transfer prices are and consider advantages and disadvantages in relation to two industries where transfer prices can be used. Gas industry and fishing industry are used as markets where transfer prices can be used.

This thesis will give a deepening and an analysis of transfer pricing and will be organized as followed:

In chapter 5 there will be an introduction of what transfer pricing is and the use of transfer pricing in an organization. Chapter 6 gives specifications of methods to use to find a right set transfer price. Taxes, rules and regulations that have influence on transfer prices are described in chapter 7. In chapter 8 and 9 I present two industries where it is an advantage to use transfer prices. The first is the fishing industry and the next the gas industry. Chapter 10 presents an discussion of these two industries according to transfer prices. Chapter 11 is a conclusion on use on transfer prices derived from this thesis and other businesses where a right set transaction price can be found from transfer pricing.

4.0 Transfer pricing

Transfer prices have a broad area of application in modern economics. Corporations today are complex structures with departments also abroad. But this presents challenges in form of non – profitable departments and integration to the society, especially in tax matters. Transfer pricing is used to find the correct transaction price between related units and show profitability and possibility for improvement.

In this chapter it will be explained what transfer pricing is and also be give example on where to use it in different situations.

4.1 What is Transfer pricing??

The purpose of transfer pricing is to get the right picture of the profit result of each area, product and investment, and to motivate the involved to think more of cost and profitability. The price of a transaction of services or products between two or more units internally in an organization or is closely related is called transfer pricing (Bjerke 1997). Albert O. Hirchman introduced in 1970 a theory about internal market where the main idea was to treat every internal department as an external department. In 1995 Tom Colbjørnsen used this theory as a starting point for a discussion of which assumptions one can make about an internal market. He presents three main ideas. The first is that all departments in the corporation have to face the possibility of getting deposed for external clients and/or internal clients. Internal clients can choose an external supplier if they want to. The second is that every department has liability for their own result. The third and last assumption is that transfer pricing will regulate demand and supply between the departments in the country where the company has its headquarters.

In a corporation transfer pricing has influence on several different relations. Economic results of different departments, every product's profitability, production mix, development of products, investments and evaluation of outsourcing all involve transfer pricing. This shows that transfer pricing plays a big part in the economical control system in corporations with extensive internal deliveries. A more complex transfer pricing problem arises from the

increased level of internal trading in today's multinational companies. Each involved country's authorities then need to be taken into consideration as well as the affected result unit when a transaction price is set (Hansen et al. 1996).

4.2 Use of transfer pricing

If a corporation is producing several products at the same time can it be difficult to see how much each product contributes to the corporation's total profitability. At the same time each department's ability to compete can be hard to see when compared with external companies. In big firms there is an internal market and information about market demands is more effectively coming from internal clients through transfer prices than from administration (Colbjørnsen 1995).

Large corporations with multiple departments need to measure each department's result and having control of every unit's result can be difficult. In such corporations direct control can no longer be used and transfer pricing is used to measure price of transactions between departments and to retransmit this information upwards in the hierarchy (Saghaug et al. 2009). Firm policy can get too much influence on distribution of company recourses if the market demand is not visible in cost and revenues. If department managers are able to get constantly increasing budgets approved departments can have an unnatural growth and develop expensive methods to construct a product. By using transfer pricing this will not be profitable for the individual department and top management will get information about the situation. Evaluation of the corporation's future, departments' expansion or reduction domestically or abroad can be made based on transfer prices (Bjerke 1997). A correct transfer price will reflect what the external market is willing to pay for this product, put pressure on and give motivation to employees and a total administrable overview of profit in the firm (Colbjørnsen 1995).

4.2.1 Organizing a corporation

To be able to compete in the market the company must be able to be both sales – and production orientated. Production- orientated companies are function organized and develop top competence to be cost effective by using the benefit of a big company and standardization. Through market divided organizations, de- centralization and width expertise sales orientated firms will meet customers' needs. A market matrix is an organization that is a combination of a market (buying) unit and a function (selling) unit. The relation between the two units is an internal market in form of purchasing and sale. Market- units work with direct market demands and are also the function- units' customer. This gives direct information about external clients' demands to the function- unit. Internal client relations give influence and sanction possibilities between departments and will put pressure on and motivate the function- unit to act on market demands. If these departments are compatible this is a strong positive motivation among employees (Colbjørnsen 1995).

4.2.2 Internal market

Transfer pricing is in many corporations used to divide and make visible cost and revenues. But customer demands must still be passed on through administrative organs if this requirement is not followed up by direct purchase and sales relations between departments. And also if the market- unit still is required to use internal suppliers. Prices are the most important decision foundation internally in a firm as in the rest of the market relations. Transfer prices that are set at the correct value will reflect what the external customers are willing to pay for a product. The internal buying unit will get this product from an external supplier if the internal production unit is not willing to or capable of delivering at this price. This can result in a reduction in this unit's activity or an increase if it does not have the ability to compete (Colbjørnsen 1995).

Transfer pricing can also be used to find how competitive internal units are. If the market unit is not willing to buy a product for a set price the other unit can sell this product to an external unit that is capable of finishing it. So an internal market with correctly set transfer prices will show how competitive both selling and buying units are (Colbjørnsen 1995).

Some situations need administrative involvement to secure a correct transfer price that is in accordance with the rest of the market. But when a transfer price is set is it up to each unit to decide how much they are willing to produce and what to produce at this price. Every unit has responsibility for their own results and they have to take the consequences of the decisions they make. If they don't produce to a transfer price that meets market demand they will have to decrease this activity or in worst scenario shut down the whole activity. In the opposite case, if there is increased activity this is the result of a transfer price in accordance with clients demand and not due to the power of a unit- manager. To make sure that this market is functioning properly there is administrative systems and laws (Colbjørnsen 1995).

4.2.3 Management involvement

Top management will in some cases have to behave as an internal competition authority. In these cases an administrative transfer price will be set based on evaluation of competition relation, profitability demands and market strategies. As in the rest of the market it is sometimes necessary to have an oversteering and observational organ to control transaction prices (Colbjørnsen 1995).

The internal market can be undermined if there is no alternative supplier. There can be several reasons for this situation. Natural monopoly is one of them. Another reason for damage on the internal market is economic lock-in. For instance: The computer- unit produces an information system that only they know how to maintain and develop. A last reason is transportation costs. To avoid internal monopoly the company should not be required to use internal delivery. There is also an option that the monopolist can be exchanged in the future, since internal monopoly most often is not permanently situation. The internal monopolist can also be confronted with business norms and standards for cost and quality. To prevent the monopolist from getting income benefits from internal units it is necessary in these situations to have a hierarchic control and have transfer prices forced on the units (Colbjørnsen 1995).

4.2.4 Fetch external expertise

Without administration units can push up the transfer price because the buyer is dependent on their professional knowledge. They can tell the buying unit that if they want lower prices is it necessary to use a cheaper material, and they will have to take full responsibility if something fails. The challenge for the buying market unit is to consider the relevant arguments and to define exactly what price and quality they want. Another option is to have tender from external suppliers. This is the most effective method since this will show what the market price is. As long as there are several suppliers and they do not use a tactical tender this will show the real transfer price. Use of an independent consultant with professional knowledge is an alternative for the buying unit. The consultant can assist in negotiations to give a more exact demand and assess professional arguments for the given transfer price (Colbjørnsen 1995).

4.2.5 External and internal income

Function- units can get internal incomes through negotiations of transfer prices and by being competitive on the external market. The information – and pressure – mechanism will disappear if this unit is just measured by resource utilization and not by their ability to sell to the internal market. All pressure that comes with negotiations will disappear by using responsibility units that measure both costs and income from transfer prices. This will make it a prevailing product for customers since it gives internal income to the selling unit (Colbjørnsen 1995).

The unit can also have external income and this revenue will be an extra check on whether or not the function-unit is competitive. One reason for only having internal income and not external is that there is a danger of sub -optimization. Another reason is that internal market-units lose their exclusive position by not always being first in line. When a decision about external and internal income needs to be taken, selling out parties of the unit or the whole unit will be a natural question. Sometimes it is better to sell off some percentage of the department or the whole unit by make the departments a private limited company (AS in Norway). This makes it easier to develop own business ideas and give a better concentration on core business (Colbjørnsen 1995).

4.2.6 Loyalty

Strong corporate loyalty will normally make every unit wait as long as possible before turning to an external supplier. Supporting and using internal units that do not pass the market demand will increase the total costs of the corporation, since the internal units will never have any motivation to increase their effectiveness and profitability. Their ability to compete in transfer prices and quality will be diminished, and in the worst case scenario this can undermine the whole existence of the company. By purchasing from or issuing tenders to external suppliers the company can compare the transfer prices in the market with their internal prices. Top management needs to create and support a company culture where everyone works to increase the company's competitiveness and profitability and where using external suppliers is not considered a sign of disloyalty. To create a market oriented loyalty culture it is necessary for top management to be clear and consistent in their support of this culture (Colbjørnsen 1995).

4.2.7 Corporation interest

Using an external supplier is not always the right thing to do even if they have the best terms and the lowest transfer price. If it leads to negative effects for the rest of the corporation and if it overshadows the benefit the particular unit can achieve using an external supplier is not a good choice. If a buying unit gets a low transfer price offer from an external supplier because this supplier has available capacity and wants a foot inside the firm this will be a good investment for the unit. But if the buying unit is a considerable customer for the internal selling unit this will lead to failure in scale assumptions and give higher cost per item produced. The result of this is that the transfer price will be higher for the other market units. If this extra cost is higher than the gain is for the unit that gets this offer this is a total income loss for the firm and external trade must not be consistent. Corporation managers need to prepare economical goals for the firm and let every unit know them (Colbjørnsen 1995).

4.2.8 Services

These goals and benefits of a big corporation can be used by the function- unit to produce in a cost effective way. If it is possible from the results to measure production in a firm it is possible to find out if wanted quantity is produced to the lowest price. This means that there will there be a clear relation between the use of input factor on one side and quality and quantity on the other. Transfer price per person can be found by using the measure of cost per employee per work operation and production per employee. A department that uses these goals is called a cost center (Colbjørnsen 1995).

The goal of establishing a cost center, often called Shared Service center, is to get a better process and increase the efficiency. The costs will also be reduced as a result of this center because the processes and procedures are assembled, integrated and standardized (Capgemini 2006).

For many staff services it is difficult to divide economical results into units. It is difficult to separate goals from efficiency because there is an unclear relation between result and achievement. If there is an external market for this service it is possible to organize staff departments in the same way as in the market and in this way measure the department's profitability. Level of competitiveness and conditions of existence will be easier to define by selling their services at a transfer price and by competing with an external market (Colbjørnsen 1995).

An internal corporation service is a service that is done by one unit for the whole company or for some of the units in the company. It is common in big corporations to have a cost unit that is available for the whole company according to producing services. Administration, coordination and control functions are examples of these kinds of services. In international corporations is it also common to have units that have focus on all international aspects in consultancy, services and research. This service unit is often in the mother company, but the daughter company has services for the whole firm or just for some units in the firm (OECD 1984)

Business sector and organization structure are factors that decide what type and number of services the service unit has. It is common to divide centralized activities into different groups:

- Administrative services: planning, coordinating, budget control, financial consulting and IT
- Unit services: Production, purchase, distribution and marketing
- Human resource services: Requiting staff and training

In this unit is there often also none material ownership in research, development and administration (OECD 1984).

4.2.9 "Make or buy – decisions"

The company has to decide whether it is best to make a product or service themselves or buy it from others. This is an important strategic area and is called "make or buy – decisions". There are several main conditions that normally will speak for having an activity in the firm. The benefit of being a big company is one of them and the classical economical reason for merger. If it is possible to combine activities products can be produced to lower unit costs and transfer price or create combined action in technology and competence. This benefit is essential but not enough to combine activities. Big differences in employer values, manners and culture can lead to administration costs that outweigh the benefits of being a big company. Conflicts and cooperative problems can take up too much time and recourses. An activity should be a part of the company if staff behavior is important for the corporate image or if unexpected events require fast movement of resources. Exclusive treatment of this activity should then be required and that the unit always is first in line in competition. The firm should also influence how the work is done so there is no deviation from the quality standard the company is known for. If the company is in a one- sided dependence to a supplier an option is to incorporate this activity into the company. Then they can control the supplier and there will not be any pressure or abuse from an external monopolist. Expert knowledge is needed for a corporation to assess offers from external suppliers. Details are often the hardest thing to see in an external offer and in many areas this will require that the company has experience in the activity in question (Colbjørnsen 1995).

