

***Can the hedging activities managed by
commodity trading companies be freely moved
and shifted for tax purposes within the legal and
tolerated Transfer Pricing guidelines?***

**Bachelor Project submitted for the degree of
Bachelor of Science HES in International Business Management**

by

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Geneva, June 2023
Haute école de gestion de Genève (HEG-GE)
International Business Management
Minor in Commodity Trading

Disclaimer

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Acknowledgements

To start with, I want to express my gratitude towards Sylvain Godinet, my mentor and supervisor for my Bachelor thesis. His guidance, valuable suggestions and professional advice were extremely helpful throughout my work.

Next, I would like to give a special recognition to the various tax experts providing their expertise in commodity trading companies that provided me with insightful inputs for my thesis. Working together with them allowed me to explore different aspects of the subject and conduct a thorough analysis.

Lastly, I am thankful to my family and close friends who stood by me during several months and supported me unconditionally. Their understanding and encouragement during tough times were of great importance.

Executive Summary

In a context where commodity trading companies are constantly seeking efficiency, it is worth asking whether these companies can freely move their hedging activities within the legal transfer pricing guidelines. In fact, hedging activities play a crucial role and represent a substantial source of income for these companies, whose primary focus still lies in physical commodity trading, a highly risky and unpredictable business. Additionally, the apparent lack of specific regulations that explicitly prohibit the relocation of these significant activities intensifies the interest surrounding this question.

To enhance the understanding of the existing guidelines, a thorough examination of the current transfer pricing practices and guidance provided by the Organisation for Economic Co-operation and Development (OECD) was conducted. Additionally, an in-depth analysis was carried out on the objectives and functions of hedging activities. Then, to put this literature review into perspective, transfer pricing professionals active in commodity trading were interviewed to provide valuable insights into potential obstacles faced when separating hedging from physical trading.

Several key points of reluctance therefore emerge. Firstly, traders' desire to work in famous trading hubs supersedes organisational decisions. Secondly, accounting and risk management difficulties could arise if hedging and physical trading are not reported under the same jurisdiction. Thirdly, the significant uncertainty surrounding profit and loss allocation among entities within the same group presents challenges to the performance of each individual entity. Lastly, the introduction of the minimum global tax rate of 15% established by the Base Erosion and Profit Shifting (BEPS) program is viewed as a looming factor, threatening the offshore relocation of hedging activities.

Although there might be operational and accounting barriers to be addressed, this pioneering research shows that commodity trading companies could overcome these obstacles and achieve an improved tax optimization through the strategic evaluation of tax regulations, the leverage of jurisdictions, and the fair utilization of tolerated tax adjustment tools while behaving transparently, ethically, in tandem with tax authorities.

Finally, the global minimum tax rate of 15% presents a significant concern for commodity trading companies, as they will not be able to circumvent its application, despite its uncertainty. However, this tax rate could potentially be beneficial for Switzerland, further solidifying its appeal from both a tax and an economic perspective.

Contents

Disclaimer	i
Acknowledgements.....	ii
Executive Summary	iii
Contents	iv
List of Tables	vi
List of Figures	vi
1. Introduction	1
2. Literature review.....	3
2.1 Transfer Pricing	3
2.1.1 <i>Definition.....</i>	3
2.1.2 <i>Example and illustrations</i>	3
2.1.3 <i>Motives</i>	6
2.1.3.1 Market Competitiveness.....	7
2.1.3.2 Flexible transfer of internal funds for efficiency	7
2.1.3.3 Alleviation of tax burden	7
2.1.3.4 Government control.....	8
2.1.4 <i>Existing Guidelines</i>	8
2.1.4.1 BEPS by OECD.....	8
2.1.5 <i>Profit and Loss sharing methods.....</i>	9
2.1.5.1 Formulary Apportionment.....	10
2.1.5.2 Arm's length principle	12
2.1.6 <i>Current Methods</i>	12
2.1.6.1 Traditional Transaction Method.....	13
2.1.6.2 Transactional Profit methods	14
2.1.6.3 Sixth Method	16
2.1.7 <i>Abusive strategies</i>	16
2.1.7.1 Income shifting through under and over-invoicing	17
2.1.7.2 Debt shifting	17
2.1.7.3 Tax havens and preferential tax regimes	17
2.1.7.4 Use of intangibles.....	18
2.2 Hedging Activities	19
2.2.1 <i>Definition.....</i>	19
2.2.2 <i>Derivative Instruments</i>	19
2.2.2.1 Spot Market	20
2.2.2.2 Futures	21
2.2.2.3 Forwards.....	22
2.2.2.4 Options	22
2.2.2.5 Swaps.....	23
2.2.2.6 FFAs	24
3. The Swiss tax system	25
3.1 Overview	25
3.2 Federal.....	26
3.3 Cantonal – Geneva	27

4. Methodology	28
4.1 Aim.....	28
4.2 Procedure.....	28
4.3 Limitations	29
5. Results	30
5.1 Organization and structure of commodity trading companies.....	30
<i>5.1.1 Transfer pricing and tax activities.....</i>	<i>32</i>
<i>5.1.2 Hedging activities.....</i>	<i>33</i>
5.2 Transfer pricing problematics	34
5.3 Transfer pricing methods used	36
5.4 Internal transfer pricing guidelines and implementation of arm's length principle	38
5.5 Impacts of Pillar 2 (BEPS 2.0)	39
5.6 Current guidelines on hedging activities	40
5.7 Reporting of hedging activities	42
5.8 External audit by tax administration	42
6. Discussion/Analysis.....	44
7. Conclusion.....	52
Bibliography	53
Appendix 1 – BEPS Action Plan.....	58
Appendix 2 – Example of hedging for futures.....	61
Appendix 3 – Interview with a Tax Consultant in commodity trading companies	63
Appendix 4 – Interview with a Tax Expert in commodity trading.....	78
Appendix 5 – Interview with a Transfer Pricing specialist in commodity trading.	87

List of Tables

Table 1 Corporate Income Tax Rates.....	4
Table 2 Company without transfer pricing optimization.....	5
Table 3 Company with transfer pricing optimization.....	6
Table 4 Example of Formulary Apportionment.....	10
Table 5 Allocation of profit according to Formulary Apportionment.....	11
Table 6 Loss Carried Forward rules	48
Table 7 Loss Carried Forward in New York	49
Table 8 Loss Carried Forward in Ireland.....	49

List of Figures

Figure 1 West Texas Intermediate Forward Curve	61
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1. Introduction

Switzerland and more specifically Geneva is a central location thanks to its highly advanced economic and commercial activities. Its geographical position, historical neutral and stable political position, skilled workforce, quality of life and tax privileges are all factors that make it a key location on the international scene. It is for all these reasons that commodity trading companies are flocking to Switzerland and are naturally warmly welcomed. Indeed, approximately 550 commodity trading and shipping companies are in Switzerland, mainly in Geneva, Zug, and Lugano (STSA, 2020). Together, they generated over 26 billion CHF in 2020, which represents 3.8% of the Swiss GDP (Kanton Zug, 2021).

These trading behemoths are in fact seeking efficiency, which is the essence of commodity trading (Diewert, Alterman, Eden, 2005). Indeed, the efficiency strategy is to look at all the areas that cause inefficiency and try to get rid of them. This strategy is called Transfer Pricing. It consists of breaking down the value chain into smaller pieces and considering where each part of these pieces should be located for tax and economic reasons, the ultimate goal being tax optimization (Rugman, Eden, 2017).

Notwithstanding, it is important to bear in mind that transfer pricing aims at defining legal boundaries in collaboration with tax administrations and this through a fair and transparent communication (European Commission, 2018). In addition, transfer pricing policies of commodity trading companies are legally required to be available to tax administrations.

In 2014, the Base Erosion and Profit Shifting (BEPS) package prohibited the displacement of commodity traders (OECD/G20, 2014). Transfer pricing is born – companies opened new subsidiaries all around the world to shift profit from one subsidiary to another. But what about hedging activities? How can hedging activities and profits be separated and independent from the core business of commodity trading companies? Are hedging activities considered as corporate movable functions? Can they be moved freely from one country to another? How can we locate hedging activities which are even more intangible than classical trading activities?

Nowadays, hedging instruments, as a risk management strategy, are widely known and leveraged by trading companies. In fact, buying and selling derivative instruments alongside physical transactions is a way to mitigate flat price risks by absorbing price fluctuations and locking-in profit margin. Indeed, commodity trading is a high-volume and

low-margin business which explains why securing margins is that critical (*Trafigura, 2019*). But can hedging activities be a new source of “tax profit”?

Conceptually, transfer pricing is, from a tax perspective, the pricing of transactions between related companies. The underlying objective is to shift profit to a low-tax jurisdiction to minimize the tax burden and gain efficiency (*Feinschreiber, 2004*). In fact, this strategic scheme is possible thanks to the mismatches and gaps that can be found in the tax literatures of various countries. Although this practice has been tolerated for decades, the tax authorities are becoming increasingly aggressive on transfer pricing. The reason is rational: countries want to collect tax revenues from business activities that take place within their borders (*Beer, Loeprick, 2017*).

Therefore, to help governments build better tax policies, a major organization is addressing this global challenge, The Organisation for Economic Co-operation and Development (OECD) and more specifically with its Base Erosion and Profit Shifting (BEPS) framework as well as its fundamental Arm's length principle (*Pankiv, 2017*). The latter intend to foster international cooperation in tackling tax avoidance issue and defining the boundaries of transfer pricing practices (*OECD, 2022*).

