# Accounting and Auditing 

# Transfer Pricing: Is the Comparable Uncontrolled Price Method the Best Method in all Cases? 

Pranvera Dalloshi ${ }^{1}$


#### Abstract

The transfer price scope is becoming a very important issue for all companies that comprise from different departments or have a network of branches. These companies are obliged to present the way of price determination for transactions that they have with their branches or other relevant members of their network. The establishment of the multinational companies that develop their activities in various countries is being increased. It has increased the need to supervise their transactions and approval of laws and administrative orders that do not leave space for misuses. The paper is focused in the response to the question if the Comparable Uncontrolled Price Method is the best method to be used in all cases. It is presented through a concrete example that shows how the price of a product determined through the Comparable Uncontrolled Price Method or market price has an impact to the profit of the mother company and other subsidiaries.


Keywords: arm's length; traditional methods; related party
JEL Classification: M41

## 1. Introduction

Various authors like Freinschreiber, Elizabeth King, Emmanuel etc, have continuously studied the issue of the determination of the transfer pricing ${ }^{2}$, according to whom it is very important but very complex issue. The knowledge of transfer pricing and their application in a company requires a relevant research, because the decision making process for transfer pricing application is affected by some factors. One of the main factors that has impact on the knowledge and transfer pricing determination in a company is the motive of determination of the transfer pricing, some of which are mandatory because they are connected with the company function process in relation with the external factors and some of them

[^0]are determined mainly because of the internal objectives of the company. The right understanding of transfer prices, transfer pricing methods and the regulation of this field supports the company in having the relevant information on the profit of each division or branch. In the same time, it protects the company from the possible penalties that may come as a result of not having the relevant information related to this issue. Although a very complex field of study and research, the transfer pricing scope has been widely studied, therefore, the users of the transfer pricing can find sufficient literature review that will help them to better understand the determination of the transfer price.

The transfer pricing is a way of measurement of the performance of a division for companies that operate in the same country, or in the subsidiaries of the multinational companies that operate in various countries. While these divisions, branches or subunits are responsible to generate incomes, to control the costs, returns on investments and for the general performance of the unit that they manage, they will not transfer the product/service that they produce/offer to the other subunit without compensation.
The process of decision making related to the application of the proper transfer pricing method requires a lot of information and analyses. Therefore in order to give the instruction to its members, The Organisation for Economic Cooperation and Development published the Administrative Instruction titled "OEDC Transfer Pricing Guidelines for Multinational Enterprises and Tax Administration". This instruction may serve to the administration as guideline for the way of applying taxes on the transfer pricing field.

### 1.1. The Factors Determining Preferred Transfer Pricing Method

The general principles of the transfer pricing require from taxpayers to initially do analysis of their transactions and then chose the method for determination of transfer pricing. The most important components during the transfer pricing analysis are (Feinschreiber, 2004):

- Taxpayers shall use the best method. The regulation instructs the taxpayers which is the most suitable method for particular products on particular situations. The best method is that which determines the price according to the arm's length principle.
- Taxpayers shall do the comparative analysis. Factors that are needed to determine the comparability of uncontrolled transactions with controlled transactions during the comparability analysis are (Levi, Wrappe \& Chung, 2006): functional analyses, contractual conditions, risk, economic conditions and transferred products or services.
- Taxpayers shall respect the arm's length principle in determining the transfer pricing. The instructions of the OECD dated in 1995 explain that the fundamental idea of arm's length principle is that the profit of the taxpayers earned from the transaction between two related parties shall be equivalent with the profit that they would earn as they were operating with non-related party.


## 2. The Specific Transfer Pricing Methods

The countries that are members of the OECD assessed that it would be helpful if there would be established the general instructions for the way of determining the transfer pricing (OECD, 2009 Edition). These instructions would not be laws, therefore, the OECD members could use these instructions but they would not be obliged to comply with them. OECD guidelines divide the transfer pricing methods into two groups:
I. Traditional transaction methods:

1. The Comparable Uncontrolled Price Method
2. Resale Price method;
3. Cost Plus method (C+).
II. Transactional Profit Methods:
4. Profit Split Method;
5. Transactional Net Margin Method.