In the last years companies have been focusing more on core business, business areas that have the best technological, competence and organizational premises for profit. Selling off activities that do not give real combined action with the core business, so- called

outsourcing, can be necessary. You may get a lower transfer price by buying a product from others than producing them yourself, but sale and purchasing of strategically alliances and networks give a more complex competition between companies and the market (Colbjørnsen 1995).

4.2.10 International corporations

Demarcation of market areas is necessary to find core business and to focus on this. If clients are asking for different products it is suitable to have an organization that has product-units. Departments divided after client groups are useful if there is a clear demand for combination and variants of the same products. Region division is suitable if there are different demands in different areas, or if there is a big client group that can be divided o a regional level. Customers have dissimilar taste in different countries and this distinction have to be adapted to every client's requirements. At the same time different countries often have different legal requirements according to specifications and quality. These considerations can be met by internationalization and establishment of regional divisions. Corporations need to behave in accordance with political authorities as well as laws and agreements in each country. At the same time there are national laws and negotiation systems that need to be considered in relation to employees and labor union. International corporations have used transfer prices between units to move money to countries with lower taxes. This can be illustrated by a transaction between a mother- and a daughter company. The total cost and revenue in the corporation are set but the price of the transaction will be affecting the distribution of the two parties' income and cost, and thereby their profit. If a product is sold from the mother company to the daughter company at a high price, the total profit in the daughter company will decrease. Likewise the profit will increase if the transfer price decreases. There will be an equal but opposite change in the mother company's profit. This is illegal and authorities try to stop this by inserting laws and rules. Both national and international corporations have the same goal. By producing products at the lowest cost possible and meeting customer demands you will get a successful company that is able to compete. International corporations have the possibility to locate production to the country with the highest cost efficiency. Production processes with high work intensity can be placed in countries where payrolls are low. Processes where knowledge is needed can be placed

where the education level is high and quality is best, and so on. This system makes high demands on the integration of part production and therefore there are often product units in international firms that have responsibility for coordination and control of production across countries. The fundamental organization problem in international corporations is by this handling the so called IR – problem, showed in figure 4.1.

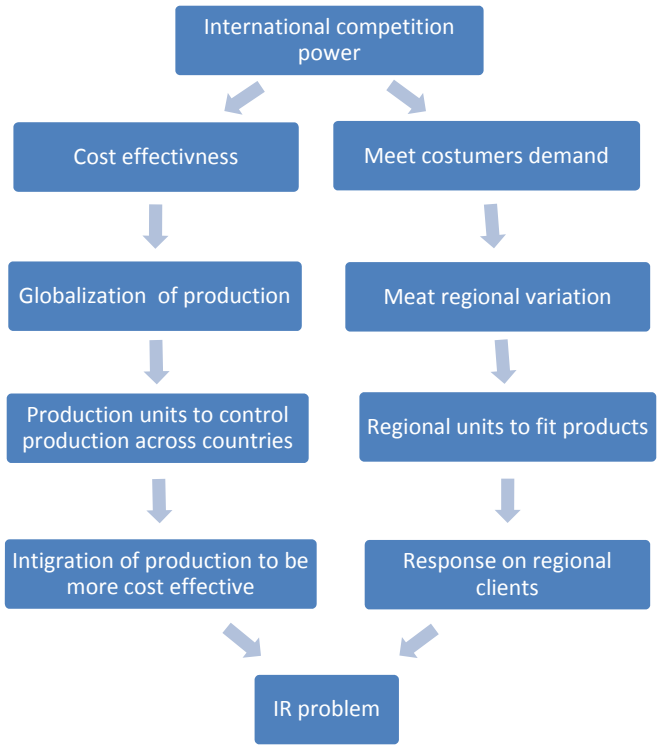

Figure 4.1: IR – problem in an international corporation

Production must be integrated across countries to be cost effective, and at the same time the marketing and production development must be adapted to regional demands. This IR – problem is often handled by constructing an international matrix organization. In this matrix the production division is there to ensure integration and the regional divisions to secure the regional market response (Colbjørnsen 1995).

4.2.11 Right transfer price

Price is the most important factor in decision making in a big corporation as in the general market. If a transfer price is set a the correct level it will reflect what the external market is willing to pay for a product and put pressure on and give motivation to employees. This transaction price will also present top management with an overview of unit profitability and thereby the total economical situation in the corporation (Colbjørnsen 1995).

5.0Methods

To find transfer prices OECD members have determined that the arm`s length principle is the international standard in tax purposes. This principle says that *transactions between closely related corporations have to be entered into with the same terms as if the transaction was between independent corporations under the same conditions and circumstances*. There are different methods developed that are in accordance with the arm`s length principle and can be used to find transfer prices. OECD divides these methods into two main groups: *Traditional transaction methods* and *Transactional profit methods*. The traditional methods is recommended, but if there is high requests for comparability combined with lack of information or poor quality information it is better to use transactional profit methods. Benchmarking is used to find the price to use in the CUP – method.

5.1 Arm`s length principle

All member countries of OECD have agreed that the arm's length principle is the international transfer pricing standard for tax purposes. The requirement used between closely related firms has to be comparable to requirements between independent firms to be in accordance with this principle. To be comparable none of the involved factors can be affected in a significant way. But if they are affected it must be possible to eliminate the effect by right and precise adjustments. The fundamental part in this principle is that *every unit in a corporation has to be treated as if it is an independent corporation*. OECD's article 9 is interpreted to mean that the tax authority needs to adjust transfer prices to the level they would have been if this relation was between independent parties (Bjerke 1997). Paragraph 1says:

"[When] conditions are made or imposed between ... two [associated] enterprises in their commercial or financial relations which differ from those which would be made between independent enterprises, then any profits which would, but for those conditions, have accrued to one of the enterprises, but, by reason of those conditions, have not so accrued, may be included in the profits of that enterprise and taxed accordingly." (OECD 2001b)

This means that if the tax authority finds the transfer price to be incorrect it is possible for them to adjust it so that it is in accordance with a transfer price that independent parties would agree to (Bjerke 1997). If independent corporations do business together it is the market that decides the financial or commercial business between them. If closely related corporations have business together it is not affected by the market in the same way. The arm`s length principle is in these transactions the best way to approach an independent relation. Tax advantages and disadvantages are eliminated by using the arm`s length principle.

In cases where it is easy to collect comparable information of transaction in independent firms the arm`s length principle is useful. But in some cases is it difficult or not sensible to use this principle. If there is lack of information or the information at hand is incomplete you do not have enough material to compare information with. If there is a special service, product or immaterial properties it can be complicated to find transactions to compare with and the arm`s length principle is difficult to use (OECD 2001a).

To be sure that the independent transaction is useful as with a basis for comparison is it necessary to use a comparable analysis. To make sure that it is a comparable independent transaction it is important that the conditions that are analyzed will affect the transaction. If there are important differences adjustments have to be made to ensure you have a basis for comparing these transactions.

There are two problems in deciding if a transaction is a comparable independent transaction. The first is to find which differences there are and what influence they have on the transfer price. The other is to decide if the two independent transactions still are comparable (Bjerke 1997). Different transactions will have different conditions that need to be compared. These conditions depend on the character of the transaction and the transfer pricing method being used (OECD 2001a).

5.2 Traditional transaction methods

Methods that belong to the traditional transaction methods group mainly follow the principle of comparing transactions with an independent corporation. In OECD (2001b) it is said that these methods are: "*The most direct resources to determine whether conditions in commercial and financial relations between closely related corporations are according to the arm`s length principle"* (Trans. by author). There are three different methods that are included in traditional transaction methods:

1. Comparable uncontrolled price method (CUP- method)
2. Resale price method
3. Cost- plus method

5.2.1 Comparable uncontrolled price method (CUP-method)

When dealing with uncontrolled similar transactions, the CUP – method is the preferred method according to OECDs (2001b) guidelines. When using this method it is necessary to look at comparability. The transaction cannot have any non adjustable differences that could have influence on the transfer price in an open market. The CUP-method uses selling price for an equal product or service as a foundation for a transfer price. This foundation is according to OECD 95 used to compare price on transferred products or services in a comparable uncontrolled transaction under equal circumstances:

"*The CUP method compares the price charged for property or services transferred in a controlled transaction to the price charged for property or services transferred in a comparable uncontrolled transaction in comparable circumstances*"(OECD 95).

All relevant factors can have influence on the transaction price on a smaller or larger scale because the transfer price is a basis for the comparison in this method. That is why it is necessary to have a high scale of comparability (Bjerke 1997). Benchmarked is in many industries used as a basis for comparison in this method (Chapter 7.2)

The best use of the CUP- method is under similar terms, in similar quantities and in a similar market (ITI 2010):

- Internally comparable: the taxpayer or another member of the group sells or buys the particular product to/from arm's length parties.
- Externally comparable: an arm's length party sells or buys the particular product from another arm's length party.

These internal and external comparables are illustrated by Bjerke (1997page 225) and the illustration is reproduced in figure 5.1.

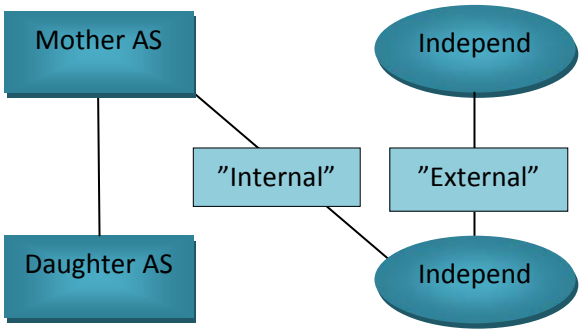

Figure 5.1: Internal and external comparables

Internal and external basis for comparison has to be found before deciding which factors are not comparable and how important they are. The best is if it is possible to adjust these non-comparable factors in an exact and dependable way. But the adjustments can affect how exact and trustworthy these factors are. In some cases is it better to combine the CUP -method with other methods or in some cases just use other methods (Bjerke 1997).

5.2.2 Resale price method

This method evaluates the transfer price by comparing gross profit margin in a controlled transaction with the gross profit margin in one or more independent transactions. It is then probable to see if the set transfer price is in conflict with the arm`s length principle. Figure 5.2 show an example of the use of the resale price method in transactions from closely relates firms (mother/daughter company) to an independent firm. The resale price a product or a service was sold for from the daughter company to the independent firm is the price this method is based on. A suitable gross profit margin is set that is equal what the daughter

company gets from this transaction, and a resale price is deducted from this. This gross profit margin covers the daughter company´s cost of buying this product and indicates a possible profit. When taxes also are deducted the price that is left is the correct transfer price according to the arm`s length principle.

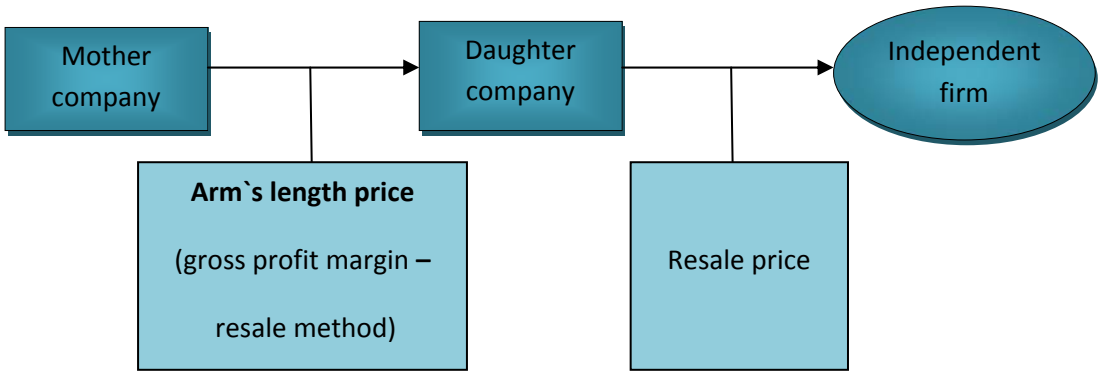

Figure 5.2: Resale price method

To find this gross profit margin you have to compare various factors (ITI 2010):

- *Internal comparing*: Resale price margin that a member of the group has obtained in comparable uncontrolled transactions.
- *External comparing*: Resale price margin that is obtained with an arm`s length firm in comparable uncontrolled transactions.

If it is not possible to compare all necessary factors in a transaction and the difference in those factors has a big influence on the price adjustments must be made to eliminate those differences. The more comparable these factors are the more likely it is that the resale price method will indicate the correct resale price (ITI 2010). So the resale price method is most useful in situations where there are as few changes as possible in functions attached to the product or service. Functions that should be well thought-out when using the resale price method are for instance component functions, contractual terms and conditions, elements in the value chain, qualities and cost structure. These are all factors that have to be examined and evaluated according to comparability of situations (Bjerke 1997).