2. Literature review

2.1 *Transfer Pricing*

2.1.1 Definition

Transfer pricing is an accounting method heavily used by multinational companies and more specifically by commodity trading companies, and refers to the pricing of transactions for goods and services between economically related and associated companies (*Internal Revenue Service, 2015*). Transactions can involve exchange of tangible and intangible assets, Research & Development activities, accounting services, or financial transactions such as loans. These internal transfer price adjustments consist of sharing the taxable income and therefore the tax burden among subsidiaries, divisions, or holding companies generated by cross-border intrafirm transactions while benefiting from the different tax policies (Corporate Income Tax rate, Double Tax Treaty, regulations, etc.) across various jurisdictions. Unsurprisingly, Transfer Pricing is a valuable and powerful tool that companies can use to optimize their tax burden. However, some strict regulations have been implemented over the years to address the risks of capital flight, tax avoidance and tax evasion.

2.1.2 Example and illustrations

To better understand this tax concept, let us take an example of a fictive commodity trading company, that we will call Smart Trading SA. This Swiss company is headquartered in Geneva and is specialized in energy trading, mainly oil. Smart Trading is considered vertically integrated and owns a mining company in Nigeria and two refineries in Ireland. In addition, it is highly active in Asia and Middle East, where it opened a few years ago some trading offices to cover a larger time zone and to be closer to the operations.

As one can imagine, when it comes to taxation, accurately allocating the expenses and profits to each subsidiary owned is not an easy task for the top management. Nevertheless, the decisions made in this regard will significantly influence the tax burden borne by the mother company and therefore necessitate careful evaluation.

As stated earlier, Transfer Pricing primarily considers the Corporate Income Tax (CIT) rate in each jurisdiction where the group operates (*PWC, 2023*) (*EY Global, 2022*):

Table 1: Corporate Income Tax Rates

Country/Jurisdiction	CIT rate (2022)	Additional Comments
United Arab Emirates	0%	Up to 55% for upstream oil and gas activities, 20% for branches of foreign banks, and (in practice) 0% for most other companies and branches.
Guernsey	0%	
Ireland	12.5%	
Nigeria	30%	30% for large companies, 20% for medium companies, 0% for small companies
Singapore	5% or 10%	Under the GTP (Global Trader Programme), approved companies enjoy a concessionary tax rate of 5% or 10% on qualifying transactions conducted in prescribed commodities and products.
Switzerland (Geneva)	14%	

This table provides a comprehensive overview of the most probable destinations for transferring expenses and profits. It is indeed in the company's best interest to allocate its profits to states such as Dubai, Singapore or Guernsey and its costs to Nigeria.

Let us consider that the mining subsidiary in Nigeria generates an equivalent of \$500 million per year of revenue, the combined revenue from two refineries in Ireland is \$800 million per year and the trading parent company in Switzerland reports an annual profit of \$1 billion.

According to the information provided in the below table (Table 2, p. 5), Nigeria sells crude oil to Ireland for a value of \$500 million per year. With low costs amounting to \$1 million, Nigeria is therefore taxed on \$499 million at a CIT rate of 30%, resulting in a tax burden of \$149.7 million.

As for Ireland, its purchases from Nigeria amount to \$500 million, and it generates an annual revenue of \$800 million. With a taxable profit of \$300 million and a CIT rate of 12.5%, Ireland would have a tax burden of \$37.5 million.

Finally, Ireland sells its refined products to Switzerland for \$800 million, while Switzerland further sells these products to its clients for \$1 billion annually. With a CIT rate of 14%, the tax burden in Switzerland amounts to \$28 million.

This results in a total tax expense of **\$215.2** million, calculated based on the taxable profit of \$999 million.

Table 2 – Company without transfer pricing optimization

Without Transfer Pricing	
Nigeria	
Revenue	500
Cost	1
Taxable profit	499
CIT rate	30.00%
Tax burden	149.7
Ireland	
Revenue	800
Cost	500
Taxable profit	300
CIT rate	12.50%
Tax burden	37.5
Switzerland	
Revenue	1000
Cost	800
Taxable profit	200
CIT rate	14.00%
Tax burden	28
Total Tax burden	
	215.2

Now, let us consider the hypothetical scenario where Smart Trading employs Transfer Pricing methods to optimize its tax strategy (Table 3, p. 6).

The Nigerian entity, which still produces and sells the same quantity of crude oil to Irish refineries, adjusts the pricing of the goods to \$100 million instead of \$500 million. As a result, the taxable profit is reduced to \$99 million, leading to a tax burden of \$29.7 million.

By purchasing from Nigeria at \$100 million and subsequently selling to Switzerland at \$900 million, Ireland effectively shifts its profit from Nigeria to Ireland, capitalizing on the low CIT rate in Ireland. Consequently, Ireland's taxable profit amounts to \$800 million, resulting in tax expenses of \$100 million.

As for Switzerland, although its revenue remains at \$1 billion, it adjusts its taxable profit to \$100 million, thereby reducing its tax burden to \$14 million.

This results in a total tax expense of **\$143.7** million (-33%!) while the global taxable profit has not changed.

Table 3 – Company with transfer pricing optimization

With Transfer Pricing	
Nigeria	
Revenue	100
Cost	1
Taxable profit	99
CIT rate	30%
Tax burden	29.7
Ireland	
Revenue	900
Cost	100
Taxable profit	800
CIT rate	12.50%
Tax burden	100
Switzerland	
Revenue	1000
Cost	900
Taxable profit	100
CIT rate	14.00%
Tax burden	14
Total Tax burden	
143.7	

Indeed, another possible tax strategy would involve shifting profits to jurisdictions such as Guernsey or Dubai, which offer a 0% CIT rate.

This simplified example serves to illustrate how strategic accounting decisions can result in substantial cost savings for commodity trading companies, making it a powerful tool for achieving tax efficiency. Nevertheless, real life is not that straight forward, and we will see later in this paper which challenges companies face when dealing with existing regulations and stringent restrictions surrounding transfer pricing practices.

2.1.3 Motives

As we understood, Transfer Pricing is an excellent tool to manage efficiently the tax burden a company bears. It enables trading companies to achieve significant tax savings and profits at the end of the year.

However, this practice can also be used for several reasons other than tax minimization. Indeed, the most common motives and functions of the application of transfer pricing strategies can be described as follows: Enhanced market competitiveness, Flexible

transfer of internal funds, Alleviation of tax burdens and Government control (*Lin, Chang, 2010*).

2.1.3.1 Market Competitiveness

By taking advantage of transfer pricing, companies can enhance their competitiveness in local markets by optimizing their cost structure, improving their product and service offerings, and gaining a competitive edge over their rivals (*Lin, Chang, 2010*). Indeed, by lowering their costs, affiliated companies can then offer competitive prices in the market which would have been much more challenging without internal price adjustments due to potential negative margins.

2.1.3.2 Flexible transfer of internal funds for efficiency

Transfer pricing can also be used as internal efficiency motive. Indeed, it gives multinational companies flexibility in pricing methods to facilitate their “global fund management” (*Lin, Chang, 2010*). This could include facilitating the evaluation of each related companies’ performance, avoiding or minimising disputes due to inter-affiliate transfers, recurrent rewards to managers of foreign subsidiaries in order to stimulate them and achieve the common objective of maximizing group profits (*Sebele-Mpofu, Mashiri, Schwartz, 2021*).

Additionally, transfer pricing manipulation adjustments enable multinational companies to reduce risks (such as political, exchange and currency risks). For example, companies may make adjustments to reduce financial risks when the related company is located in a country where the currency is depreciating or may suffer from excessive erosion of local assets due to inflation (*Lin, Chang, 2010*).

2.1.3.3 Alleviation of tax burden

Tax alleviation is certainly the most common motive of using transfer pricing yet not the easiest to apprehend. We can divide these manipulations into two axes: the reduction of tariff costs (custom duties) and the reduction of income tax (*Lin, Chang, 2010*).

As the calculation of tariffs is based on the value-added proportion to a product in a specific country, these costs can be eliminated if goods are sold at a lower price to an affiliate company in this specific country (*Lin, Chang, 2010*).

The second and main axis is, as stated above, the reduction of income tax. This can be achieved by playing with the different tax policies, tax incentives, tax interpretations among the various jurisdictions and by over- or understating the value of transfers in

transactions between related companies. In other words, multinational companies can benefit from some of the existing and numerous loopholes and mismatches between tax laws, hence avoiding tax.

2.1.3.4 Government control

Finally, transfer pricing is a widely used tool to counter some trade restrictions imposed in host countries. Indeed, when a government sets quotas, subsidies, or other non-tariff import restrictions, subsidiaries are struggling to meet their local targets. Thus, by inflating the transfer price, it enables the company to reduce its taxes and eventually offset losses due to the inability to import freely (*Lin, Chang, 2010*).

If the imported amounts are restricted, the price should be set lower to increase the volume of imports.

When trade restrictions are set on exports, the affiliate located in such countries might also inflate the purchasing price to reduce its taxable profit. As for imports, if the restriction is on the export amounts and not on quantity, the price should be set as low as possible to increase the number of products exported (*Lin, Chang, 2010*).

2.1.4 Existing Guidelines

2.1.4.1 BEPS by OECD

The Organisation for Economic Co-operation and Development (OECD) is an intergovernmental organisation founded in 1961 where governments along with policy makers and citizens are working together to promote economic development and cooperation among their 38 member countries (*OECD, 2022*). Together, they aim to share their knowledge and expertise, and to provide solutions to multiple challenging topics, such as world economic performance, cooperation with developing countries, and tax evasion.

Furthermore, the OECD sets the rules governing international taxation standards for multinationals. It provides guidance and standards on a wide range of tax issues, including tax treaties, transfer pricing and the arm's length principle, the taxation of cross-border income, and the exchange of tax information between countries (*OECD, 2022*).

In 2015, the OECD along with G20 countries officially launched the Base Erosion and Profit Shifting 1.0 program (BEPS 1.0) that aims at increasing tax transparency and filling the numerous gaps and inconsistencies existing in international taxation rules for MNEs (Multinational Enterprises) that are engaging in tax evasion and tax inversions

(Thomsonreuters, 2019). For that matter, BEPS 1.0 developed a 15-actions plan to address cross-border taxation with a focus on profit-shifting opportunities.