## 3. The Analysis of Comparable Uncontrolled Price Method for Determination of Transfer Pricing

The Comparable Uncontrolled Price Method is based on the market prices. This method determines the transfer price comparing the way of the price calculation from an uncontrolled company, which has applied this price in similar sales conditions of the product or service. The comparability between controlled transactions and uncontrolled transactions exists when between these transactions there are not differences, or these differences do not have any material effect, or if for these differences there can be improvements. We can say that the most preferable method of the transfer pricing is the Uncontrolled Price Method (Method of the Market Prices). Therefore, we will analyse a real case of the usage of Uncontrolled Price Method in selling a semi-product which is Clinker. Clinker is a dark grey nodular material made by heating ground limestone and clay at a
temperature of about $1400 \mathrm{C}-1500 \mathrm{C}$. The nodules are ground up to a fine powder to produce cement, with a small amount of gypsum added to control the setting properties (http://www.understanding-cement.com/clinker.html).

As the semi-product Clinker is one of the main parts of the final product, it happens frequently to be traded by related parties or unrelated parties. Regarding the purchase of this semi-product, the company which we are going to analyse buys it from both unrelated and related parties. At the same time, it sells it to the related parties, whereas sale of this semi-product to the unrelated parties takes place more rarely because of the very high production cost.

Let us analyse the case of the sale of Clinker from the Division A which operates in country X with the tax on Corporate Income of $20 \%$, to the Division B which operate in country Y with the tax on Corporate Income of $10 \%$. We possess the following data to present the determination of the transfer pricing:

## Division A

Market price $\quad 46 €$
Units of clinker sold: $\quad 37,000$ ton
The costs are as follows:
The direct material, direct labour and other indirect variable costs: $45 €$
Variable administrative costs: $2 €$
Fixed costs:
Indirect costs of production: 333,000€
Fixed administrative costs: $148,000 €$
There are no sales costs as the Clinker is sold only with the customer's request.
Therefore, the cost of producing clinker is: $45+2+9+4=60 €$
Division B
By adding other components, one tone clinker, approximately produces the following: 1 tone clinker / 1.30 tone cement

37,000 tone clinker /48,100 tone cement
The sales price of one tone cement:
Additional costs for producing one tone cement:
$75 €$

The transfer price based on the market price method considering the opportunity cost is calculated as follows (Horngern, Datar, and Foster):

## Transfer price $=$ Cost of goods manufactured $\boldsymbol{+}$ Opportunity cost

Transfer price $=60 €+(46 €-60 €)=60 €+(-14)=46 €$

Table 1. Calculation of the profit of Division A through absorbing method (application of the market price)

Income statement of Division A
Seles $(37000 * 46 €)$

Cost of Goods Sold:
The production cost of clinker $(37000 * 54 €)$

Gross Profit (Gross Margin)
$(1,998,000)$

Administrative expenses:
Variable (37000*2€)
Fixed
$(\epsilon)$
( $€$ $1,702,000$
rixed
Net Profit (Loss) $(518,000)$

The table above presents the case when the Division A sells its semi-product to the related parties with a price which is equal to market price but under its cost of goods produced. It is understandable that when the price is lower than the production cost then there is a loss, which in this case is $518,000 €$. For the external financial report, it is requested the determination of the absorbing costs or the full determination of the cost. According to GAAP, the profit is a long term concept and it depends from the difference between incomes and expenses. The absorbing manner includes all production costs: direct materials, direct labour, variable indirect cost and a part of fixed direct cost of every product unit. When a product unit ends, then it transfers these costs to the stocks. When it is sold, then in the Income Statement these costs are shown as costs of goods sold.

Table.2. The impact of the purchase of clinker with the market price to the subsidiary and parent company

| Division B |  |  |
| :--- | :---: | :---: |
| Cost of clinker purchased from Division A | $(37,000 t * 46)$ | $(1,702,000.00)$ |
| Additional costs for production of cement | $(48,100 t * 14)$ | $(673,400.00)$ |
| Total costs |  | $(2,375,400.00)$ |
| Incomes from selling of cement | $(48,100 t * 75)$ | $3,607,500.00$ |
| Profit |  | $1,232,100.00$ |

## Parent Company

| Profit /Loss from the Division A | $(518,000.00)$ |
| :--- | :---: |
| Profit from the Division B | $1,232,100.00$ |
| Total profit | $714,100.00$ |

The table shows that Division B which buys this semi-product from the network subsidiary does not record neither profit or lost since it would buy clinker with the same price from the third parties as well. But, the profit of the parent company would be as follows:

## The incomes from the transfer price $=$ Cost of the transfer price

Therefore the amount of $1,702,000.00 €$ is the income of the Division A, whereas for the Division B it is its cost. While the profit of the parent company from this trade is zero, the divisions profit is affected significantly from the way of the determination of the transfer price, so it would be preferable that the sub-branch managers were free to determine the transfer price, and to be free to decide if they would sell the semi-product to the other subsidiary or not. In this way, they would show their management ability and increase of the profit of the division that they manage but it would also have positive impact in the total profit increase of the parent company.