5.2.3 Cost – plus method

Seller's (mother company) actual costs is point of departure in this method and it finds an arm`s length price by adding cost and gross profit margin (given in percentage of relevant costs) together. This gross profit margin has to be suitable and is based on what seller invests in independent and comparable transactions. It has to cover all the costs the seller has but also give a suitable profit and return on investments (Bjerke 1997). This is shown in figure 5.3.

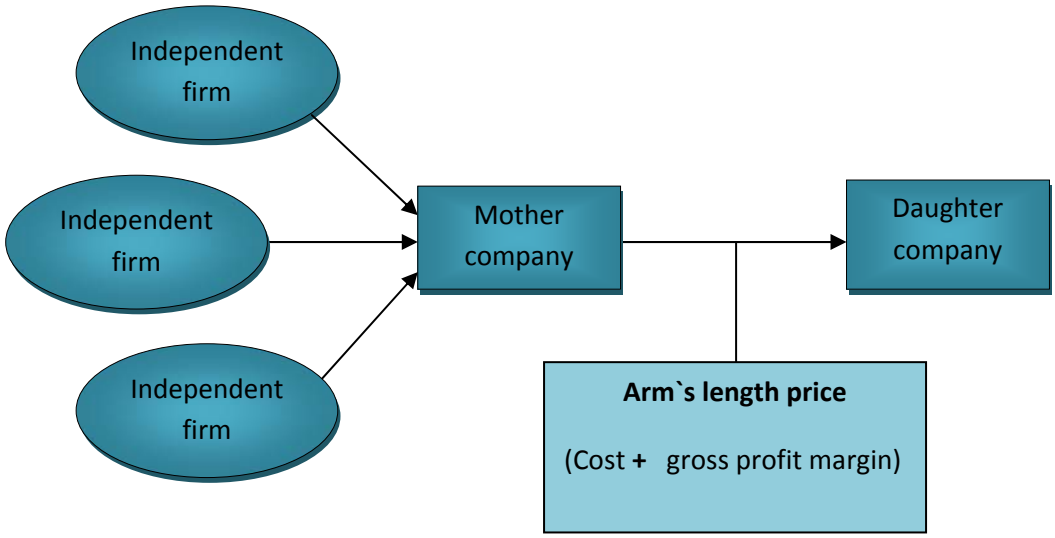

Figure 5.3: Cost – plus method

Before using this method there are two elements that have to be evaluated and determined. The total costs of the product and a reasonable gross profit margin have to be set. This is also the main problem with this method. Which costs that have to be accounted for under total cost for the product is another problem. This is important because cost in itself is used to calculate the arm`s length price and the gross profit margin is calculated as some percentage of this cost. Since the gross profit margin is set by comparing an independent comparable transaction it is important to consider which demand for comparing that has to be set. Correct set cost is therefore important because cost is one part of the transfer price and it has influence on the gross profit margin (Bjerke 1997).

Costs are divided into three different categories (ITI 2010):¨

1) *Direct costs:* for instance raw materials.

- This is direct cost in production of product or service and the cost that is directly inflicted in production of a product or in performance of a service (OECD 2001b)

2) *Indirect costs:* for instance repair and maintenance.
   - Related to the process of a product, but this cost can be the same for many dissimilar products or services (OECD 2001b).
3) *Operating costs:* for instance selling, general and administrative.
   - This is expenses in the corporation as a unit (OECD 2001b).

There is different application of what is contented in the different categories and it is important that there is the same division in the firm that is used to compare with (OECD 2001b).

Bjerke pronounce in 1997 the best application of the cost – plus method, and it is the same if using the other methods "*This method shall be used in those cases where it provides the most trustworthy answer on what the arm`s length principle should be"* (trans. by author). For the cost- plus method this means that there has to be an evaluation on how suitable this method is and if there is a method that is more suitable. For cost- plus method is it best to use this in…"*cases where there is no market price or totally identical transactions so the direct comparing methods are not applicable*" (Bjerke 1997, trans. by author). Cases where the cost – plus method is a good tool to use are for example:

- Production of special products
- rental production
- If closely related corporations have common production facilities
- If closely related corporations have purchase - and delivery agreements
- If the purchaser makes big alterations on the product before selling it
- If the controlled transaction is performance of services
- In cases where there is no resale at all

In relation to the resale method it is a question if it is better to find buyer's resale price or if it is better to find seller's costs. The reason the cost – plus method is the best in these cases is because it is not possible to use other traditional methods and the cost – plus method gives a trustworthy result in these situations (Bjerke 1997).

5.3 Transactional profit methods

In some cases is it not possible to use traditional methods to find transfer price. High demand for comparability combined with lack of data or bad data quality is often the reason. In such cases OECD (2001a) has approved two transactional profit methods:

1. Profit split method
2. Transactional net margin method (TNMM)

These methods are based on net profits from transactions between closely related corporations. Net profit is what is left for the corporations after all costs are deducted (Bjerke 1997). The main difference between the two methods is that in the controlled transaction the profit split method is applied to all members involved while the TNMM is applied to one member only (ITI 2010).

5.3.1 Profit split method

The main idea behind this method is to find the total profit in a transaction and split this profit on parties the participating parties. When using this method an evaluation of whether the closely related parties have acted in accordance with the arm's length principle is done by checking if the profit in the transaction is correct according to the parties' contribution. To decide the parties' contributions different important factors in the transaction will be examined:

- Which functions different parties have done
- Which tasks different parties have performed
- What risk was involved for the different parties
- Which properties the different parties have used

The division has to be to the largest possible extent as close as possible to how independent part would have divided profit in a comparable situation. If there are losses in the transaction this will be divided in the same way.

There are two main questions that have to be answered in the profit split method and that is determination of the total profit and between who this profit will be divided. The

division will normally be based on one transaction but in some cases is it possible to look at more than one transaction, especially in cases where there is influence from different situations and it is impossible to divide these cases.

The main goal is to divide profit between related firms as if they were independent and there are different ways to estimate this distribution. OECD (2001b) discusses two ways to do this estimate in their guidelines for transfer prices. The first is contribution analysis and the second one is residual analysis. The main purpose of contribution analysis is to divide the whole profit into parties so everyone gets a share that is in accordance with how much they have contributed. Residual analysis divides the profit in two stages. First one part is divided between all contributors after what that they have contributed with in products or services. The second part is to set a market return on this contribution, based on what every part would get in similar contributions (Bjerke 1997).

The profit split method has its advantages, but it also comes with some disadvantages:

- To a lesser extent than traditional methods the profit split method is based on comparable transactions, *but* information that comes from independent transactions will be more and more uncertain because the comparability is reduced.
- The method evaluates all parties in transaction and increases the probability of fair division, *but* the reliability of this method depends on information from all parties.

The profit split method also has other weaknesses (Bjerke 1997):

- It is seldom used to set a transfer price between independent companies and is therefore a theoretical method
- It can be difficult to divide income, cost and property between the transaction and the rest of the processes
- The method is used on historical data and it is easy to be wise in retrospect.

5.3.2 Transactional net margin method (TNMM)

This method uses a set net margin by looking at the net profit in percent of an objective number. Bjerke (1997) says that the transactional net margin method: "…*evaluates whether the parties have acted in accordance with the arm`s length conditions by comparing the net profit the related parties earn from the transaction, to the net profit that independent parties get from corresponding transactions"*(trans. by author). Net profit is what is left for a firm after all costs are paid. This profit will change from firm to firm and the profit has to be set in relation to an objective number like turnover, costs or properties.

Net profit is in focus in this transactional net margin method. An estimate is made of the size of the profit of one of the parties in the transaction in relation to that of a corresponding independent party. If it is not achievable to set this net margin in relation to the independent part it is possible to use the net margin an independent firm would have as a guiding number (OECD 2001b).

In every individual situation one has to evaluate which method to use. The transactional net margin method would typically be used (Bjerke 1997):

- when there are differences in account principles between the related and the independent transaction. This is differences in costs that are accounted for in gross profit and the first that is calculated for to find net profit. Differences can have material meaning for gross profit.
- when functions are divided differently in the related and the independent transaction. This is because this method is not so sensitive to such differences.
- when there are differences between the products in the transaction. Product comparing is not so important in this method.

An advantage is that this method is not so responsive to transaction differences. This applies also to some function differences. There are other factors that this transactional net margin method is more sensitive to and there has to be a more detailed analysis of comparability using this method. It is only essential to look at functions performed of one of the related firms and that is a major advantage, but there is a danger that there can be an unrealistic high or low profit level to some units in the firm because of a given net margin in one unit. The corporation's total profitability is not looked at in this type of analysis (OECD 2001b).

5.4 Benchmarking

The main reason to use benchmarking is to find the CUP – price (chapter 5.2.1) to use in transfer pricing. Departments in the corporations will also maintain sharp sins the benchmarked will show profitability in the unit or product (Frank Asch 2010).

5.4.1 What is benchmarking??

There is no clear definition of benchmarking in economic management today and the concept is used in different ways. The most common definition is that benchmarking is learning and improvement through comparison and most of the literature about the subject deals with different types of comparison methods. A general understanding of the concept is that benchmarking is to compare with other units and to learn from this experience to improve one's own company. It is then possible to get an external reference frame on which areas it is necessary to improve. Benchmarking can be divided into three groups: (Løvland 2001):

- *Internal benchmarking*: comparing of own performance over time.
- *External benchmarking:* comparing with competing firms.
- *Generic benchmarking:* comparing with non – competing firms.

In practice often more than one of these are used at a time. This is because corporate processes are often very complex and one has to look at several aspects when comparing one situation with another.

Benchmarking can also be divided after which process that is used to compare with:

- *Performance benchmarking*: comparing of economical or productivity goals.
- *Process benchmarking*: comparing of the way things are done.
- *Strategic benchmarking*: comparing of strategy.

In the literature there is now more focus on process benchmarking while earlier focus was on the performance part of benchmarking. There is a general understanding that it is difficult to decide which method is the best, the result being that there has been little development in this field (Andersen et al. 1999).

5.4.2 Process benchmarking

There has been a demand for a general model of process benchmarking and in 1995 Bjørn Andersen introduced "the benchmarking wheel" figure 5.4. This model systematizes the strong sides of many benchmarking models and aims to avoid the biggest weaknesses.

Figure 5.4: The benchmarking wheel.

The main reason to use this wheel is to enhance the corporation's performance. This wheel can be used not only in economical and performance areas, but also to reduce absenteeism and increase work satisfaction (Løvland 2001).

5.4.3 Performance benchmarking

Earlier the focus of benchmarking was on performance, but these days literature is to a lesser extent concerned with this area. Performance benchmarking is a measure in productivity and is comparing of economical or production performance. The main reason is the problem of defining the productivity concept and a practical interpretation of this. Generally productivity has been measured through quantitative data but it is possible to have goals that include adding value. Alternating has performance – and process benchmarking been used but to find a benchmark by looking at performance is not in focus now (Løvland 2001).

6.0 Taxes, laws and regulations

A transaction between two or more taxpayers requires regulations to be in accordance with the country's laws and to give participators correct advantages and disadvantages of this transaction. The Norwegian Parliament passed new rules about reporting and documentation of transfer pricing and this means than Norwegian corporations are obliged to register and report their internal transactions in their tax form. In international corporations manipulation of transaction prices has been used to move profit from one nation to another. The total corporation tax can be reduced if the transaction is from a nation with high tax to one with low tax. In Norway there are laws that regulate the use of transfer prices and there is now more inspections and higher punishment for abuse of transfer prices then earlier. OECD has developed guidelines to reduce the risk of conflicts and disagreeing politics caused by transfer pricing. Advance Pricing Agreements have also been entered between tax payers and tax authorities where the main content is the transfer pricing methods that are used, foundation for comparison, adjustments of this comparison foundation if necessary and also assumptions for possible events in the future. This is to ensure the right transfer price and to avoid later adjustments.

6.1 Related enterprises

The price of a transaction between related parties is called Transfer pricing and this is a central topic in national as well as international tax law. This transaction of services and products takes place between two or more units internal in an organization (Bjerke 1997). Defined by OECDs model agreement article 9 no.1 enterprises are related when one company or the same persons are directly or indirectly involved in management, control or ownership in another firm. A directly or indirectly related firm is according to Joint Venture Agreements in 2005 defined as (Gussiås 2006):

- (mother company) firms that have more than 50% of capital stock or votes or in some other manner is in control of one of the involved parties, direct or indirect.
- (daughter company) firms that in one of the parties, direct or indirect, exercises control of or has more than 50% of the votes or capital stock

- (sister company) firms that have more than 50% of the votes or capital stock or in some other way, directly or indirectly, is in control of one or more companies and also are controlling more than 50% of capital stocks or votes or in a direct or indirect way controls one of the parties.