However, this first phase was later reformed as it did not thoroughly consider digital transactions such as trading transactions occurring on online platforms. Therefore, BEPS 2.0 came into force in 2021 with the aim to modernise tax rules and consolidate individual countries' unilateral taxation regimes into one single and common system (Rödl and Partners, 2022).

BEPS 2.0 framework is built around a two-pillars approach:

- Pillar 1: Reallocation of taxation rights with a fairer profit allocation and nexus rules for market jurisdictions. In sum, it says that taxing rights belong to the country of the company's customer (Rödl and Partners, 2022). This pillar addresses companies with a global annual revenue exceeding €20 billion and a profitability exceeding 10% (EY, 2020). Additionally, Pillar One provides a specific formula to calculate the proportion of taxable earnings within each jurisdiction the company operates.
- Pillar 2: New global minimum tax rate of 15% for MNEs having an annual turnover exceeding €750 million. It aims to put a floor on corporate income tax (CIT) competition by introducing a global minimum CIT rate that countries can use to shield their tax bases (Action 1 - OECD BEPS, 2022).

Current Actions

As discussed above, BEPS framework lists fifteen actions under the OECD framework to provide governments with national and international rules and instruments to fight against tax avoidance and ensure that profits are being taxed in the country where the economic activities and value creation are taking place (BEPS Actions - OECD BEPS, 2022). The fifteen actions are further described in Appendix 1.

2.1.5 Profit and Loss sharing methods

Before choosing a specific transfer pricing method to help set "the right price", a trading company must decide which profit and loss sharing method it will endorse when it enters international interfirm transactions.

For that matter, we can distinguish two different approaches: the Formulary Apportionment (FA) and the arm's length principle approach (OECD, 2010).

2.1.5.1 Formulary Apportionment

Also known as unitary taxation, Formulary Apportionment (FA) is an approach where commodity trading companies allocate their profits across the various jurisdictions where they operate based on the sales, number of employees and payrolls, and capital base (or tangible assets) (TPC, 2020). Each of these factors represent respectively each jurisdiction's contribution in the local consumer market (sales), the capital market (fixed assets) and the labour market (employees and payroll).

This method is based on a specific formula, usually a weighted average of the various factors named above (revenue, assets, payroll, etc.) to best allocate a company's global income among all the countries in which the group operates.

To better illustrate this approach and understand the distribution of profits among subsidiaries, let us examine the case of Smart Trading SA which primarily operates in Nigeria, Ireland, and Switzerland.

According to the information provided in Table 4, the taxable amounts for Nigeria would be \$499 million, for Ireland \$300 million, and for Switzerland \$200 million.

However, the FA approach enables the company to allocate the taxable profit by considering additional factors, such as the number of employees and the fixed assets owned and operated by each subsidiary.

To achieve this, the profit is initially consolidated (\$999 million) and is then split among the various subsidiaries in each jurisdiction, using the below simplified formula. Let us note that multiple formulas may exist. Indeed, each jurisdiction may have developed its own. Hence, it is crucial to agree on specific formula beforehand. For the sake of simplicity, we will use the Standard Corporate method which assigns equal weight to each factor (Williams, Vasché, 1999) :

$$\text{Share of profit/loss for each jurisdiction} = \{((\text{State-wide Property}/\text{Total Property}) + (\text{State-wide Payroll}/\text{Total Payroll}) + (\text{State-wide Sales}/\text{Total Sales})/3) * \text{Total Income}\}$$

Table 4 - Example of Formulary Apportionment

Jurisdiction	Revenue	Costs	Nb of employees	Intangible assets	Taxable profit
Nigeria	500	1	20	150	499
Ireland	800	500	60	300	300
Switzerland	1000	800	20	5	200
Total	2300	1301	100	455	999

Upon applying the Formulary Apportionment method, a significant shift can be observed in the allocation of taxable profits among the various subsidiaries:

Table 5 – Allocation of profit according to Formulary Apportionment

	Revenue	Nb of employees	Intangible assets	Taxable Profit allocated to each
Share attributed to Nigeria	500/2300=22%	20/100 = 20%	150/455= 33%	$((22\%+20\%+33\%)/3)$ *999= 250
Share attributed to Ireland	800/2300= 35%	60/100= 60%	300/455= 66%	$((35\%+60\%+66\%)/3)$ *999= 536
Share attributed to Switzerland	1000/2300= 43%	20/100= 20%	5/455= 1%	$((43\%+20\%+1\%)/3)$ *999= 213
Total	100%	100%	100%	999

The first three columns of Table 5 represent respectively the share of revenue, employees, and intangible assets attributed to each subsidiary.

The last column illustrates the taxable share of profit by applying the aforementioned formula: summing up the shares assigned to each subsidiary based on the three different factors, dividing this total by three, and then multiplying it by the global taxable profit.

The application of the Formulary Apportionment method re-allocates the share of taxable profit considering the number of employees and the valuation of intangible assets. Despite Ireland's revenue representing only 35% of Smart Trading SA, it inherits the largest portion of the taxable profit share due to the employment of the highest proportion of workers and the possession of two-thirds of the assets.

In contrast, Nigeria, which initially appeared to generate the largest profit, is assigned a reduced share of the overall profit due to its small structure in terms of employees and assets.

One of the biggest benefits of using the Formulary Apportionment method is that it significantly reduces the incentive for companies to artificially shift their profits in low-tax jurisdictions. Instead, tax burden is allocated naturally according to the real activity of each associated enterprises in their own location (*TPC, 2020*). Additionally, this method is relatively simple to understand, foresee, and can be easily implemented in companies.

However, this method can be double-edged. Indeed, the formula does not consider all the aspects of the company's business and value, (e.g., intangible assets), which can be detrimental to the profit-sharing process. Furthermore, the repartition may not be in favour of the company, which could allocate most of its profit in a high-tax jurisdiction.

2.1.5.2 Arm's length principle

The arm's length principle states that the price agreed in a transaction between two related parties (controlled transactions) must be similar to the price agreed in a comparable transaction between two unrelated parties (uncontrolled transactions), hence carefully following market prices (*OECD, 2022*). This follows the principle that transactions must be stated at Fair Market Value (FMV). In addition, the BEPS program introduced a provision with the intention of guaranteeing that transfer pricing results are consistent with the concept of value creation (*BEPS Actions - OECD BEPS, 2022*).

As opposed to the Formulary Apportionment method, the arm's length principle is widely recognized by OECD members and most non-OECD members and should not involve any pricing adjustments for tax purposes (*OECD, 2022*).

The so-called arm's length pricing method is considered as more flexible than the Formulary Apportionment method as it analyses and adapts each transaction individually rather than using an existing pre-determined formula for each and every transfer (*KPMG, 2018*).

Additionally, despite its key component being Fairness, the arm's length profit sharing method raises a host of concerns.

2.1.6 Current Methods

It exists several transfer pricing methods that can be used to determine an arm's length price under the guidelines set by the OECD. These methods can be split into two main categories: the Traditional Transaction Method and the Transactional Profit Method. As their respective name suggest, the first method looks at each intra-firm transaction individually, whereas the second method consists at assessing the global company's profit (*Group Valentiam, 2021*).

To determine which pricing method is the most suitable, one must consider the respective strengths and weaknesses of each method, the nature of each transaction, and the degree of comparability between controlled and uncontrolled transactions: a controlled transaction designates a transaction taking place between related entities

(associated enterprises); an uncontrolled transaction happens between unrelated and independent companies.

Moreover, a functional analysis must be performed by the company, which determines the various functions (e.g., manufacturing, R&D, marketing and sales activities, transportation, services, etc.), assets (tangible and intangible), risks (financial, credit, operational, commodity price, inventory, market, etc.) of each associated enterprise and their related transactions (UN, 2021).

2.1.6.1 Traditional Transaction Method

Comparable Uncontrolled Price Method

The CUP method compares the price charged for products or services transferred in controlled transactions to the price charged in uncontrolled transactions in similar circumstances (UN, 2021). To be able to apply this method, comparability factor is key. Therefore, there must be no differences in the transactions being compared that could influence the price although small accurate adjustments can be performed.

To determine this degree of comparability between controlled and uncontrolled transactions, the company should rely on a significant amount of available data. In fact, the characteristics of the goods or services being transferred must be closely analysed and considered, as well as the contractual terms, economic circumstances, business strategies, and functional analysis. (UN, 2021).

However, this methodology represents a major hurdle for commodity trading companies. Indeed, it is challenging to gather reliable evidence of the economically relevant characteristics of commodities such as the physical features and quality, contractual terms with volume traded, arrangement's period, timing and terms of delivery, transportation, insurance, etc. (Ochoa, Barbieri, 2021). Therefore, CUP method is often rejected for such businesses.

Resale Price Method

As its name suggests, the RPM uses the purchase price of a product or a service being bought from an associated company and the resale (i.e., selling) price of a product or service charged to unrelated and independent customers (uncontrolled transactions). Hence, this methodology focuses mainly on the associated company active in marketing and selling functions (Afzal, 2022).

This resale price is used to determine a gross margin that will enable the company to cover its costs while making an appropriate profit. In fact, by deducting this “resale price margin” to the resale price (and additional associated costs), one obtains an arm’s length price for the initial transfer of goods between associated companies (Afzal, 2022).

$$\text{Transfer Price} = \text{Resale Price} - \text{Resale Profit Margin} - \text{Direct Costs}$$

Cost-Plus Method

The Cost-Plus Method (CPLM), also called markup pricing, refers to a method where the price is determined by adding a profit markup to the company’s overall direct and indirect Cost of Goods Sold (COGS). The formula can be illustrated as follow:

$$\text{Transfer Price} = \text{Total costs} + \text{Gross-Profit Markup}$$

First, the company must determine all the costs incurred by the supplier in a controlled transaction between related companies. In a second step, it is about determining and adding up a market-based markup (fixed amount or percentage) to the gross profit (Group Valentiam, 2021). This markup is basically the difference between the product’s cost and its selling price.