- What would happen if the Division A would at least sell clinker with the price which is equal to total cost for one unit?

DM, DL and other indirect production expenses: $\quad 37,000 * 45 €=1,665,000 €$
Variable administrative expenses:
$37,000 * 2 €=74,000 €$
Production indirect cost:
Administrative fixed costs 333,000€

Total costs for the unit:
148,000€

Tables 3. The Income statement of the Division A with the price equal to total production cost

Income statement of the Division A
( $\epsilon)$
( $\epsilon)$
Seles (37000 * 60€)
2,220,000
Cost of Goods sold:
Clinker production cost (37000*54€)
(1,998,000)
Gross Profit (Gross margin)
222,000
Administrative expenses:
Variable (37000*2€)
$(74,000)$
Fixed expenses $\quad \underline{(148,000)}$

Net Profit (Loss)
0
In this case, the Division A does not have loss or profit, as it sells clinker with the price that covers the total cost.

Table.4. The effect of purchasing the clinker with the price equal to total cost in the profit of subsidiary and for the parent company

## Division B

| Cost of clinker purchase from Division A | $(37,000 t * 60)$ | $(2,220,000.00)$ |
| :--- | :---: | :---: |
| Additional costs for producing of cement | $(48,100 t * 14)$ | $(673,400.00)$ |
| Total costs |  | $(2,893,400.00)$ |
| Incomes from selling of cement | $(48,100 t * 75)$ | $3,607,500.00$ |
| Profit |  | $714,100.00$ |

## Parent Company

Profit ( Loss) from Division A 0
Profit(Loss) from Division B
714,100.00
Total profit
714,100.00
In this case, the profit of the Division B would decrease because of the higher purchase price of clinker (from $46 €$ to $60 €$ ), but this does not have effect on profit of the parent company, which remains $714,000 €$ in the same way as it is when the Division A was recoding loss. But having into consideration the opportunity cost, the possibility to purchase the clinker in the external market with a price of $46 €$, Division $B$ (under the condition there is no intervention from the high management) it would not accept to purchase the product with the higher price than the market price. It can be seen from the tables as well that when the product is purchased with the price equal to total cost for unit, it places the division B in a bad situation.

Contribution of the Division B with the price of $46 € \quad 1,232,100.00 €$
Contribution of the Division B with the price of $60 € \quad 714,100.00 €$
Difference
$(518,000.00) €$
Through variable method, cost for one unit include only the variable cost of production, these costs include: direct materials, the direct labour and variable indirect cost. Indirect fixed costs are treated as a cost of e period and they do not pass to the other costs of the product, but are expended during the period they take place.

If we exclude the fixed expenses which take place even if product has not been produced, then the minimal price would be the variable cost of the production which is equal to $47 €$.
DM, DL and other production indirect expenses: $\quad \mathbf{3 7 0 0 0} * \mathbf{4 5} €=1,665,000 €$
Variable administrative expenses:
$37000 * 2 €=74,000 €$
Variable cost of the production

$$
1,730,000 / 37,000=47 €
$$

Table 5. The Incomes Statement of Division A with price equal to variable production cost

The Income Statements of Division A
( $\epsilon)$
( )
Seles (37000 * 47)
1,739,000

Variable expenses:
Clinker production cost $(37000 * 45) \quad(1,665,000)$
Variable admin. expenses (37000*2)
$(74,000)$

Contribution Margin
Once again we saw that the Division A would not earn a profit since in all cases the production cost is higher than the market price.

- Below is presented the case of purchase of clinker by the third parties, showing the contribution of the subsidiary and the group.

Table 6. Purchase of clinker from the external parties
Division B
Cost of clinker purchased from the external $\left(37,000 t^{*} 46\right)(1,702,000.00)$ parties
Additional costs for production of the cement $\quad(48100 t * 14) \quad(673,400.00)$
Total costs
Incomes from sales of the cement
(48100t*75) $3,607,500.00$
Profit
1,232,100.00
Parent Company
Contribution of the Division A 0
Contribution of the Division B $\quad 1,232,100.00$
Total profit $\quad 1,232,100.00$
In this case, there will be no impact for the Division A. The Division B will have the same contribution as in the first case when the semi-product was purchased
with the market price by the Division A, whereas the total profit of the parent company would be $1,232,100 €$. We can conclude that the selling of the product with lower price that the production cost causing loses to the parent company compared to the case when the product is purchased from the external parties.
Contribution of the parent company from the transfer prices: $\quad 714,100.00 €$
Contribution of the parent company from the external prices: $\quad 1,232,100.00 €$
Difference $\quad(518,000) €$
A stronger reason for using this kind of trade is the will of the management to present the profit in that branch/division where the tax rate is lower and thus avoiding the payment of the tax. In this case, the loss of about $518,000.00 €$ is decreased from the incomes of the Division A thus reducing the net profit as well as the tax on profit, the tax rate for corporate profit in country X was $20 \%$ whereas in Y it was $10 \%$. It means that the profit has been transferred to a country which has a lower tax whereas the loss was reported in the country where the tax on profit is higher.