"Community of interest" is used in the Norwegian Tax Law (1999) to describe the relation between associated or closely related corporations and is used when one of the parties has an interest in the other or if a third part has interests in both firms. No requirements are made about what this relation should be and it has to be evaluated in every case, but the most common is ownership and parties with more than 50% ownership in another firm. The most important issue in this is how much influence this ownership has. In some cases persons or firms can have a large influence and power but no ownership. Lenders, suppliers and personal relations are example of this.

6.2 Tax

When two units are related a transaction and use of transfer pricing can take place. An example of this is transfer pricing between a mother- and a daughter company. The total cost and revenue in the corporation are set but the price of the transaction will be affecting the distribution of the two parties' income and costs, and thereby their profit. If a product is sold from the mother company to the daughter company at a high price, the total profit in the daughter company will decrease. Likewise the profit will increase if the transfer price decreases. There will be an equal but opposite change in the mother company's profit (Bjerke 1997).

From this profit tax demands will be calculated separately for the two enterprises. The Inland Revenue authorities need to consider the transfer price to get the correct profit and tax for each company (Bjerke 1997). The Norwegian Parliament passed new rules about reporting and documentation of transfer pricing in 2007. For many Norwegian companies this means that they are obliged to register and report their internal transactions in their tax form (Tax team. 2009).

Multinational corporations use the benefit of transfer pricing across borders internally in the company (Balsvik et al. 2009). In 2004 Bartlett, Ghoshal and Birkinshaw defined multinational corporations as companies that have direct investments of significance in several countries, and an active role in managing these investments. Because of rapid development of internal trading across borders transfer pricing has got more and more interest from the involved parties. This expansion is the result of globalization of investments and trades in multinational corporations and it makes up 40 percent of the total international trade (Tang 1997). Manipulation of transaction prices has been used to move profit from one nation to another. The total corporation tax can be reduced if this transaction is from a nation with high tax to one with low tax (Balsvik et al. 2009). To stop this and control tax income the Inland Revenue authorities have found it necessary to evaluate and adjust this transfer price if necessary, to make sure income and tax are correct. A problem related to adjustment of transfer prices is double-tax. If there isn't a corresponding adjustment in the other involved countries the adjustment result can in no foundation for cost deduction in any of the countries involved (Bjerke 1997).

6.3 *Norwegian laws and directives*

In 2002 Per -Kristian Foss, at that time Minister of Finance wrote an article in a Norwegian newspaper about the lack of directives and unclear regulation of transfer pricing in Norway. He described some of the changes the government thought was necessary for Norway to be a part of the "global – tax jungle". He questioned the commercial transfer pricing across borders that has given this country a bad reputation because of the Norwegian way of setting income according to individual judgment. The article`s main topics was unclear rules for transfer pricing and the low sill for getting an additional tax or punishment in Norway (Dagens Næringsliv 2002).

Tax law § 13 – 1 gives Norwegians directives for transfer pricing and the area of application is *"…valuation of performance in real, mutual transactions between closely related taxpayers, typically companies in corporations, particular corporations with participating companies from Norway and from one other state"* (Greni et al. 1999, trans. by author)

To make sure that income and cost stays with the correct firm and those who have the tax residency the tax law (1999) states that *"…determination by discretioncan be performed if the taxpayer's fortune or income is reduced because of direct or indirect common interest with another person, firm or appliance"* (Tax law 1999, trans. by author). This exercise of discretion is in accordance with the Arm's length principle in OECDs guidelines. The Arm`s length principle will be discussed later.

Three conditions have to be fulfilled for the Internal Revenue Office to make an assessment of adjustment of income and fortunes:

1) A reduction in taxpayers income or fortune
2) A common interest between parties. This common interest concerns both between Norwegian corporations and across borders and the division between them is the effect of Tax law § 13 – 1, 2. term:

   > *"If the other person, corporation or appliance mentioned in the first term is a resident of or native to a non – EEA country and there is reason to assume that the fortune or income is reduced, the reduction shall be considered as a consequence of this common interest if not the taxpayer benefits that that's is not the case"* (Tax law 1999 § 13 – 1, 2. Term, trans. by author)

   In cases with common interest between Norwegian corporations it is the taxation authorities' duty to prove that there is a reduction in income and fortune because of this common interest. But when a Norwegian corporation has a common interest with a company belonging abroad it is the taxpayer that has to prove that the reduction is not a result of this common interest. This is because it can be difficult to find evidence of this connection in an abroad business relation (Brudvik 2004).

3) This reduction in income or fortune must come from common interest. The Tax law § 13 – 1, 3.term says that transfer price of a transaction internal in a corporation has to be the same as if the transaction was between two independent parties under comparable situations (Liland et al. 2002).

> *"By discretion fortune or income will be determined as if there is no common interest at all"* (Tax law 1999 § 13 – 1, 3. Term, trans. by author)

According to OECDs guidelines there is a law for deductibility of services in Norwegian tax law. It says that *"it will give deduction for cost that is inflicted by obtaining, maintaining or securing taxable income" "* (Tax law 1999 § 6 – 1, 1. term, trans. by author). This means that the firm has to have utility value for every product or service that the firm is debited with. Tax authority and corporations use these recommendations when handling international valuations and this topic is central in OECDs guidelines (Greni et al. 1999).

There are limited laws concerning transfer pricing and belonging areas in the Norwegian law system. OECDs guidelines for Transfer pricing has to be followed by the Norwegian tax authorities because of Norway's membership in OECD and this is shown in this chapter. OECDs guidelines will be discussed down under in more details.

6.4 Regulations

There have been changes in many country's regulations regarding transfer pricing and investigations about the transfer pricing procedures the corporations use have been intensified. OECD (Organization for economic co-operation and development) has published directives for transfer pricing, and many countries have entered mutual agreements like APA (Advance Pricing Agreements). There is also a convention for countries in the EU called "Convention on the Elimination of Double Taxation in Connection with the Adjustment of Profits of Associated Enterprises". And FN composed "United Nations Model Double Taxation Convention between Developed and Developing Countries" that is a model for agreements between industrialized and developing countries (Gussiås 2006). Inland Revenues Authorities will also be interested in transfer prices in transactions between countries with the same tax burden to be sure that the taxable income is divided correctly, although in these situations the risk for incorrect transfer price is low since the corporation normally doesn't have any benefit of it (Bjerke 1997).

6.4.1 OECD guidelines

Organization for European Economic Co – operation (OEEC) was established in 1948 to accomplish the Marshall Plan, which was an economical reconstruction program for the Western Europe after the World War II. In 1961 the organization was renamed OECD, short for Organization for Economic Co – operation and Development. Later also non European countries have become members and today (2005) the organization has 30 member countries.

The main purpose of OECD is to work in relations across borders and through sincerity and by working together reduce the risk of conflicts and disagreeing politics. Guidelines for various areas have been developed and OECDs tax committee has required every country to follow these as carefully as possible (Liland et al. 2002). The guidelines are recommendations and not legally binding.

There have been developed guidelines of practice of pricing in transactions between units internally in an international corporation by OECDs Committee on Fiscal Affairs. These guidelines are called "Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations" and built on the Arm's-length principle. This principle is the international transfer pricing standard and OECDs member countries have agreed to use this in connection to taxes. In general the Arm`s – length principle is based on comparing conditions between a controlled transaction and transactions between independent parties and will be discussed in more detail later.

6.4.2 Internal services

In ODECs guidelines (2001a and 2001b) for transfer pricing there are specifications for transfer pricing of internal services. The arm`s length principle has to be followed when dealing with transfer pricing on services. This is in situations where one unit in a corporation is performing activities for another unit in the same corporation. Tax authorities in the country where the mother company or the actual service unit is resident, together with the international firm; have to decide which costs should be covered by the mother company or the service unit. They also have to agree on which cost should be moved to other internal units domestic or possible abroad. There is a risk that international corporations charge units in the country with best benefit in tax demand (OECD 1984). In delivery of internal services it

is common to use internal agreements. Management Service Agreement is often used. These agreements have the advantage of making clear which services have been performed and how the charging of the consignee should be. A firm has to get benefits from the service it is charged for and the size of it has to be in relation to the service that is done, for the tax authorities to give their approval (Hansen et al. 1996).

6.4.3 Advance Pricing Agreements (APA)

In the last years there has been an increased interest for transfer pricing and the Inland Revenue Authorities have more and more inspections to make sure that it is done correctly. Punishments for faults in transactions have been increased and corporations try to guard themselves against later adjustments and double taxation. To make sure there is no need for adjustments corporations will enter agreements with the Inland Revenue Authorities. This kind of agreement is getting more and more common internationally (Gussiås 2006).

"Agreements between taxpayers and Inland Revenue Authorities to determine what criteria to attach importance to in transfer pricing of this particular transaction in a given time period" is the definition of APAs according to Joachim Bjerke (1997, trans. by author). The Norwegian Inland Revenue Authorities is not using Advance Pricing Agreements today but with some special cases as exceptions.

The main content of Advance Pricing Agreements is methods to use in transfer pricing, foundation for comparison, adjustments of this foundation if necessary and also assumptions for possible events in the future. Which transactions, years and units that are tied to the agreement is up to the individual tax payer, but the Inland Revenue Authorities have to be involved in the decision. It is possible to go back in time in this kind of agreement, or extend it over several years or several tax authorities (Bjerke 1997).

The major advantage of APAs is that the main uncertainty according to the tax authority approval of transfer pricing methods is eliminated. With use of APA the Tax Authorities will accept the transfer price before the transaction is done. These accept will make the probability for later adjustments reduced. Another advantage is that APAs give co – operation between tax payer and tax authorities and this provides mutual insight into thought process and procedures. In cases where APAs apply to past years is it possible to use the

agreement to solve problems from these years. It is a benefit to pursue APAs if the former problems have not been adjusted or if it is easy to adjust. This makes Advance Pricing Agreements resource and time saving for both tax payer and tax authority (Markham 2005).

Advance Pricing Agreements that involve tax authorities in different countries can be difficult because several countries do not allow this kind of agreement. Then there is no uncertainty elimination associated with double taxation. This is because the other country does not agree with the transfer pricing method that is used. Both time and recourses are needed in preparation of an Advance Pricing Agreement and there has to be evaluations of cost associated with APAs against cost associated with transfer pricing procedures and examination of this. A major problem in APAs as in the rest of the agreements processes is time delay. A long time from application is delivered to approval from authorities is one problem. Continues change in business structure and environment is another problem that demand change in agreements and make them more expensive (Markham 2005).

7.0 Fishing industry

The fishing industry today consists of several complex corporations, both large and small. It is an industry where it is easy to get information about external companies. In the fishing industry benchmarking is used to buy some percentage of the process or product to compare with own units. This information is used to find external transfer prices and this transfer price is used when making decisions about outsourcing or keeping a unit or product. This benchmark is used to find a comparable price to use in the CUP – model (Chapter 5.2.1) and from this set the correct transfer price. The purpose of using benchmarking is to get access to information about a corresponding external unit and to learn and improve the one's own corporation. It provides direct information about the value of one's own units and shows where there is possibility to improve. (Frank Ashe 2010).

In this chapter I will give a short overview of the fishing industry and in chapter 9.1 will I have a discussion about benchmarking in the fishing industry according to transfer pricing.

7.1 The fishing industry

Fish farming started on a small scale in the 1970s but it wasn't until the early 1980s that it became a big industry. According to Central Bureau of Statistics (Statistisk sentralbyrå 2010) the fish industry constitutes about 5% of all export in Norway and the main type of fish being exported is salmon and trout (Hansen et al. 2008). In 2006 909 permits for salmon and trout farming were given in Norway. This amounts to a total production capacity of 890 761 tonnes (Directorate of Fisheries 2006).

The production process for fish is shown in figure 7.1.