This pricing method is relatively easy to understand and implement. However, CPM is deemed appropriate for commodity trading companies only when their activities are services-related and do not require significant specialized expertise, risk-assumption, or risk control functions relating to the commodity (Deloitte, 2019).

2.1.6.2 Transactional Profit methods

Unlike traditional methods, transactional methods are not necessarily based on comparable uncontrolled transactions, where the concept of comparability is challenging but crucial. Indeed, these methods mainly focus on the Earnings Before Interest and Taxes (EBIT) that several companies engaged in a specific line of business achieve (UN, 2021), as opposed to traditional methods that generally use gross profits.

Note that companies do not exactly use this method to determine their prices. Nevertheless, they consider it as an effective instrument to assess whether the profit realised in controlled transactions has been affected by internal or external factors in comparison to the profit earned in uncontrolled transactions (UN, 2021).

Transactional Net Margin Method (TNMM)

The Transactional Net Margin Method, commonly called TNMM, is a method which aims at determining the net margin a company earns from controlled transactions. It is comparable to Resale Price Method and Cost-Plus Method as they all employ the margin approach, although the latter two use the gross margins.

In TNMM, the net profit margin is defined as the ratio of the net profit of a company to its revenue. The net profit margin, related to sales, costs, or net assets, earned by the examined party (or tested party) in controlled transactions is compared with those achieved in similar and comparable uncontrolled transactions or with independent companies in the same line of business (UN, 2021).

This method is used to determine if the profit margin of the tested party is consistent with the arm's length standard. If the profit margin in controlled transactions of the tested party is higher or lower than those in uncontrolled transactions or in comparable independent companies, adjustments may be made to meet an arm's length price.

Profit Split Method (PSM)

The Profit Split Method (PSM) is based on the principle that related parties' profits should be split in a way that reflects the economic and financial contributions of each party to the transaction. Moreover, the relative contributions of the parties can be based on various factors, such as the nature of their functions (R&D, Marketing& Sales, etc.), their assets, and the risks they assume (KPMG, 2016).

The aim of the PSM is to eliminate any biases affecting the profits made in controlled transactions by determining the profit that independent companies would have realized if they had engaged in the transaction (UN, 2021).

PSM should be used when (UN, 2021):

- The related parties make unique and valuable contributions to the transaction,
- The transaction is highly interdependent: it is impossible to evaluate related parties' contribution independently as their business operations are so intertwined,
- The related parties either jointly assume an economically significant risk or separately assume closely related risks.

2.1.6.3 Sixth Method

All the previously discussed transfer pricing methods rely on the fact that tax authorities have access to sufficient support documentation provided by international companies. If this sounds challenging, it is even more so for developing countries as they might not have enough data about businesses operating in their countries to carry out comparability analysis. Also, developing countries may lack the expertise and resources necessary to engage into in-depth transfer pricing studies (*UN, 2021*).

To counter this complexity, some developing countries have put in place a rule usually called “Sixth method” or “Commodity rule” that is non-OECD originated, to determine the arm’s length price of a transaction between related parties. This method might be considered as a flexible version of the CUP method although the Sixth method allows it to be compared not only with an actual transaction but with quotations (*Gulati, 2020*).

For commodity trading companies, this approach relies on the quoted or publicly available prices on the commodities market of imported or exported goods in order to compute the price of the commodity transaction between associated companies.

Under this rule, the transfer price is determined by adding up a markup to the prevailing market commodity price. In fact, this premium intends to compensate the party handling the commodity for all the costs associated with transport and storage and is typically based on an arm’s length margin for similar services provided by independent parties in the same market (*OECD, 2010*).

2.1.7 Abusive strategies

With the insatiable appetite of corporations to continually increase their profits while reducing their taxes, some still sometimes manage to slip through loopholes and ambiguities in the existing global tax system and reduce their taxes substantively and abusively through four main mechanisms: income shifting through under- and over-invoicing, debt shifting, tax havens, and the intensive use of intangible assets (*Sebele-Mpofu, Mashiri, Schwartz, 2021*).

These methods are commonly referred to as Transfer Mispricing, also known as transfer pricing manipulation or abuse transfer pricing, and basically describe the deliberate misrepresentation of the price of goods or services in cross-border trade transactions between related parties in order to minimize taxes or hide profits (*Sheppard, 2012*).

2.1.7.1 Income shifting through under and over-invoicing

The most common abusive strategy is the income shifting through misinvoicing. This technique refers to the transfer price distortion in controlled transactions between related enterprises by exploiting tax differentials among various jurisdictions (*Sebele-Mpofu, Mashiri, Schwartz, 2021*).

This results, for example, in over-invoicing (inflate the price) an affiliate located in a high-tax jurisdiction thus lowering its profit while increasing its costs. In the other hand, this would imply under-invoicing (minimize the price) a related company located in a low-tax jurisdiction thus decreasing its costs and increasing its profit.

Consider the case of Smart Trading SA, which operates an upstream oil business in Nigeria and conducts part of its oil trading activities in Dubai. When Nigeria sells its crude oil to its affiliate in Dubai, it may have the incentive to deviate from the current market price and artificially under-invoice the cargo. The rationale behind it is that Nigeria, with a CIT rate of 30%, would benefit from reducing its taxable profit as much as possible and shifting it to the Dubai affiliate, where the CIT rate is 0%. Hence by underestimating the selling price, Nigeria reports a lowered profit and thus a decrease in its tax burden.

2.1.7.2 Debt shifting

Debt shifting is another common method used by multinational companies to reduce tax. It consists of overfinancing some related companies through debts instead of capital in jurisdictions with high tax rates. This phenomenon is called tax shield. The goal is to substantively increase the costs of borrowing (interests) which are directly deductible to the taxable profit, hence reducing the tax burden. In return, these interests represent an income for low-tax jurisdictions' related companies and are therefore subject to a low or zero tax rate depending on the jurisdictions (*Sebele-Mpofu, Mashiri, Schwartz, 2021*).

Nevertheless, many governments limit this practice thanks to thin capitalization rules. The concept of thin capitalization is to set a limit (cap) to the amount of debt a company can have compared to its equity. This cap can be set through a fixed maximum ratio of debt to equity or a fixed limitation of deductible interests, depending on the countries.

2.1.7.3 Tax havens and preferential tax regimes

Although much discussed and debated over the years, tax havens and offshore financial centres remain a political and economic controversy. They refer to countries where the taxation of foreign businesses (and individuals) is exploited at a favourable rate to lessen the burden on the actual home country's tax system. According to the OECD definition,

there are four key indicators of tax havens although there is no absolute measure (*Tobin, Walsh, 2013*):

- No or only nominal taxes (hence offering, or being perceived as such, a place for non-residents to escape tax in their country of residence);
- Lack of transparency (such as the absence of beneficial ownership information and bank secrecy);
- Unwillingness to exchange information with the tax administrations of OECD member countries;
- Absence of a requirement that activity must be substantial (transactions may be “booked” in the country with no or little real economic activity).

However, the definition is still evolving over the years. Nowadays, tax authorities tend to include the lack of materiality (assets, employees, etc.) and the “size” of profits generated as substantive signs of tax havens (*Davis Plüss, 2021*).

Still today, universally famous tax havens like British Virgin Island, Jersey, Luxembourg, or Cayman Islands attract billions every year although the lack of transparency makes accurate data extremely difficult to obtain.

2.1.7.4 Use of intangibles

The last strategy is the use of intangibles assets. This refers to the transfer of intangibles such as intellectual property, trademarks, or copyrights to a subsidiary in a low-tax jurisdiction to reduce the overall tax liability of the company (*Sebele-Mpofu, Mashiri, Schwartz, 2021*). In concrete terms, the parent company assigns the ownership of its intangible assets to a related company located in a tax haven and then licenses the assets back to the parent company in exchange for a fee. The licensing fee is then considered as an expense for the parent company (in a high-tax jurisdiction) whose taxable profit is reduced while considered as an income for the subsidiary located in low-tax country.

Moreover, valuing intangible goods and find similar and comparable transactions is already greatly challenging for companies and tax authorities. But to assess whether those goods have been processed under the arm’s length principle makes the task even trickier.

No wonder then that multinational corporations frequently take advantage of these flaws by capitalizing on intangibles.

2.2 Hedging Activities

In the absence of reliable sources, the below section is mostly based on the Course Material of Julie Noller, 2022-2023, Haute Ecole de Gestion, Geneva.

2.2.1 Definition

Hedging activities refer to the use of derivative instruments aiming at mitigating and reducing the risks associated with price volatility of a particular commodity. In fact, although the core business of a commodity trading company is the trading of physical commodities themselves, such as energy (oil, gas, coal, etc.), agricultural products (coffee, cotton, sugar, grains, soybean, etc.), and metals (ores, aluminium, nickel, copper, etc.), hedging activities have developed tremendously over the past decades and are now an integral part of the business model of commodity trading companies.

As mentioned earlier, the core business of commodity trading companies is the buying and selling of commodities on a global scale. They serve as intermediaries, connecting buyers (importers, food manufacturers, governments, consumers, etc.) with sellers (exporters, producers, farmers, grain elevators, etc.). Their role is to facilitate the matching of supply and demand in various commodity markets.

Commodity trading companies typically engage in buying and selling at a predetermined future date. The price of the commodity can either be fixed at the time the contract is agreed upon by both parties, or it can be determined as a floating price following the market volatility over a specific period of several days. Indeed, due to the inherent volatility of commodity prices, there is a significant risk that the price will suddenly fluctuate between the conclusion of the deal and the day of delivery and payment. These price risks, known as “flat price risks”, expose traders to the full impact of commodity price fluctuations without being safeguarded against potential losses or gains.