| Transfer with price 46€ | Profit (Loss) | Tax rate | Saving/Payment |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
| Division A | $(518,000.00)$ | $20 \%$ | $103,600.00$ | Saving |
| Division B | $1,232,100.00$ | $10 \%$ | $123,210.00$ | Payment |

Since the loss in the calculation of the tax on profit is reduced from profit, then the Division A is saving an amount of $103,600.00 €$, whereas the Division B pays the amount of $123,210.00 €$ as a tax on profit, an amount which it would pay even if it purchases the clinker from the third parties. As per the parent company, the amount of $123,210.00 €$ would be decreased from its profit even if the Division B would purchase clinker from the third parties but it would not save the amount of 103,600.00€.

## 4. Conclusion

From the example above we can conclude that such determination of the transfer pricing by the Division A is not favourable because its performance as a subsidiary is not assessed accurately. The recommendation would be that the senior management shall not interfere in their subsidiaries because only in this way, it would be possible to identify which subsidiary is performing better. The selling of clinker with the lower price than the production cost is causing loss to the company. We can conclude that the selection of the transfer pricing method has a direct impact in the profit of the company. Therefore, the companies shall pay more attention to the determination of the product prices that they trade with the
related parties. With the market development and the presentation of the new forms of organisation, the usage of traditional methods only is becoming difficult. Therefore, the new transfer pricing methods become useful as a result of possibility to determine the price according to the arm's length principle in cases when the usage of traditional methods does not enable the determination of the price in accordance with the arm's length principle. However, some countries allow only the usage of the traditional transactional methods, some other countries have made no priorities which transfer pricing methods to be used, and they rely on choosing the best methods possible.

## 5. References

OECD (2009). Edition. OEDC Transfer Pricing Guidelines for Multinational Enterprises and Tax Administration. OECD Publishing.

OECD (2005). OEDC Transfer Pricing Guideline. OECD Publishing.
Ernest \& Young (2010). Arm's length Principle: Three challenges arias of application. EYGM Limited.
Freinschreiber, Robert (2004). Transfer Pricing Methods. New Jersey: John Wiley \& Sons, Inc Hoboken.
King, Elizabeth (2009). Transfer Pricing and Valuation in Corporate Taxation Transfer Pricing and Corporate Taxation, Beecher. LLC, USA: Consulting.

Elliott, J. \& Emmanuel, Clive, R. (2000). International Transfer Pricing: A study of cross border Transactions. Clima Publishers.

Smullen, John (2001). Transfer Pricing for Financial Intuition. Published by: Woodhead Publishing.
Marc M. Levi, Steven C. Wrappe \& Kervin Chung (2006). Transfer Pricing Rules and Compliance Handbook. Chicago USA.
Eden, Lorraine (1998). Transfer Pricing and Corporate Income Taxation in North America. University of Toronto Press Incorporated, Canada.
Freinschreiber, Robert (2002). Transfer Pricing Handbook Third Edition. John Wiley \& Sons.
Kuan, Judy S. (2005). Global Transfer Pricing Solution. World trade Executive.
Price Waterhouse Coopers. International Transfer Pricing 2008. Price Waterhouse Coopers LLP.
Green, William H. (2005). US Transfer Pricing source Book. USA: World Trade Executive, Inc.
Arnold, Brian J. and McIntyre, Michael J. (2002). International Tax Primer, second editition. Kluwer Law International; 2 edition, October.
OECD July (2008). Model Tax Convention on Income and on Capital. OECD Publications.


[^0]:    ${ }^{1}$ Faculty of Economics, University of Prishtina, Republic of Kosovo, Address: Agim Ramadani no 60, 10000 Prishtina, Republic of Kosovo, Tel: +37744-662-486, Corresponding author: pranveradalloshi@yahoo.com.
    ${ }^{2}$ Transfer pricing is the price that is assumed to have been charged by one division or a branch of a company for products or services it provide to another division of branch of the same company.