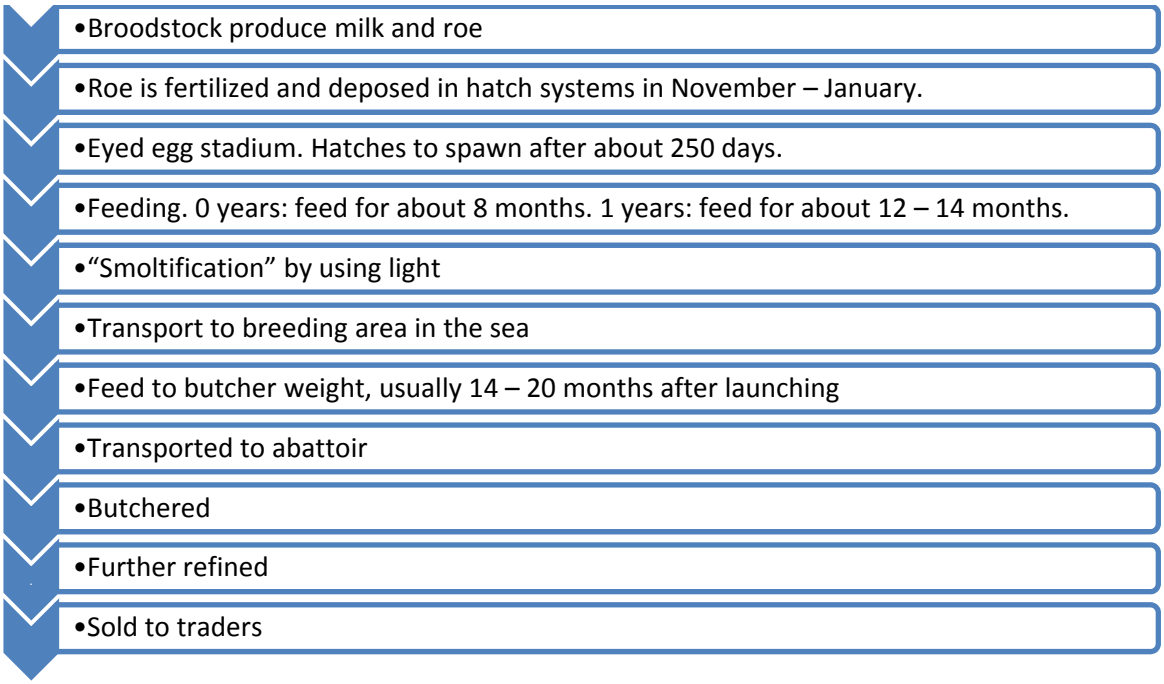

Figure 7.1: Production process of salmon and trout.

As shown in table 7.1 the main production of salmon in Norway takes place in Nordland County. The production of trout is highest in Hordaland and Møre og Romsdal.

	MATFISKPRODUKSJON GROW OUT			
	Laks *Atlantic salmon*		Regnbueørret *Rainbow trout*	
Fylke *County*	Mengde *Weight*	Verdi *Value*	Mengde *Weight*	Verdi *Value*
Finnmark	22 066	529 557	698	20 436
Troms	70 961	1 776 457	960	24 939
Nordland	130 999	3 421 215	9 236	208 768
Nord-Trøndelag	55 699	1 396 119	13	324
Sør-Trøndelag	80 792	1 858 108	1 372	38 130
Møre og Romsdal	79 701	1 979 575	18 483	461 812
Sogn og Fjordane	43 256	1 084 235	8 862	213 807
Hordaland	88 492	2 257 893	22 929	599 669
Rogaland	43 752	904 890	71	1 915
Øvrige fylker	10 664	161 226	83	3 347
Totalt/ *Total*	**626 382**	**15 369 275**	**62 707**	**1 573 147**

Table 7.1: Fish production in Norway in 2006, Directorate of Fisheries)

Profitability examination done by the Directorate of Fisheries shows that fishing industries has a joint annual turnover of 20 billion Norwegian kroner and total result of six billion Norwegian kroner before tax. Production in the fish industry has increased from 30 000 kilos per man-labor year in 1985 to about 390 000 kilo per man-labor year in 2006, but

the curve is leveling off. The Directorate for Fisheries has concluded that 2006 was a stable year but also a peak in production.

In Norway production of salmon and trout amounts to about 689 thousand tonnes, of which 17 tonnes were consumed in Norway. A little over 50% of the export was farmed fish. For salmon France, Denmark, Poland, United Kingdom and Russia are the most important markets. But France is growing in importance (see figure 7.2). The export value increased from 2004 to 2006 due to high prices and increased production.

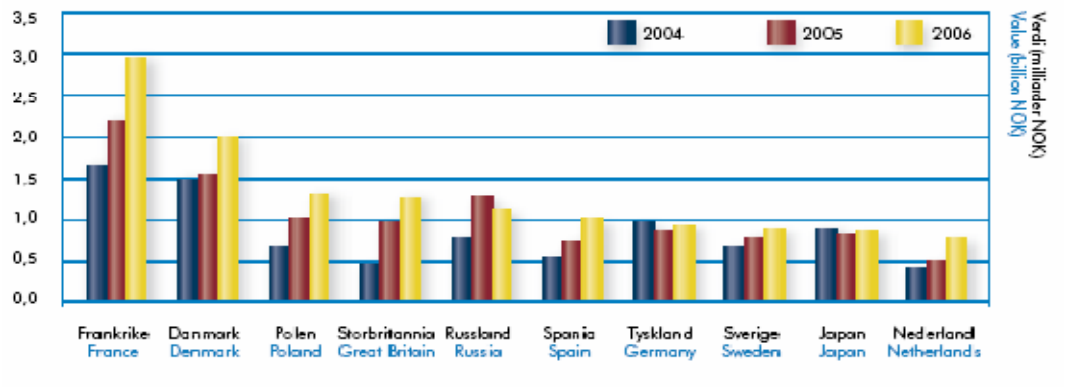

Figure 7.2: Export of salmon

The main marked for trout is Japan but in the last years even Russia has become an important market. There is less profitability in trout production than in salmon and as a result the production is lower. (Hansen et al. 2008).

8.0 Gas industry

From the reservoir natural fluids with a number of different combinations of hydrocarbons, water and other molecules are produced. A reservoir is a porous rock that contains hydrocarbons that it is possible to produce. Required result after producing these hydrocarbons is stabile oil and gas. In the reservoir pressure and temperature are high and there will be different qualities and different quantity factors between gas and liquids when they are transported to surface (Asheim 1985). Process installations treat the gas and transport it to the market. For gas there is a separate export system on the sea bed to transport gas to an external marked (Gassco 2010).

Gas is given in standard cubic meter (Sm^3) oil equivalent (o.e). Sm^3 have reference 15 degrees and 1,013 bar and is an international measuring unit that is used in the oil and gas business. Oil equivalents is used to get oil, gas and natural gas liquid (NGL) in the same scale (Statistisk sentralbyrå 2010).

8.1 Gas history

Before World War □□ offshore drilling was limited to shallow waters in Lake Maracaibo, Venezuela and Louisiana, USA. The first offshore platform began production in 1947 in the Gulf of Mexico, but it was not until the 1960`s the adventure really started. This was the start of a future with many new oil offshore oil and gas provinces being discovered also in Norway (Odland 2000).

Before 1960 the resources on the Norwegian Continental Shelf were unknown. It was an American oil company that started to search in the North Sea after finding gas outside Netherland. But it was not until 1969 the first big Norwegian oil field, Ekofisk, was discovered by the oil company Phillips. Foreign companies were the first to start extractions in Norway but the Norwegian government required a big part of the income and close co-operation with newly established Norwegian oil companies to secure Norwegian income and development. This was the start of the oil and gas industry in Norway and also the leading revenue source in Norway after 1970.

Today Norway is one of the largest producers of oil and gas in the world and the third largest exporter. From 1996 big yearly deposits to the petroleum revenue fund have been made and in 2007 were the fund had a value of 2000 billion Norwegian kroner (Norsk Teknisk Museum 2010).

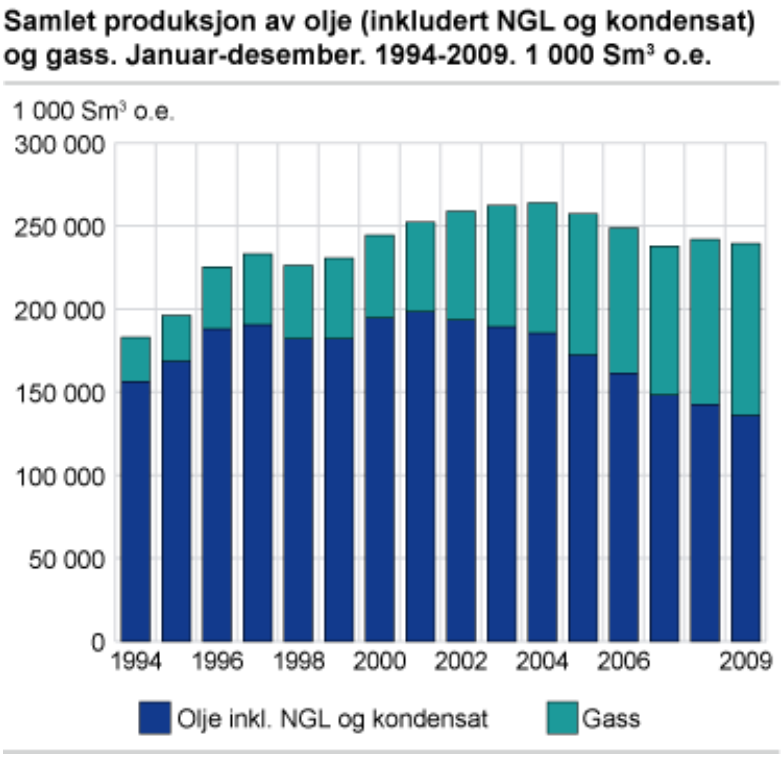

Figure 8.1: Total annual production of oil and gas

Large gas fields were discovered in the 1980s on the Norwegian continental shelf and Norway is now as much a gas nation as an oil nation. To transport gas to shore in Norway or to export it to Europe pipe networks were built on a large scale (Norsk Teknisk Museum 2010). Total production of oil and gas in 2009 in Norway was 239 million Sm3 oil equivalents. This is a reduction of about 1 percent from the year before. Gas production increased but oil production decreased from the top year in 2000. Gas production doubled from 2000 to 2009 and the production in 2009 was 103 billion Sm3 oil equivalents. This is 43 percent of the total petroleum production this year. In 2009 five new fields started production of gas and this gives a total of 52 gas field in production (Statistisk sentralbyrå 2010).

Production of Natural Gas Liquid (NLG) has remained stable for the last five years and in 2009 the production reached 16 billion Sm3 o.e. Condensate was in production on eight fields the same year and produced 4.4 billion Sm3 o.e (Statistisk sentralbyrå 2010).

The future vision is that gas will be an increasing part of the total petroleum production. At the same time a gradual decrease in oil production is expected. The total Norwegian gas export is expected to increase over the next five years. Gas is also used in injection wells on the Norwegian continental shelf and in energy production in addition to gas sale from Norway.

This expectation of gas export has a huge uncertainty factor when it comes to production size. Factors that have influence on this are stops in production, how fast production drops and production start for a particular field, technological development and how much there is to produce on every field. In the future the amount and size of discoveries and profitability in the business will be a big part of this uncertainty factor as well (Gassco 2010).

8.2 Gas introduction

4.6 billion years ago the earth was created and it has been constantly changing ever since. These changes are caused by geological processes bothon the outside and the inside. Earth's engine on the outside is the radiation heating from the sun and together with gravity it creates processes such as disintegration, erosion, deposition and transportation. Heat flowing from the center of the earth is the inner engine and causes shifting of tectonic plates and up – pushing of melt and formation of mountain ranges.

Organic material from plants, algae and animal plankton are the main components of oil and gas. This material falls to the ground and if there is no oxygen circulation putrefaction will use all of it and the organic material will be seasoned. From algae that are seasoned in clay clay shale will be created and this is a possible source rock for oil and gas. Over time and with temperature increasing to 80 – 150 degrees this organic material will be transformed into petroleum.

Oil and gas consist of a number of chemical connections between carbon (C) and hydrogen (H). The simplest connection gas is Methane (CH_4), and this is created from biological processes in bog, swamp, rubbish dump and shallow depths in sediment reservoirs (Ramberg et al. 2007). Other central gases are Ethane (C_2H_6), Propane (C_3H_8) and Butane (C_4H_{10}). Methane is the main component in natural gas in most cases but the others are also important. Carbone Dioxide (CO_2), Water (H_2O), Nitrogen (N), Hydrogen (H) and noble gases are also present (Bjørlykke 2001).

Gas will normally contain a lot of hydrocarbons if it has not been exposed to temperatures above 120 – 150 degrees Celsius or if it originates from bacteria on shallow depths. In production it will be liquid and be called condensate gas or wet gas. Dry gas contains mainly methane and will not give any big amount of condensate (Bjørlykke 2001).

Crude petroleum can be divided into several types and gas will be present in all production processes as shown in Table 8.1 (Bjørlykke 2001).

Low shrinkage oil	•After production and separation this will contain a lot of liquid and little gas •Under normal pressure and temperature
High shrinkage oil	•After production and separation this willcontain a small percentage of liquid and a considerable amount of gas •Under normal pressure and temperature
Condensate	•With pressure reduction this will turn into liquid •Gas with temperatur higher than the critical point •Low density
Dry gas	• Creates no liquidphase under normal pressure and temperature •Special methane and other molecules with low carbone number
Wet gas	•Is pure gas phase in reservoir •Creates some liquid during production and separation under normal pressure and temperature
Undersaturated crude oil	•Oil that contains less gas than what is dissolvable by pressure and temperature in the reservoir
Saturated crude oil	•Oil that contains so much gas that it is cursory by pressure and temperature in the reservoir

Table 8.1: Classification of crude oil.