Consequently, trading companies can hedge themselves against this volatility risk by converting flat price risks into what we commonly call “basis risks”. In fact, basis risks describe the differential in the price behaviour between the physical commodity and its underlying hedging instrument. As we understand it, absolute risk elimination does not exist. In practice, a residual risk (basis risk) always remains because the price of a hedging instrument will never perfectly match the price of the physical underlying asset.

2.2.2 Derivative Instruments

Derivative instruments are financial contracts whose value are derived from an underlying asset, such as a stock, bond, commodity, or currency, and directly linked to

the performance and fluctuations of the underlying asset. For the purpose of this research, our focus will be exclusively on commodity as the underlying asset.

When a commodity trading company buys a physical commodity from an exporter, it faces flat price risk, as its transaction is fully exposed to market volatility. To mitigate this risk, it engages in the derivative market by taking a long position. This involves purchasing derivative contracts that creates a corresponding financial position and acts as a hedge to offset potential price movements in the underlying physical commodity.

In summary, the trader is required to take an opposite position in derivatives compared to their physical transaction. For example, if a company enters into a purchase contract with an exporter, during the time for the contract to be physically settled, the company is short commodity. It means it does not have the commodity in hand but will receive it later. Therefore, it enters a long derivatives position (it buys a contract) to offset any changes in the price of the hedged commodity.

To effectively hedge and respond to the specificities of each transaction and commodity, various derivative instruments are available, each with distinct specifications and market rules: Futures contracts, Forward contracts, Options, Swaps, and Freight Forward Agreements. Let us analyse them in more details in the following sub-sections.

2.2.2.1 Spot Market

Before analysing each derivative instrument, it is essential to first introduce the Spot Market. Spot Market, also known as physical market or cash market, describes the financial market where the actual physical commodity is bought and sold for immediate delivery at the current market price. Additionally, it is the market where the actual supply and demand of a commodity is manifested, although the exact demand and supply is unknown, which makes this market very volatile.

In practice, commodity trading companies enter into agreements to buy and sell commodities for future delivery. Then, the commodity trading company has several options based on the market prices evolution: to buy in advance at spot price and then store the physical commodity, to buy it right before delivery at spot price, or to enter into a derivatives contract and go to physical settlement. The decision will depend on the current storage costs and the shape of the forward curve for the underlying commodity.

Moreover, as stated above, price in a purchase and sale agreement is generally either fixed in advance (indirectly linked to the spot market price) including a premium or markup for the trading company, or it is agreed to be the average of several spot market

quotations of an index around the date of delivery. This is called floating price or indexed price.

2.2.2.2 Futures

Future contracts are certainly the most famous and common derivative instruments. Those contracts enable a participant, say a commodity trading company, to buy or sell a physical commodity in the future. Indeed, in contrast to the spot market, the participants on the futures markets trade contracts for physical delivery at date in the future.

Futures are called ETD products (Exchange Traded Derivatives), meaning they are traded directly on the market with a clearing house as counterparty. Besides, futures market is one of the closest markets to perfect competition. In fact, the products are homogeneous, the information is perfect and easy to access, there are no or very limited government's intervention, and nobody has market power therefore no barrier to entry and exit the market. Moreover, the market is highly liquid due to the many buyers and sellers in the market, which makes the market very strong.

In addition, this instrument is subject to Margining, which is directly linked to market volatility. In fact, when a participant wishes to open a new futures position, he is required by the clearing house to deposit an initial amount of money (buffer).

Throughout the life of the position, a minimum amount (maintenance margin) must be maintained at any time to cover the risk exposure. If the amount of money is not sufficient, the participant will receive a margin call where he will be required to bring more funds immediately. If the trader cannot meet the margin call, he will have to reduce the risk exposure by reducing its position.

Futures contracts have a limited lifespan set by the contract's expiration date. Until this expiration date, the trader has several options: offset the position, make a rollover, or go to settlement.

Offset

Offset a position means that when the futures contract reaches expiry, but the trader does not want to go to delivery, he will buy or sell the same contract in the opposite direction of its initial futures position to neutralize it. For example, if he bought 100 lots of Brent Mar-23, he would sell 100 lots of Brent Mar-23 to offset its initial contracts and close the positions.

Rollover

Rollover is an action that happens when the futures contract reaches expiry, but the trader wishes to keep its position open in the market. He will thus offset the position (as described above) and he will enter a new position for the next futures contract expiry. For example, if he bought 100 lots of Brent Mar-23, he would sell 100 lots of Brent Mar-23 to offset its initial position. Additionally, he will buy 100 new lots of Brent Apr-23.

Settlement

By definition, a futures contract implies a physical delivery at the expiration date. If the trader does not react before the expiry date, he will be obliged to deliver or receive the underlying commodity of the futures contract. In pure hedging activities, it is extremely rare that the trader goes to settlement. These activities only aim at hedging the risks of physical deals.

2.2.2.3 Forwards

In opposition of futures, a forward contract is an Over-The-Counter (OTC) instrument and requires a physical delivery. Its market is not regulated and therefore illiquid, contracts are tailor-made to the specific transactions and terms are agreed on a case-by-case basis with a known counterparty.

As a physical delivery is required at the expiration date, forwards are not used for speculation. However, they are a good hedging tool to lock-in the price in advance for producers and importers in order to insure more predictability.

2.2.2.4 Options

Similar to forwards, options are OTC derivative instruments. This contract between two parties confers the right, but not the obligation, to buy or sell a commodity in a date set in the future at a specified price, known as the strike, including a premium. There are two types of options: call options, which give the buyer the right to buy the underlying commodity at the strike within a specified period; and put options, which confer to the buyer the right to sell the commodity at the strike within a specified period.

Call option

Buying a call option means that the company (which does not hold the physical commodity yet and will buy it in the future) bets on a rise in price. Hence, if the market price of the underlying is increasing, the buyer can exercise its option and buy the commodity at the agreed strike price, which is lower than the market price. In this case,

the potential profit is unlimited, and the maximum loss is limited to the premium (price of the option itself at which the company previously paid).

On the other hand, selling a call option (short call) means that the company (which holds the physical commodity and will sell it on the future) is betting on a decline in price. This is considered as a bearish strategy. In the case where the buyer of the option exercises its right, the seller is required to physically deliver the cargo. And unlike the call's buyer, the potential loss is unlimited, and the maximum profit is bound to the premium.

Put option

Buying a put (long put) means that the company (which holds the physical commodity and will sell it on the future) is betting on a decrease in price. If the market price effectively goes down as expected, the option's holder has the right to sell its cargo at the strike, which is higher than the spot price. In this case, the option's seller is obliged to accept the delivery of the physical cargo. Here again, the potential profit is unlimited whereas the possible loss is capped at the premium.

Conversely, selling a put (short put) is a bullish strategy where the option's seller is expecting an increase in price. The latter does not hold the physical commodity but has to be ready to be delivered the cargo if the buyer exercises its right.

Unlike forward contracts, options are not only used to hedge physical commodity trades but are heavily employed in speculative activities. Indeed, these instruments provide leverage to trading companies as they enable them to control a larger position of an underlying commodity with a smaller amount of capital.

2.2.2.5 Swaps

A commodity swap is a legally binding agreement where two counterparties agree to swap cash flows from two different financial instruments on a date set in the future. One of the cash flows is based on an agreed fixed price, and the other one is based on a floating price that is tied to the market price of commodity (index). The floating price can be determined by considering the spot price as published by reporting agencies and the price of a physical-delivery future contract as published by exchanges.

They are usually OTC contracts and can therefore be customized, which allows the counterparty to better hedge the price risk of the commodity itself by having its hedging instruments closer to the physical commodity and thus reducing the basis risk.

2.2.2.6 FFAs

Lastly, Forward Freight Agreements are financially settled Contract for Difference (no physical delivery) that enable shipowners, charterers, and speculators to hedge against the volatility of freight rates. They reflect the cost of transporting bulk commodities by sea across the world in the wet market (crude oil and any clean petroleum products) and the dry market (grains, coal, metals, etc.).

FFAs focus on the main key trade flows (routes). They map the most frequently used shipping routes by standardized vessels and attempt to replicate the market's tendency. As with most of the derivative instruments we have looked at, their quotes are based on supply and demand, reflecting the evolution and forecasts of vessels hire prices, bunker price, and all other costs incurring during transportation.

3. The Swiss tax system

3.1 Overview

Switzerland, being a Confederation, has a decentralized tax system with federal, cantonal, and municipal taxes. Each of the 26 sovereign cantons are in principle free to set taxes, insofar as the Swiss Constitution does not expressly prevent it (DFF, 2023).

At the federal level, the main taxes levied are the federal income tax, withholding tax (on income from financial investments), stamp duty (on traded securities), and value added tax (on consumption goods and services) (Greter et al., 2018). As for the cantons, they mainly levy income tax, wealth tax, and tax on capital. As previously mentioned, cantons have the authority to create their own tax laws within their jurisdictional competence (Greter et al., 2018).

So far, none of them (Confederation and cantons) have issued a special tax act on transfer pricing. However, most of the Swiss Tax Acts governing corporate income tax, withholding tax, stamp duties and VAT do have provisions for adjusting profit shifting under the arm's length principle (Lenz, Eckert, Benoit-Gonin 2022).

Additionally, as a member of the OECD, Switzerland strongly relies on the Transfer Pricing Guidelines set out by the international body since it has not its own specific transfer pricing legislation or any specific documentation requirements (Lenz, Eckert, Benoit-Gonin, 2022). As such, if transfer prices are disputed by local tax authorities, the company must be able to prove that transfer prices are following the arm's length principle and are based on a rational economic reasoning (Greter et al., 2018).

Switzerland follows the principle that any harmful profit shifting between related companies should be prohibited and can therefore automatically be subject to transfer pricing adjustments. To benefit from these legal adjustments, the established jurisprudence of the Federal Supreme Court outlines four conditions to be met (Lenz, Eckert, Benoit-Gonin, 2022):

- *“a company provided a benefit without receiving an adequate consideration in return; and*
- *the benefit was provided to a shareholder or related party; and*
- *the benefit would not have been granted to a third party; and*

- *the disproportion between the benefit and the consideration was recognisable for the company”.*

With a strong commitment to transparency and tax avoidance prevention, Switzerland is scrupulously involved in the implementation of the BEPS program, where it aims at establishing the minimum standards of the BEPS action plan (*Greter et al., 2018*). Countering harmful tax practices (Action 5), preventing tax treaty abuse (Action 6), implementing Country-by-Country Reporting (Action 13), and improving Mutual Agreement Procedures (Action 14).

3.2 Federal

As previously mentioned in the above section, most of the Swiss Tax Acts include a legal basis that allows the tax authorities to adjust the tax liability of a company if they suspect that the company engaged in profit shifting (*Greter et al., 2018*). Let us have a look at the main pieces of federal legislation referring to transfer pricing practices:

Corporate Income Tax: the article 58 of the Direct Federal Act stipulates that if the company has concluded a transaction with a related party that deviates from the market conditions, the tax authorities have the right to adjust the income or expenses resulting from the transaction to match the market conditions, by following the arm's length principles. The burden of proof lies with the company, who must provide evidence to demonstrate that the transfer price was based on arm's length conditions (*LIFD, 2023*).

Withholding Tax: According to the Withholding Tax Act (13 October 1965; SR 642.21) (*LIA, 2023*), if a Swiss corporation's profit is reduced due to inappropriate transfer pricing in favour of a related party, the adjusted amount for Swiss tax purposes is treated as a constructive dividend subject to a withholding tax rate of 35% (*Greter et al., 2018*). In the event of a Double Tax Treaty (DTT), withholding tax may be fully or partially refundable to the company.

Stamp Duty: According to the Stamp Tax Act (27 June 1973; SR 641.10) (*LT, 2023*), when a parent company transacts with its direct Swiss subsidiary, a hidden capital injection into the equity of the Swiss subsidiary may arise due to the difference between the fair market value and the transfer price. Switzerland therefore imposes a stamp duty of 1% on this hidden capital contribution (*Greter et al., 2018*).

Value Added Tax: the Value Added Tax Act (12 June 2009; SR 641.20) (LTVA, 2009) is currently the only Swiss tax act that explicitly mentions the arm's length principle for transactions between related parties (Greter et al., 2018).

Regarding the transfer pricing methods, Switzerland does not impose any of them. It stipulates that the most appropriate method should be used. However, the three traditional methods (CUP, RPM, Cost-Plus) are still preferred by tax authorities because they are considered the most reliable and accurate methods for determining transfer prices between related parties. Nevertheless, the most commonly used method in Switzerland is still the TNMM (transactional net margin method) (Matteotti et al., 2022).

3.3 Cantonal – Geneva

As far as the cantons are concerned, they were expressly requested by the Swiss Federal Tax Administration (SFTA) to adhere to the OECD guidelines, by enforcing to companies the arm's length principle (Greter et al., 2018). Geneva Canton has not issued any specific transfer pricing legislation or documentation requirements but follows the OECD's Base Erosion Profit Shifting (BEPS) project.

4. Methodology

4.1 Aim

This study aims at understanding the various transfer pricing practices used by commodity trading companies, and more specifically those related to hedging activities. Therefore, our research question can be formulated as follow:

- Can we consider hedging activities as movable functions that can be freely transferred from one jurisdiction to another?
- How can hedging activities and profits be separated and independent from the core business of commodity trading companies?
- Are there transfer pricing guidelines specifically addressing hedging activities?

4.2 Procedure

The approach used to address our research objectives was essentially based on qualitative research methods. Our first step was to collect secondary data on the two main key concepts of this thesis, transfer pricing and hedging activities, through literature written by professionals, audit companies and through guidelines from the Organization for Economic Co-operation and Development (OCED); as well as scientific and academic reviews.

Secondly, as the aim of this thesis is to discover what are the current transfer pricing practices of commodity trading companies, the most preferable way of collecting primary data was through interviews with tax experts in the field. Thanks to a non-exhaustive list of seventeen questions sent to the interviewees in advance, we were able to collect insightful qualitative data.

The three interviews were then anonymized to preserve the professional secrecy, and the anonymity of the interviewees and their companies. In the next sections, we will therefore refer to the three interviews we conducted as ITW1, ITW2 and ITW3.

These steps have led to the final one which was to consolidate and analyse the primary and secondary information collected in order to develop a comprehensive understanding of the topic and address the research question regarding the feasibility of freely moving and shifting hedging activities within legal transfer pricing guidelines.

4.3 Limitations

Given the potential sensitivity surrounding transfer pricing strategies, interviewees may have exercised caution and refrained from providing complete transparency. This limitation could have affected the depth and breadth of information during the interviews. Moreover, as this topic requires niche expertise, the number of respondents was limited, and the results may not represent the entire spectrum of viewpoints and practices within the industry.

5. Results

5.1 Organization and structure of commodity trading companies

As reported by ITW1, a commodity trading company is typically split into four main pillars:

First, Front Office, which encompasses traders who engage in the physical buying and selling of commodities. On the other hand, there are traders who primarily deal with financial instruments, commonly referred to as “paper” traders. These financial instruments serve various purposes, including speculation, but can also be utilized for hedging activities, used to mitigate risks associated with the volatility of physical commodity prices.

Nevertheless, the responsibility for executing hedging activities may vary across companies, often falling under the duty of the Middle Office. The allocation of this function depends on factors such as the company's size and strategic organizational structure.

Geographically speaking, the most prevalent trading centres are Singapore, Geneva, London, Houston, and Dubai. This strategy of establishing trading desks across the three major continents aims to ensure comprehensive coverage of different time zones, facilitating uninterrupted trading operations. Additionally, the preference of traders to live in developed countries and major trading hubs significantly influences the choice of locations where companies establish their trading desks.

The operational centre, known as the Back Office, constitutes the second pillar of commodity trading houses. The latter oversees the booking and monitoring of the transactions once a physical deal is executed by the trading desk. Within operational teams, there are typically specialized individuals in various areas such as vessel chartering (shipping operators), cargo operators and contract operators.

Additional roles within the back office encompass specific responsibilities such as managing letters of credit and financing arrangements for specific purchases and sales, rather than global financing activities. Finally, there are teams dedicated to invoicing the physical trades.

The organizational structure of these back offices can vary. In some instances, a single team handles the entire transaction process, from vessel preparation to invoicing. In contrast, other teams may assign different individuals to specific tasks within each

transaction. This can depend on the preferences and requirements of the traders involved, as well as the nature of the trade itself.

For instance, in the case of large vessels carrying substantial cargo volumes, it may be advantageous to have one person overseeing the entire transaction to ensure a seamless and coordinated process. However, when dealing with smaller quantities and a higher volume of transactions, it may be more practical and efficient to distribute tasks among multiple individuals or teams.

Middle Office, constituting the third pillar, serves as the risk department. Its primary objective is to safeguard the company against excessive financial, physical, or paper position risks taken by traders, thereby aligning with the limits established within the company's overall strategy. The Middle Office controls and monitors the predefined limits to prevent them from being exceeded, ensuring that the company does not face excessive market exposures. As mentioned previously, hedging activities are generally the responsibility of the Middle Office as these activities are considered as risk management tools.

Trade Finance constitutes the fourth pillar of a commodity trading company, playing a crucial role in engaging with banks to establish financing limits. The department is responsible for setting Borrowing Bases for financing specific goods flows, including letters of credit and bank guarantees.

In addition, a Support department is typically present within companies, encompassing functions such as accounting, legal, taxes, KYC controlling, anti-money laundering, compliance, and more. Among those functions, the tax team serves as support unit for the entire group, primarily assisting the Front Office, Trade Finance, and Middle Office.

In the case of ITW2, who works in a European utility owning the grid and production assets, the strategy is slightly different. The majority of their workforce, comprising engineers, maintenance personnel, and technical staff, focuses on the operation and maintenance of power plants and the grid. Out of nearly 30'000 employees, only 326 are part of the trading department. The trading team is primarily based in Germany, the company's headquarters, with approximately 50 traders located in London, Geneva, and Oslo.

However, the geographic distribution of traders changed following Brexit and the Covid lockdown. Prior to these events, traders from Switzerland and the UK commuted to the German head office during the week. However, due to the lockdown, countries

temporarily suspended social security coordination rules (i.e., when an employee spends more than 25% of time in another country than the one of his employers, he has to be insured for security pension and accident insurance in his country of residence instead of the country of employment) and the obligation to create permanent establishments. This allowed the company to hire the best talents from the UK and Switzerland while maintaining a single trading office in Germany.

Nevertheless, when the rules were reinstated, the company decided to set permanent establishments in Switzerland and the UK. They provided cross-border commuters with the choice of keeping their German contract (high job security) and continuing to commute to Germany or becoming employees in the UK or Switzerland. Unsurprisingly, all traders opted to work from their home country, leading to the formation of new trading books. This transition gave rise to transfer pricing issues, which needed to be addressed.

In the case of ITW3, who works in one of the biggest commodity trading companies globally, he stated that the company revolves around product lines known as platforms, by major products groups. The company ensures comprehensive time zone coverage and proximity to origination and destination areas by establishing these platforms in six main regions: North America (US), Southwest LATAM (Argentina, Mexico, Uruguay, Colombia), North LATAM (Brazil), EMEA, North Asia (China), and South and Southeast Asia (Singapore, Australia, Indonesia, India, Malaysia). Each of the platforms is staffed with specialized traders who focus on their respective product areas. However, some traders are also concentrated in renowned trading hubs.