Gas is used in many of the products that we use every day. Oil and gas together is the most important material in production of plastic. Here hydrocarbons are broken down and compounded in different ways to get different qualities. Color and/or new chemicals are added to improve the quality of the raw material. From these products everyday life products like shopping bags, drinking bottles, computers and mobile phones are made (Gassco 2010).

A hydrocarbon reservoir consists of a porous rock type like sandstone or limestone with a dense rock above, creating pockets where hydrocarbons are collected and allowed to float upwards. In the ocean porous rocks usually contain salt water but because hydrocarbons have a lower weight it will displace the water in time. In figure 8.2 this is shown in oil – gas reservoir.

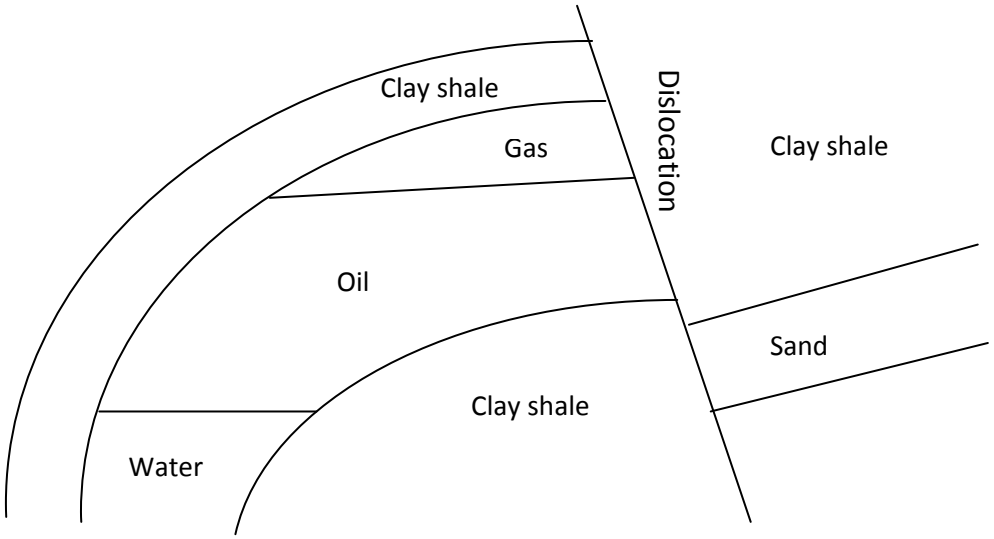

Figure 8.2: Schematic diagram of an oil reservoir with a gas cape

Reservoir types can be divided into four different groups. There is produced gas in all four types of reservoir from some precipitation in production to gas only reservoirs:

- *Purely oil reservoir*: Only oil over water. There is always some production of gas in the production process.
- *Oil reservoir with a gas cap*: Gas lies on the top of the oil and towards the clay shale as in figure 10.2.

- *Gas condensate reservoir*: Only gas over water. Only gas in the reservoir but there can be precipitation of some oil if there is a pressure drop or in the start of production. This reservoir produces a lot of gas and some condensate (light oil)
- *Gas reservoir*: Only gas over water. Only gas in the reservoir but can give some light oil in smaller quantities.

These types of reservoir are mainly divided by witch hydrocarbon components that are present in the reservoir but pressure and temperature also have some influence (Skaugen 2006).

8.3 The gas market

Today Norway is one of the largest producers of oil and gas in the world and the third largest exporter (Norsk Teknisk Museum 2010). When gas is collected up from reservoirs it is transported into shore for future treatment. Process installations treat the gas and transport it to the market. There is a separate export system on the seabed for transportation of gas to the external market. The total length of this transport pipeline is 7800 kilometers. Gas goes from process arrangement through pipelines and in to shore to the process installation. Wet gas and dry gas is then divided. Wet gas is transported to external markets by ship. Dry gas is transported through pipelines to receiving terminals in mainland Europe and Great Britain. Figure 8.3 shows transport gas pipelines today.

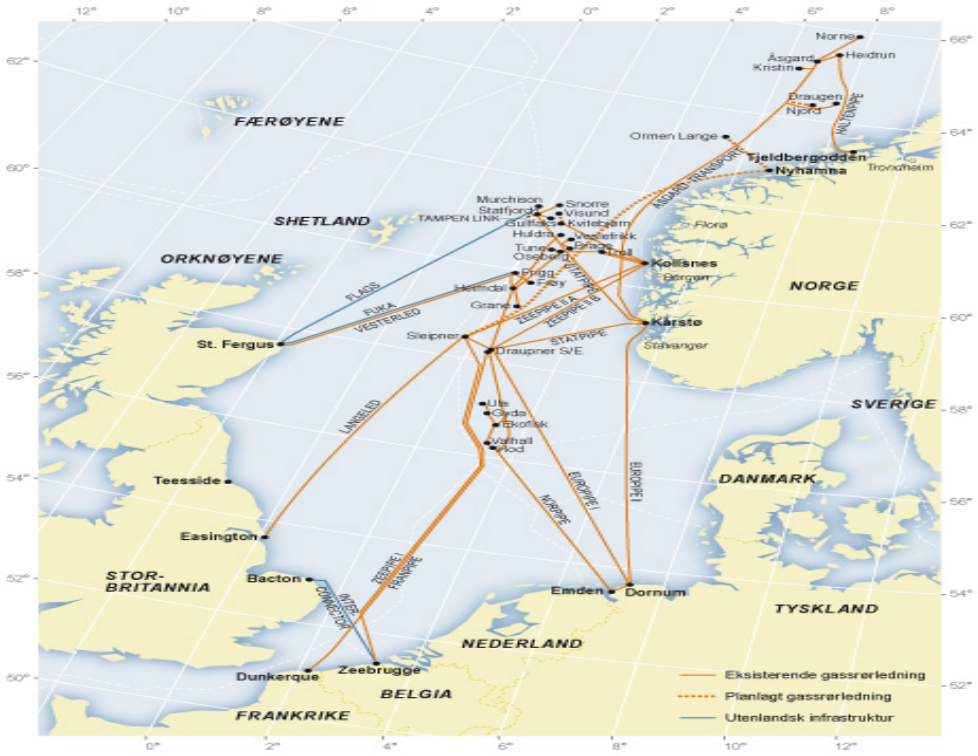

Figure 8.3: Transport gas pipelines

Oil- and gas corporations are responsible for selling their own gas and the sales organization in every firm has direct negotiations with their customers. A total of 96.6 billion Sm3 gas was exported from Norway to landing terminals in Europe in 2009. Figure 8.4 show this distribution (Gassco 2010).

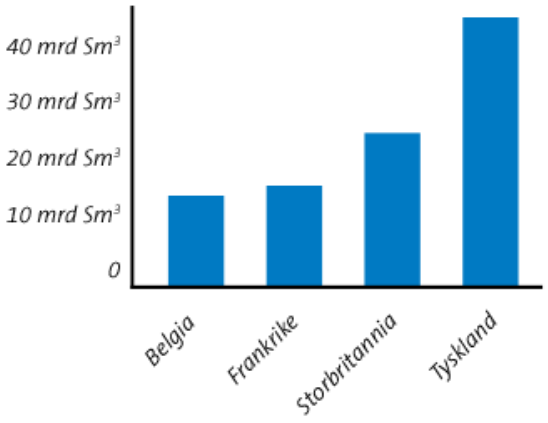

Figure 8.4: Distribution between landing terminals in Europe in 2009

The European gas market can be divided into three different groupes in PLG (Liquid propane and butane) (Gassco 2010):

- Fuel for industry and house (60%)
- Raw material in petrochemistry industry (30%)
- Engine fuel for vehicle (10%)

Many of today's delivering agreements for gas were made in the 1990s and the agreements last for about 25 years. Many new contracts will be entered into in the future and it is expected that around year 2020 gas will be the biggest contributor to Norwegian petroleum production (Skatteetaten 2000).

When the Norwegian gas reaches the European market there are terminals that sell the gas to further buyers. In the United Kingdom the key liquid trading point for natural gas is the National Balancing Point (NBP) and this is the most used trading point in the European marked (Direct Energy Business 2010). This trading point is where a position of a network user is determined and gas can be purchased and sold (GasTerra 2010).

Asche et al. (2001; 2001) and Silverstof et al (2005) show that there is an integrated market for gas in Europe, and so a market based gas price can be a good norm price for gas. In a market with different oil based products Asche, Gjølberg and Volker (2003) show that this market is well integrated and oil prices are determined from the price of crude oil. In United Kingdom the oil, gas and stream markets are well integrated. This means that the price that is included in the contract formulae (chapter 8.5) is not that important for the movement in price because of correlation in all them. (Asche at al. 2006, Panagiotidis et al. 2007).

In the United Stated the most liquid trading point is the New York Mercantile Exchange (NYMEX), and together with the NBP it is closely monitored by Direct Energy Business so there can be an impact on the current and future supply flow and price trends (Direct Energy Business 2010).

8.4 Gas sales contracts

In gas contracts there are a number of detailed specifications on the gas that is going to be delivered. There is a strict requirement regarding quality that the seller has to follow when processing the gas.

When contracts are entered into exporter and importer have conflicting interests. When regulating volumes, the importer would like to have volume flexibility because gas storage is expensive and there is limited supply. The importer also wants to be able to adjust the volume in response to changes in downstream demand and they prefer the gas price to be responsive to the substitute price as an assurance that they will be able to sell the gas. The exporter has to make large and irreversible investments in form of extraction, processing and transportation facilities. To secure the return on these investments the exporter will want an assurance that they will sell this gas over a time period. A stable gas steam at maximum capacity utilization is also ideal and therefore a specific price, a minimum price or other price guaranties are preferred in these contracts.

The general content in gas contract is that the importer receives a certain volume of gas per year or that the importer pays for the volume of gas that they do not like to receive. Another option is to use substantial volume flexibility on a daily basis. Then two types of volumes are used, Daily Contract Quantity or Annual Contract Quality, and flexibility for both importer and exporter will be specified (Asche et al. 2002).

8.5 Gas price formula

A price formula determines the current gas price in long term contracts. The formula consists of two parts: a constant basis price under fixed terms and a part linking the gas price to an alternative form of energy under variable terms. The basis price is the agreed on value of the gas. The last part often combines different alternatives like a weighted average of fuel oil, coal and electricity for natural gas. Every energy alternative is given a certain weight reflecting its competitive situation to gas and the price change is multiplied by an energy convention factor to make it possible to measure it in the same way as gas. Terms are at last multiplied by an impact factor and a gas price formula is given:

$$P = P_0 + \sum_j \alpha_j \left(AE_j - AE_{j0}\right) EK_{AE_j} \lambda_j \qquad (1)$$

where:

P = gas price

P_0 = base price

α_j = weight in the element

j = substitute j

$(AE_j - AE_{j0})$ = price change

EK_{AEj} = energy convention factor

λ_j = impact factor for price change (typical 0.85 or 0.90)

There is a large instability in price changes in substitutes for natural gas price in these contracts. This means that the one producing this gas takes a high part of the price risk. The current price is calculated as an average over a time period and this indicates the correct price (Asche et al. 2002).

In the United Kingdom the oil, gas and stream markets are well integrated. This means that the price that is included in the formulae is not that important for the movement in price because of correlation between the markets. The most important in this formula is not which alternative energy that is included, but how much it reduces and delays variation in price (Asche et al. 2006, Panagiotidis et al. 2007).

8.6 Special gas taxes, laws and guidelines

In addition to laws and guidelines (Chapter 6.3) the Norwegian oil industry is controlled by the Oil Taxation Office. Their focus is mainly on single factors in transfer pricing and they compare different oil corporations' practice to find deviations and special cases.

In 2007 the Norwegian Parliament passed new rules about reporting and documentation of transfer pricing. There has to be a registration on the tax form about transactions made (Tax team 2009) and when the oil companies sell petroleum there are norm prices they must use for this form. These prices are set for crude oil in the Petroleum Income Tax Law §4 (Anundskaas 2009)

There are no norm prices for gas in any law according to Tax Assessment Act § 4 -12, companies are obligated to prepare a written documentation that describes the foundation for the evaluates sales price and terms in their transactions. This has to show that business between closely related parties corresponds to the terms and prices that would have been used between independent parties. Since the yearly production of gas is expanding (7.3 percent in 2009) and gas is a big part of the total petroleum production (42.9 percent in the nine first months in 2009) in Norway (Statistisk sentralbyrå 2009), a standard transfer price for gas is of interest.