5.1.1 Transfer pricing and tax activities

According to the interviewees, Transfer pricing is a critical consideration for trading companies due to their involvement in intra-company transactions, including the buying and selling of raw materials, financial transactions, and service-related entries across multiple subsidiaries. Trading teams are often organized by region to cover global markets, where each member works for a different legal entity but contributes to the same trading book and profit and loss statements. In the context of trading teams, the specific legal entity involved in a transaction is often irrelevant, as the focus lies on the overall portfolio. However, accountants are responsible for allocating transactions to specific legal entities, which can be a complex task. Indeed, the dynamic and volatile nature of the market means that there are no fixed rules, and traders often switch roles during transactions, making it challenging to determine individual contributions.

Although transfer pricing holds a crucial position within commodity trading companies, the dedicated personnel responsible for global transfer pricing functions is relatively limited, even within large trading firms. In fact, the number of individuals working on transfer pricing typically ranges from one to five. However, these transfer pricing teams closely collaborate with tax experts located in each of the jurisdictions. The objective is to maintain consistency across global activities that impact every country and region. Furthermore, certain transactions may be predominantly domestic or regionally centralized due to variations in activities across different regions and subsidiaries. Such regional differentiations require specific approaches to address unique factors and considerations within each jurisdiction.

5.1.2 Hedging activities

According to the literature review and the consensus among all the three interviewees, hedging activities play a crucial role in the risk management strategy for commodity trading companies. These activities help reduce the effects of price volatility, maintain predictable revenues, and safeguard overall profitability.

Given the highly unpredictable nature of commodity prices, even a slight variation in price can have a significant impact on a company's bottom line. Therefore, hedging serves as a protective mechanism for trading companies, enabling them to mitigate the risks associated with price fluctuations, ensure continued operations and sustained profitability.

Furthermore, due to the narrow profit margins involved in commodity trading, even incremental price fluctuations can significantly impact their overall profitability. In this regard, hedging helps lock-in prices and minimize uncertainty, thereby enabling them to make more accurate predictions regarding their costs and revenues.

Regarding the organisation of hedging activities, the approach varies depending on the company. In larger companies, middle officers systematically handle hedging activities. When physical traders finalize a deal in the market, it is immediately recorded in the middle office's orderbook in order to be hedged. While in smaller organisations, it is not uncommon for physical traders to manage their own hedging positions.

According to ITW1, the required skill set for physical traders and paper traders may slightly differ. Indeed, paper traders are expected to possess extensive knowledge of trading platforms and various financial instruments. Nonetheless, both activities are

closely intertwined as they necessitate a broad understanding of markets and commodities in general.

5.2 Transfer pricing problematics

As opposed to more classical multinational companies, commodity trading companies do not have intra-company flows related to intellectual property (royalties). Indeed, having IP is not appropriate in the commodity world as brands are not relevant (commodities are fungible by definition). However, there are three main important transfer pricing areas in commodity trading companies:

Buy and Sale of physical commodities between the entities of the group. In certain situations, a company based in one country, say Company A, may buy a cargo and then sell it to another company within the same group, say Company B. This is often done due to regulatory constraints, particularly for value-added tax (VAT) purposes, which require the group to establish a local subsidiary in the country where the goods originate (Country A).

Consequently, the local subsidiary in the country where the commodities are usually sourced (which acts as the exporter), will usually resell the commodities to another subsidiary within the group. Indeed, it is uncommon for the local company in countries within Latin America, Asia, or Africa to directly sell to third parties. Furthermore, the affiliates that purchase the commodities are typically based in major trading hubs such as Geneva, London, Singapore, and so on.

Financing: Trading companies rely heavily on external financing, including loans from banks, due to the large volume of their transactions and the desire to increase their Return on Equity (ROE). However, as ITW1 outlined, only a few subsidiaries within the group typically receive this external funding. This can be attributed to the fact that banks may have restrictions on granting loans in certain countries depending on their risk policies.

To overcome this constraint and effectively manage financing flows, some companies establish cash pools, which involves consolidating the cash balances of multiple subsidiaries into a single account, typically at the parent company level. Subsidiaries that receive external funding can then provide intra-company loans to other subsidiaries, applying interest rates based on market price. As emphasized by ITW1, the transfer pricing aspect of these cash transfers is relatively straightforward, as external comparative data, such as publicly available interest rates, can be easily accessed.

However, accessing interest rates becomes more challenging in countries with strict currency controls, such as South Africa, Colombia, or Argentina, compared to countries like Switzerland, the US, or Europe.

Services: Large companies often establish subsidiary companies specifically dedicated to providing internal services (share service centre), such as accounting, operational support, credit activities, compliance, legal, tax, investment, treasury, IT, and more. These affiliates solely focus on offering services for the different entities within the group. Consequently, this share service centre must bill the other subsidiaries for their provisions, thereby necessitating the application of transfer pricing.

As outlined by all the interviewees, countries with complex tax systems, corruption, unclear regulations, and intricate political relationships pose the greatest challenges in terms of transfer pricing.

ITW1 provided an example of African countries, particularly French-speaking jurisdictions, which tend to emulate French tax laws while adjusting them as they see fit. In these countries, tax legislation is often brief and lacks detailed guidelines, allowing for subjective interpretation. Consequently, this grants significant power to tax authorities, giving them the upper hand. In such jurisdictions, legal and political uncertainties in the country (lack of transparency, corruption, etc.), make it arduous to challenge the tax authorities in court. Conversely, tax authorities find it easy to dispute the low prices set by commodity trading companies.

Furthermore, numerous African and Latin American countries lack a robust and well-established accounting system, or they have insufficient published data to establish reliable benchmarks. Indeed, obtaining accurate comparables remains vital for achieving favourable outcomes. This implies that obtaining the proper documentation to contest tax authorities is complex, often leading to resolution through negotiation rather than pursuing legal action, as the latter is typically not deemed worthwhile. Therefore, it becomes crucial to establish strong contacts and relationships with local politicians and tax administrations since they hold the ultimate decision-making power. Although the risk of corruption exists, trading companies make efforts to implement various precautions to avoid engaging in precarious situations due to the high likelihood of corruption.

Still according to ITW1, Brazil is identified as having the most complex tax system, with other Latin American countries, including major commodity producers like Argentina and Colombia, also posing significant complexities. Additionally, certain African nations, namely Zambia and Angola, have extremely complicated tax systems. In these

jurisdictions, tax authorities frequently use transfer pricing in conjunction with VAT regulations. Without forgetting Asian countries, such as China and Indonesia, whose tax complexities should not be overlooked.

In general terms, as confirmed by ITW3, developing and emerging markets tend to adopt an assertive approach towards transfer pricing. However, they often lack technical expertise in this area.

5.3 Transfer pricing methods used

According to the OECD guidelines, there are five primary transfer pricing methods that are tolerated within its framework. These methods are divided into two main groups: Traditional Transaction methods, which include Comparable Uncontrolled Price Method (CUP), Resale Price Method (RPM), and Cost-Plus Method; and Transactional Profit methods, which include Transactional Net Margin Method (TNMM), and Profit-Split Method.

At the international level, companies have the flexibility to choose the most appropriate transfer pricing method within the guidelines. However, certain countries may enforce specific transfer pricing methods that must be adhered to.

To provide an example, some developing countries, particularly in Latin America, employ the *6th Method* as a transfer pricing approach. This method solely considers the price stated on the Bill of Lading, which is the document indicating the loading of cargo onto the vessel. It is typically used when there are limited data on comparable transactions or when reliable market prices for the goods or services under consideration are not available. However, the absence of standardized guidance on the application of the 6th Method can lead to inconsistent outcomes across various jurisdictions and transactions.

As confirmed by ITW1 and ITW3, the most used method by commodity trading companies is the Comparable Uncontrolled Price Method (CUP), which involves applying the same price in a controlled transaction as in an uncontrolled transaction (arm's length principle). Therefore, ensuring comparability and access to relevant data is key. In practice, one must strive to find a purchase or sale in the market that is qualitatively comparable, with similar aspects such as Incoterm, contract duration, quantity, quality specifications, country of origin and destination, among others. Although finding an exact match for a transaction is challenging, commodities have an advantage of having their prices publicly displayed.

However, the publicly displayed price is only one component of the overall price formula, and its demonstration is relatively straightforward. The thorny part lies in justifying to tax authorities the premium that the company adds to the market price, as this directly impacts the profitability and margin of the trading company. Finding a plausible explanation and suitable benchmarks for this premium proves to be practically impossible.

Furthermore, when determining the transfer price, commodity trading companies usually consider the value of the financial product, such as a hedging instrument, that is directly linked to the commodity. However, this “paper value” is not considered in the CUP methodology, making the justification to tax administration even more complex.

Moreover, as stated by ITW3, the CUP method also poses a challenge as very few multinational companies use this method outside of the realm of commodities trading. Therefore, tax authorities may lack the necessary expertise to comprehend and apply this method as they are not accustomed to it.

For all the reasons mentioned above, we understand the limitations that these transfer pricing rules have from a trading company perspective, although they must still be respected.

As opposed to the previous interviewees, ITW2’s company applies a combination of the Profit-Split method and the Cost-Plus Method (CPM) for their trading activities, as outlined in the OECD 2010 report under “profit attribution to permanent establishment for global trading and financial derivatives”. The company assesses the P&L of each of its five trading departments (asset trading in Germany, physical trading outside Germany and throughout Europe, origination desk, LNG desk, and Smart& Digital) on an IFRS basis year-to-date. Subsequently, it removes any costs not related to front office activities. The resulting figure is then marked up by 10% in line with the CPM formula (transfer price=total cost + markup).

The company then considers a risk capital allowance that is allocated to each trading desk. This allowance represents the amount of equity the group is willing to risk on trading positions. It is then multiplied by the pre-tax Weighted Average Cost of Capital (WACC). This calculation yields a residual P&L (Profit and Loss Statement) figure, which is further allocated to each trading desk based on the functions performed by each entity in the P&L.

Lastly, the company examines all the support costs associated with each jurisdiction. These costs are marked up by 10%, and the resulting amount, along with the profit-split for the country, is considered. From this total, the local entity is responsible for covering the front office charges, including salaries, bonuses, and overhead expenses. The remaining amount represents the profit before tax in the local country.