Advanced Pricing Agreements (Chapter 6.4.3) is not used by the Norwegian Inland Revenue Authorities, the exception being that the Oil Taxation Office has the possibility to use binding statements according to consequences of tax in specific transactions. This is only in advance of the agreement and only for taxpayers in the petroleum revenue tax law.

9.0 Discussion

In this chapter there will be a discussion about transfer prices in two relevant industries. The fishing industry and gas industry is used to highlight the importance of transfer pricing and emphasize goals by using this transaction price.

9.1 Fishing industry

It is common in the fishing industry to use to find the real market value of a process or a service. This way the market price can easily be found and from this the correct transfer price can be set.

In chapter 11.1 will there be a discussion about transfer prices found from a bench market and with reference to the fish industry.

9.1.1 Transfer pricing and bench market in the fishing industry

In the fish industry there are many integrated corporations, especially in fish farming. This indicates that there are benefits of operating together in a big company. Disadvantages can be controlled because the volume is mainly divided internally. When some percentage is purchased from a bench market big company advantages can be lost. But because this is a small part the benefits will overshadow disadvantages (Chapter 4.2.1).

In this industry many corporations possess a lot of information both general and on specific fields accompanying this industry. To be sure that all resources in the company are utilized in the best way possible is it common to use an external market as comparison. This market is called a bench market and the use of this by learning and improvement through comparison is called benchmarking. External benchmarking is to compare own processes, performance and/or strategy with a competing firm and is often used in the fishing industry.

Transfer pricing is used to find the result and contribution in each department or single unit internally in a corporation. It is possible to compare this set transfer price to other

processes, performance or strategy if there is a similarly organized company in the same market. To compare transfer price to an external competitor it is common in the fishing industry to use a bench market where they are buying some percentage, say 5 percentage of the department, product or stab services to compare with. Buying a part of the fish food is an example of this. They do this to see if they have a transfer price that is correct according to the rest of the marked. This provides knowledge about the profitability in a department or about a product and from this it is possible to analyze potentials. Decisions like expansion, reduction, outsourcing or closing of a department are made based on this knowledge and the information can be used to initiate big changes in a corporation (Frank Ashe 2010).

By using a bench market it is possible for the fishing industry to find out if a transfer price is correct. The bench market shows how capable a department is and if it is better to buy this product internally from an external company. It is possible to use an independent for this work (Chapter 4.2.4). Benchmarking will show what is most profitable of those two, internal or external, and will be used when making a decision on which supplier to use. If the price found from the bench market is lower than the internal price this gives the company the possibility to improve their product or buy from an external supplier. Shutting down a department or reducing an activity is an option. Or if benchmarking shows that the transfer price is correct and the internal market is better than the external they can decide to increase a department or an activity. The internal market is depending on the results of transfer prices that are purchased as some percentage in a bench market (Chapter 4.2.2). Or it has to be taken into consideration whether or not this benchmarking information is in the best interest of the company or if it is a way for an external competitor to get access to a new marked (Chapter 4.2.7).

In the fishing industry as in the rest of the market there are cases where the management has to be involved in setting a transfer price. Benchmarket will be used to avoid an undermined internal marked as a result of no external suppliers. Natural monopolies, economic look – in and tied – up transports cost do not present a problem when there is a manager that uses bench market for some of the products in a corporation (Chapter 4.2.3). This will of course depend on the information being used and that company loyalty (Chapter 4.2.6) is not too strong in the sense of not using external suppliers. If the general attitude in the company is that “we only use our own products” and that “we support our own firm” there

is no point in using resources on benchmarking. The management has to change this attitude before collecting information from external suppliers to utilize in a bench market.

Benchmarking will turn questions about internal and external income to a non-problem. The benefits of having only internal suppliers are still there and there is no danger of sub – optimization. For large companies there is always an option to start an AS, private limited company, of the department to compare with instead of using a bench market (Chapter 4.2.5). Fish food is an example of a product that can be bought in a bench market but where the production could also be sold and turned into an AS. There will also be a decision on buying or making the food (Chapter 4.2.9). Benchmarking some part of the food will provide fundamental information about the most profitable decision on whether to make this food themselves or purchase it from a competing corporation.

To use bench market on staff services it is necessary to organize the staff department in a way that makes it possible to compare it with an external staff department. If one part of the accounting services is purchased from an external benchmarked is it necessary that this part can be compared with the internal part (Chapter 4.2.8).

The main reason for benchmarking is to improve an organization by comparing some part of a process, performance or strategy to be as profitable as possible. Transfer price is used as a comparison and price is the most important decision factor in the fishing industry as in any corporation (Chapter 4.2.11).

9.1.2 Taxes, laws and regulations in the fish industry

All corporations have to pay tax of their profit to the country they operate in. This means that a fish farming company that operates in Norway pays tax of the profit to the Norwegian state. Here a bench market is useful for finding the price of internal transactions if there is no norm price for this. The information a market like this will give can reduce the possibility of having the wrong transfer price and because of this pay an incorrect tax.

If the company also has found it profitable to produce their own fish food in an individual unit or in a daughter company this will give a more complex tax situation. A transaction will be made between the department that produces food and the main company

that. To avoid manipulation of profit between the two parties transfer price is used as a documentation of this transaction. The documentation has to be in the tax form to prove to the Inland Revenue authorities that the transaction is done correctly. In the fish food unit is in another country with other tax laws the transaction can be used to move profit where it is most profitable for the company. This is not legal and will lead to penalties for the involved if discovered. Benchmarket will give the company and the authorities' information about what transfer price to use and there will be no problems or penalties from the Inland Revenue authority (Chapter 6.2).

When using transfer pricing the Norwegian Tax Law regulates what the relationship between the two parties should be and how income and taxes are to be placed with the correct party. The main farming company and the fish food company have to be closely related and they must have a real mutual transaction. Determination by discretion can be performed if there is a reduction in income because of direct or indirect common interest between the two parties.

If the Internal Revenue Office wants to make an adjustment of the fortune or income in the farming company or in the fish food unit three conditions have to be fulfilled. There has to be a reduction in one of the parties' income or fortune, there has to be a common interest between the two taxpayers, and the reduction must come from common interest. If it was service the farming company was buying from a unit, then the service has to be useful for every product or service that the firm is debited with according to Norwegian tax law (Chapter 6.3).

ODEC has guidelines that must be followed in transfer pricing. Both the fish farming company and the fish food company have to follow them in transactions of products, like fish food, and of services (Chapter 6.4.1/6.4.2). They can also enter agreements with the Inland Revenue Authorities to avoid all adjustments. The main content of these agreements is methods for transfer pricing, the basis for comparison, adjustments of this if necessary and also assumptions for possible events in the future. Benchmarket can be used as basis for comparison and this will be reassuring for both related units.

9.1.3 Use of methods

In the fishing industry, as in every industry in an OECD country, transfer price must be set according to OECD's guidelines. The arm`s length principle has to be followed to find the correct transfer price and to avoid penalties and later adjustments. This means that every unit in a corporation or closely related firms has to be treated as if it is an independent corporation. With this as a foundation there are different methods for finding the correct transfer price (Chapter 5.2)

The general understanding of benchmarking is that it is used to compare with other units and to learn from this experience to improve one's own company. This means that to use a bench market there has to be enough information about the market that is used as comparison. Or in other words, if there is lack of information there is no purpose in using a bench market. In such situations Transactional profit methods are then not useful in a bench market to find transfer prices (Chapter 5.3).

In these situations traditional transaction methods are the best way to find transfer prices in a bench market. OECD recommends using one of the traditional transaction methods as long as it is possible and there is enough information to use them. In the fishing industry the choice of which method to use in the benchmarked will depend on what products are used and what information is available (Chapter 5.2).

Since the fishing industry are regular users of bench market fish food has been used as an example of this information collection method. When a fish company is buying some percentage of their fish food from a comparable firm in the same market this will be information that is used as a foundation for setting the correct transfer price on their own fish food and to decide if it is more profitable to buy fish food or produce it themselves. If there are no non adjustable differences in this transaction that could have influence on the transfer price the comparable uncontrolled price- method is a great method to use to find transfer prices for fish food. It is easy to find market price in this industry and the price that fish food is purchased for is market price and the correct transfer price. This is the CUP – method to find a transfer price through benchmarking. The percentage that is purchased from an external market is used to find the comparable uncontrolled price and then transfer prices. Here the market price is used as a basis for a transfer price but it depends on an equal product. If there are different contents in the fish food this can be a factor that is not adjustable and this can

affect the benefit of this method. You have to analyze every situation to see if the CUP-method is useful (Chapter 5.2.1).

If the fish food unit in the company sells food to other fishing companies it is possible to find transfer prices using the resale method. The resale price will be the basis for what the mother company uses as a transfer price to the fish food unit or daughter company. The daughter unit has to have a gross profit margin that is calculated for in the transfer price. The margin that is set has to be compared internal and/ or externally in a comparable transaction. A bench market can be used for this purpose. The factors that are important in the transaction must be very comparable for this method to work. The more comparable the factors are the more likely it is that the resale price method will give the correct transfer price (Chapter 5.2.2).

In some cases is it easier to look at the mother company's cost instead of the daughter company's gross profit margin. If the bench market provides more and better information buying percentages from the mother company, looking at costs from producing the fish food, the cost – plus method is the best to use. The daughter unit that is buying from a mother company uses the cost of producing fish food and a gross profit margin to find right transfer price. What direct, indirect and operating costs the mother company has when buying the fish food and what gross profit margin is probable must be determined. It is not likely that the method will be used on fish food since the cost –plus method works best in cases without market price and/ or direct comparing methods. Fish food is a big industry and as long as there is not a particular kind of fish food that is not comparable to a market this method not so suitable for fish food and a bench market (Chapter 5.2.3)

Which method is the best to use depends on what data is available and how comparable the information is. A combination of methods can be used but the arm`s length principle has to be the leading principle.

9.2 The gas industry

As a fast growing industry and with more and more complex corporations there is an increasing interest for transfer pricing in the gas industry. The complexity of this industry presents challenges in supervising the departments and also in interaction with the society and authorities, especially when it comes to taxes.

In chapter 9.2 there will be a discussion about the use of transfer pricing in the gas industry with examples from gas pipelines and gas sale. Taxes, laws and regulation will be looked at according to transfer pricing in this industry and also use of method to find this transfer price.

9.2.1 Transfer pricing in the gas industry

In Norway the gas industry is growing, with increasing production and more and more export to Europe. This makes it a complex business. Gas is exported to Europe through pipelines on the seabed and there is a big pipe grid on the Norwegian continental shelf today. Total length of this transport pipeline is 7800 kilometers (Chapter 8.3). The laying of gas pipelines is a compound operation where many parties are involved, both internal and external. Some services and products are purchased from external suppliers and some from internal units. Contracts will contain specific unit prices, but other factors will also have influence on the operation regardless of the parties involved (Ole Ophus 2010). This will provide an overview for every party involved (Chapter 8.4). In internal markets using transfer prices to push departments to be compatible and to have responsibilities of own results often has a positive influence (Chapter 4.2.1). This can result in expansions in order to place more of the operation internally in the company and thereby increase the profitability. The price of the operation will make the pipeline company decide whether an external or internal supplier is the best to use. A correctly set transfer price can be used to set the price of an operation so it is possible for the company to decide which supplier to use. Suppliers can also use transfer price to decide if this is an operation they will do at the set price. If suppliers think the tender

transfer price is too low for their services, they can of course turn the job down, but this can also indicate that their prices are too high compared to the market price (Chapter 4.2.2).

To avoid internal monopoly it is in some cases necessary for management to set the correct transfer price. Economical lock – in is also a reason for the management to control this price. Rapid development of technology in a business with large annual turnovers results in the gas industry having products that require special knowledge to use, maintain and develop. Only a few companies possess the required knowledge, and since they know their clients are dependent on them they might price their services at an unreasonably high level. If the transaction takes place between departments in a corporation management involvement will provide the correct transfer price compared to market standards and avoid this problem (Chapter 4.2.4)

An operation in gas pipe laying will be complex and it will often be necessary to involve external suppliers (Ole Ophus 2010). Some units of the firm can also be sold and made into private limited companies to make it easier to develop products or ideas to fit the operation (Chapter 4.2.5). Particular products used in the gas pipeline can be developed in such a unit. Agreements or problems with strong company loyalty can be a reason to sell out. The transfer price will be adjusted to market price if there is no department in the firm to be loyal to. Market price will be more profitable for the pipeline corporation because the transfer price will show if the product can be bought for a lower price externally than from the company's own unit (Chapter 4.2.6). Obviously, external suppliers also must be examined critically to be sure of their intentions, especially if they offer a very low price (Chapter 4.2.7).

Several parties are involved in the pipe laying. Administration, coordination, and control functions all play their part. Also consultancy, services and research are involved. To be sure this parties is used in the best and most profitable way transfer prices can be used. This requires that the unit is organized in a way that makes it possible to compare it to external units. This will show effectiveness per person involved and their contribution (Chapter 4.2.8).

Transfer pricing can tell big corporations if it is better to buy services or products from others or to make it themselves. This is called "make or buy decisions". The economical benefits of being a big company are one important reason for merger. When considering a

merger the company has to consider whether values, manners and culture will suffer because of conflicts and cooperation problems or declining quality standards. This will be an individual decision in every company (Chapter 4.2.9). In the gas industry there are a lot of international corporations and also international contracts so the laws and regulations of each involved country have to be taken into consideration. In transfer prices across borders special attention is paid to taxes and the profitability regulations (Chapter 4.2.10). To have an overview over this and also in profitability in every big corporation transfer pricing can be used to find the right price. And a right set transfer price the price the rest of the marked is willing to pay (Chapter 4.2.11)

9.2.2 Taxes, laws and regulations in the gas industry

To use transfer pricing there has to be a relation between two or more enterprises. According to OECD one company or the same person has to be directly or indirectly involved in management, control or ownership of another firm. The Joint Venture Agreement elaborated on this in 2005 (Chapter 6.1).

In the gas industry several different relations are used. One example is when a mother company sells gas to a daughter company. Profit in these two related firms is divided through the transfer price gas is sold for. When the Norwegian Parliament passed new rules about reporting of transaction price many companies had to implement new registration and reporting practices. From 2007 they had to report the transactions in their tax form. When the oil companies sell petroleum they must use norm prices for this in the tax form and these prices are set for crude oil in the Petroleum Income Tax Law §4 (Anundskaas 2009)

There are no norm prices for gas in any law. But in accordance to Tax Assessment Act § 4 -12, the companies are obligated to prepare a written documentation that provides a basis for evaluation of the sales price and terms in their transactions. This has to show that business between closely related parties corresponds in terms and prices to those used in a transaction between independent parties. Since the yearly production of gas is increasing a standard transfer price for gas is of interest (Chapter 6.2).

Laws and directives regarding transfer pricing in the gas industry are the same for every OECD country. These laws have directives for application area of transfer pricing.

There is also a law that ensures that income and cost stays with the right firm and this is in accordance with OECDs arm`s length principle. There are directives that describe when the Internal Revenue Office can make judgment of adjustment in income and fortune. But for the oil and gas industry there are some additional laws and guidelines. The Norwegian oil industry is also controlled by the Oil Taxation Office. Their focus is mainly on single factors in transfer pricing and they compare different oil corporations' practice to find deviations and special cases (Chapter 6.3).

OECD's guidelines are the leading international standard for countries that are members of this organization. OECD's main purpose is to work in relations across borders and through sincerity and by working together reduce the risk of conflicts and disagreeing politics. An OECD tax committee has developed "Transfer Pricing Guidelines for Multinational Enterprises and Tax Administration". Many multinational gas corporations follow these rules although they are not binding (Chapter 6.4.1).

To reduce the risk of later adjustments or double taxation Advanced Pricing Agreements (APAs) have been developed. APAs are not used by the Norwegian Inland Revenue Authorities today, the exception being the Oil Taxation Office's opportunity to use binding statements according to consequences of tax in specific transactions. This is only in advance of the agreement and only for taxpayers in the petroleum revenue tax law (Chapter 6.4.3).

Because gas is big business in Norway is it important what level of profit paid tax is from. This has a big influence on the Norwegian economy and also the economy of the corporation. Transfer prices are then necessary for the authorities to get the par they want and also for the firms to pay the correct tax and avoid penalties.

9.2.3 *Use of methods*

When a gas company decides on what method to use to find a transaction price to the decision has to be in accordance with OECDs guidelines. If the country is an OECD member the arm's length principle must be followed.

OECD recommends using traditional transaction methods to find transfer prices as long as it is possible (Chapter 5.2). As long as there is a marked to compare with is these methods work well. The CUP – method (Comparable Uncontrolled Price – method) can be used as long as there are no non adjustable differences that have influence on the market price. The market price or spot price for gas can be difficult to find because gas contracts are long-term and there are big fluctuations in gas prices. Multinational corporations and internal transactions are common. In Europe the landing terminals resell the gas (Chapter 8.3). These terminals can be used to find a market price but there is no guarantee that this will reflect the market price in Norway and if this is under the same turns.

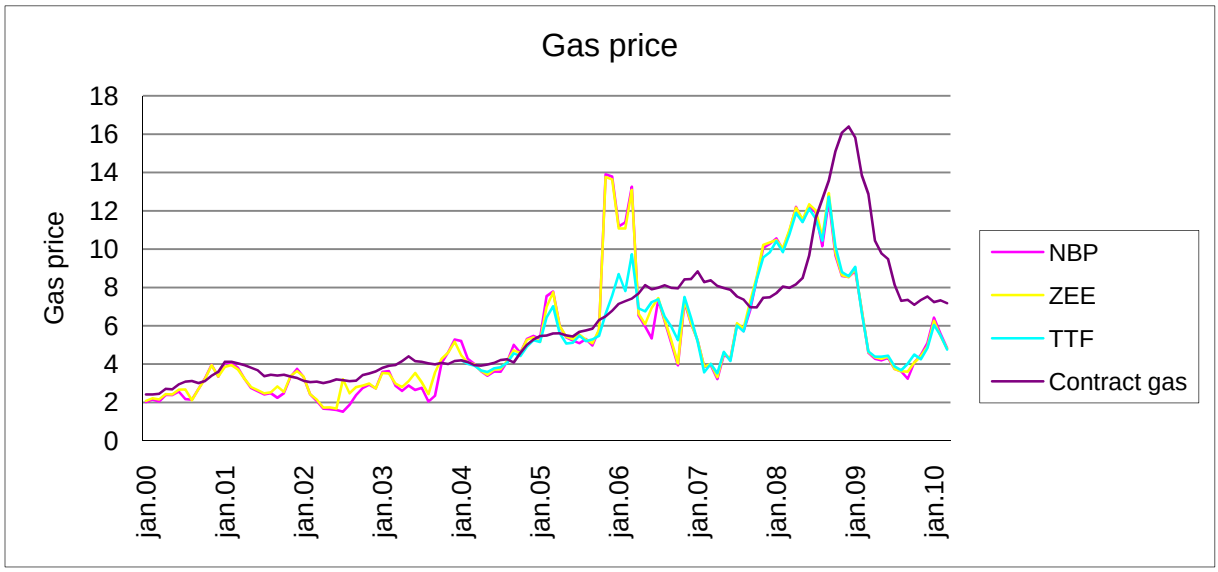

Figure 9.1: Variations in gas prices (2000 - 2010)

In figure 9.1 gas prices from different terminals in Europe (Chapter 8.3) are compared with contract price for gas from year 2000 to 2010. All prices are in USD/MMBUT. The contract averages the other three. But there are some deviations in the contract price. This price has some delay from the other but equal variation. This variation gives income for which taxes will be paid at a later time.

Because of different conditions in Norway and in Europe can the terminal prices can be used in the cost – plus method to find market price (Chapter 5.2.3). Local costs will be regulated for before setting the transfer price. A problem in using cost – plus method on gas is that this method gives uniform cost because it builds on expectations. But as seen in figure 9.1 the gas price fluctuates both in the market and in contract price. An option when using this method in Norway is to compare gas price with the terminals in Europe and from this regulate the price up or down according to transportation. This can also be used in the resale price method. Then the terminal price can be adjusted to make the gross profit margin suitable for a transaction between related parties (Chapter 6.2.2).

To adjust prices a gas price formula can be used. This is an option for setting a gas price in long-term contracts. A transfer gas price is then found from a combination of a fixed price and energy substitutes. But there is a price risk for the gas producer (Chapter 8.5)

In situations where there information is lacking or if it is not possible to compare prices in transactions of gas OECD approved two new methods. The profit split method can find total profit and split it between the participating parties. Everyone involved will then get the correct profit according to their contribution. The same happens when using the transactional net margin method, but here profit is divided as percentage of the contribution. Although both methods are approved by the OECD they still recommend the traditional transaction method (Chapter 5.3.1/5.3.2).

It will be specified in a gas contract which method to use (Chapter 8.4). All parties have to agree and the gas price and payment routines must be specified to avoid conflicts and unexpected costs. This has a big influence on payment on the tax and the future of the involved corporations.

Transfer prices are useful for estimating a price and it is possible to find a guiding norm price to the gas market this way. This will be a starting point for finding a good transaction price and useful in taxation. As an average terminal prices can be used to control a transaction price. Systematic deviations have to be controlled so profit can be divided correctly. If these deviations continue over time an explanation must be given. This comparing of price makes it easy for the authorities and the corporation to control a correctly set transfer price.

10.0 Conclusion

Transfer pricing is an important tool to get an overview of and make visible cost and contribution in big corporations. As a general rule transfer prices are used to make a more profitable economical intervention, to get an impression of the financial situation and also to have control over the background for decision making. Because of complex organizations it is often difficult for management to see profitability and contribution of the different units in the corporation. Transfer pricing can give an overview of the situation and at the same time place more responsibility with the unit manager. Because transfer prices can influence the department future it may motivate departments to greater effectiveness and economical thinking.

In large corporations correctly set transfer prices will give a taxation benefit, especially in international corporations where legislation in different countries have to be taken into consideration. Both corporations and authorities will have interest in correctly set transfer prices. Transaction tax is a large source of income for the authorities and the company can avoid penalties by setting the correct transfer price.

To find a transfer price that is in accordance with OECDs international standard in the arm`s length principle, several methods are approved. OECD has come up with three traditional transaction methods that mainly follow the principle of comparing transactions with an independent corporation. When the basis for comparison is good the correct transfer price is found by comparing effectiveness, with the possibility to adjust data. But if there is a lack of information or the information at hand is unsatisfactory it is more difficult to find a transfer price that is in accordance with the rest of the market. The OECD has approved two methods for cases with lack of comparable data. Based on net profits from transactions between closely related corporations it is then possible to find the transfer price.

This thesis has presented two industries where transfer pricing can be used to find cost and contribution. The thesis also analyzes how taxes are affected when using transfer prices in the two industries.

In the fish industry it is easy to compare the company's effectiveness to the market. Benchmarking is used to buy some percentage of a corporation to compare and measure effectiveness in one's own company. This provides information about what the transfer price should be. Because the price is found by looking at a comparable market it is the correct transfer price and presents a valid basis for evaluation of the profitability of the company's various departments.

In the gas industry there is no unit price or norm price for gas. Longtime contracts are entered into on expectation of future prices. Because the gas industry is a growing industry and the corporations are getting more and more complex, a set transfer price for gas could be a benefit for the involved parties. International corporations with daughter companies both domestic and abroad place a large importance on transfer pricing when it comes to deviation of profit. Comparability is not so easy in gas transfer pricing questions. There are terminals in Europe that resell gas to the consumer market, and when making a few adjustments their prices can be used as a comparison. An average of the terminal prices presents a good guiding price as long as systematic deviation over time explained by the one setting the transfer price.

This thesis has also looked at how transfer pricing can be used to improve corporations' relations with the authorities. There are other situations and industries where transfer prices can be important tool and also is used today.

In Norwegian hospitals a unit price per operation is often used when applying for governmental support. The hospitals have to consider this price in every operation. This is meant to increase effectiveness. Public hospitals will never go bankrupt but this unit price or transfer price will show money used per operation. Questions have been raised about this unit price as many people fear it will lead to prioritizing of profitable patients and leaving unprofitable patients waiting (Johansen 2007).

In industries where tenders are common transfer pricing used to be a control mechanism between the company issuing the tender and the invited tenders. When local government issues a tender on sanitation transfer prices can be used to find out which sanitation firm has the lowest unit price and from this decide which firm to use. There can be transfer price per garbage disposal or in weight, example per kg. This will give a good overview of cost per household.

In some situations is it useful to use tender to get the best offer. An example is when Directorate of Public Roads invites to a tender competition. The company with the lowest offer may get the job but it will need a special contract where all transfer prices are listed to show that their offer is the best (Norges Høyesterett 2003).

Debt-collection agencies can be used as a bench market when companies sell a percentage of their outstanding money in form of customers' unpaid bills. This provides financial security for the company and the debit-collection agency will get paid for the job

This thesis has shown the importance of transfer pricing and its many areas of application. Being an effective tool transfer pricing can be used in many industries and increase the companies' profitability.

11.0 Sources

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12.0 Figures, tables and formula