Nevertheless, ITW2 confirmed that its company applies the traditional method for financing activities. This involved applying a spread on certain transactions using the RPM and CPM.

As confirmed by ITW1, it is rather common for a company to employ multiple methods based on the specific activity, function, or flow. For instance, if a particular desk handles complex flows involving several entities, a detailed analysis on a company-by-company basis is necessary to determine which team member will be assigned to which specific legal entity.

5.4 Internal transfer pricing guidelines and implementation of arm's length principle

As indicated by all of the interviewees, each company establishes its own internal transfer pricing guidelines, usually directed towards the accounting department and trading desks.

According to ITW1, companies initially strive to map out all existing flows within their operations. Following a comprehensive risks and functions assessment, the complete transfer pricing study, including benchmarking, can start. In fact, to carry out these transfer pricing assessments, many trading companies rely on the expertise of audit firms such as the Big 4 or specialized transfer pricing boutiques.

Once the advisory firms provide their detailed analyses, companies must transform the findings into internal guidelines. The latter need to be clear and concise, ensuring that operators and traders understand how to apply them in their respective roles. Additionally, the accounting department should be equipped to make any necessary accounting adjustments based on these guidelines.

Moreover, as ITW3 reported, each new transaction flow is thoroughly examined on a case-by-case basis, and every jurisdiction must follow the global internal transfer pricing policy. However, the implementation is primarily coordinated globally while also taking regional considerations into account.

Regardless, although some slight nuances among various trading companies, their internal guidelines must be in line with the arm's length principle, as most countries adhere to guidelines put forth by the OECD. However, certain countries also have their own specific guidelines that must be followed. For example, Brazil has established its own set of transfer pricing rules.

Additionally, while many countries may adopt the OECD's guidelines, they might still have differing standards when it comes to determining market prices. Argentina, for instance, has published a specific price index for certain commodities holding significant importance to the country's economy. Consequently, certain companies operating in Argentina have to use market prices directly published by the government. It is important to note that the sources of data used to determine market prices may vary from one country to another, and this variability can impact how companies establish or support their market price data.

As highlighted by ITW1, the implementation of the arm's length principle is primarily characterized by its high costs more than its complexity. Indeed, it entails an expensive and time-consuming process of engaging with third-party experts, such as consulting firms, in order to comprehensively assess the company's financial flows, and translate the findings into internal guidelines.

Consequently, it is imperative for trading companies to possess the necessary financial and organizational resources to meet the expenses associated with transfer pricing compliance. Larger companies are usually better equipped to handle these costs and can absorb them more easily. However, smaller companies with limited resources and complex financial flows may struggle to establish proper transfer pricing documentation.

5.5 Impacts of Pillar 2 (BEPS 2.0)

As explored in section 2.1.4 (Existing guidelines), the OECD has taken significant measures to fight tax evasion and profit-shifting practices by introducing a comprehensive 15-actions plan addressing cross-border taxation. In 2021, the OECD introduced BEPS 2.0, in which it implemented a new global minimum tax rate of 15% for MNEs with an annual turnover exceeding €750 million. This measure aims at ensuring an equitable and standardised approach to taxation all around the world.

As confirmed by ITW1, nearly all companies have already incorporated the fifteen actions outlined in the BEPS framework, including the Country-by-Country Reporting. However, the introduction of BEPS 2.0 presents an entirely and impactful new challenge for many

trading companies. Notably, commodity trading houses, whose annual revenues often reach enormous amounts in the tens or even hundreds of billions, rapidly exceeding the revenue threshold of €750 million.

Nevertheless, the majority of countries already maintain a tax rate higher than the proposed 15% minimum. In fact, the average Corporate Income Tax rate among European OECD member countries stands at 21.5% while the worldwide average was recorded at 23.4% in 2022 (*Bray, 2023*). According to the official CIT rate table, only 34 countries have an actual rate below 15% (*Tax Foundation, 2022*). Although the list is relatively short, it includes the United Arab Emirates (Dubai) which is a significant trading hub. We might therefore anticipate substantial tax implications arising from this jurisdiction.

Although this reform was announced and implemented within the BEPS framework in 2021, it remains a certain degree of ambiguity surrounding the interpretation of certain guidelines. Additionally, there is ongoing uncertainty regarding the universal implementation of this minimum tax rate. Nonetheless, the implementation process will undoubtedly require time, and it is imperative for companies to proactively prepare for it.

5.6 Current guidelines on hedging activities

As anticipated, there are no specific guidelines pertaining to hedging activities, at least not within the OECD framework. For instance, in tax jurisdictions like Switzerland and Singapore, there are regulations specifically addressing hedging activities in relation to VAT matters, but not directly related to transfer pricing practices. The true complexity surrounding hedging activities arises from the strong connection between those hedge positions and the physical positions they are meant to offset.

When both sides of the transaction are executed within the same legal entity, there are no issues, as the company can simply offset the hedge against the physical position, effectively balancing the mark-to-market (MtM) valuation. In essence, if a gain is made on the physical, there should be a corresponding loss on the hedge, and vice versa. Consequently, the legal entity can easily consolidate the outcomes of both positions, effectively offsetting any disproportionate gains or losses.

However, challenges arise when the execution of a physical transaction and its corresponding hedge occur in separate legal entities. To better illustrate this scenario, ITW1 provided a practical example:

Let us consider Entity A, based in Switzerland, which purchased crude oil (long position). Meanwhile, the market price of crude oil increases. As a result, Entity A can sell the commodity at a higher price and generate profit.

To mitigate the risk of a potential decline in commodity prices, Entity B, located in the US, decides to sell futures contracts (short position) for the “account” of Entity A. Unfortunately, due to the price surge, the sale of these futures contracts leads to a financial loss.

Certainly, both legal entities, A and B, could offset the gain from the physical transaction with the loss from the hedge. However, from a legal standpoint, Switzerland realizes a pure gain, while the US experiences a pure loss. This raises questions about the fairness of transferring this gain or loss between entities, as well as determining which entity should transfer it to which other one.

According to ITW1, it is not efficient to separate these two activities into distinct entities. Economically speaking, they should be considered together because the hedge is intended to cover the risk associated with the physical asset. If they are legally separated, it could lead to a situation where one country (A) ends up paying significantly higher taxes, while the other country (B) pays none. Naturally, one could attempt to generate profit through a company based in a low-tax jurisdiction. However, the real challenge lies in the uncertainty surrounding where the profit will be realized, as it is impossible to predict the direction in which prices will move. In fact, it remains unclear whether the profit will arise from the paper transaction or the physical commodity itself.

Moreover, while there are no specific guidelines governing those activities, it is necessary to provide justifications to tax authorities for each cash transfer, which are either linked to the sale of physical commodity, or to the financing of transactions.

To address these issues, some companies establish internal mechanisms such as International Swaps and Derivatives Association (ISDA) agreements. These contractual agreements facilitate the exchange of financial products between different related parties. By establishing these contracts, it becomes possible to determine which parties are involved in the exchange of specific products and establish a legal framework for simple cash transfers.

For instance, let us consider a scenario where Entity A engages in trading a physical position tied to floating prices (following an index). To hedge this position, Entity B enters into an ISDA with Entity A. This ISDA stipulates that for each floating price position that

requires hedging, Entity B compensates Entity A, and vice-versa. Therefore, these swaps precisely transfer profits between companies within the same group.

5.7 Reporting of hedging activities

In terms of hedging activities' reporting, there may be differences in how they are treated under Local GAAP (Generally Accepted Accounting Principles). These differences primarily revolve around whether hedging activities should be reported under "financial income" or whether they can be offset against the inventory, sales, or the cost of goods sold.

According to ITW1, from a strict accounting perspective, hedging activities should be reported under financial activities. However, because hedging is closely interconnected with physical activities, it would be more logical to report them in conjunction with physical sales and purchases. The question is precisely whether a hedge profit should be reported as an increase in revenue or as a reduction in the Cost of Goods Sold (COGS) as a form of an insurance. Similarly, should a hedge loss be reported as a decrease in revenue or an increase in COGS? This is where the complexity of reporting lies.

According to ITW1's perspective, the revenue and COGS related to both physical and hedging transactions should be combined and reported together in a dedicated P&L especially designed for trading activities.

When it comes to speculation activities, they are usually reported directly under financial products. Consequently, distinguishing between hedging and pure speculation can be challenging from an accounting standpoint. This challenge arises primarily because it can be difficult in practice to determine the precise boundary between hedging and speculation. For instance, when a company hedges a physical position at a rate exceeding 100%, say 120%, it raises the question of whether the 20% are still considered as hedging strategy or if it becomes pure speculation. Or should a hedge be confined to precisely 100% coverage, with anything exceeding that threshold being regarded as speculation. These matters are complex and subject to ongoing discussions without clear-cut answers.

5.8 External audit by tax administration

Every major commodity trading company undergoes regular audits. This is primarily due to the fact that tax authorities find it convenient to target these companies, given their

unfavourable reputation. Indeed, building a significant case against prominent players like Glencore, Gunvor, or Trafigura is relatively easy. Furthermore, trading companies handle crucial products that hold immense economic significance for numerous countries. Therefore, the taxation of these companies is viewed as a tool to reclaim a portion of the wealth associated with such operations.

Additionally, trading companies based in Switzerland face audits from both the Swiss tax authority and local administrations in the countries where the group operates. However, audits conducted by local administrations are more prevalent for trading companies based in Switzerland, compared to audits carried out by the Swiss tax authorities, particularly because Switzerland possesses extensive knowledge of this industry. The administration in Geneva, for example, is well acquainted with the activities of traders and can provide comprehensive answers to inquiries. On the other hand, the situation becomes significantly more challenging in producers' countries where these commodities originate. There are only a few companies involved in such activities, and local authorities often lack experience in dealing with them. As a result, when there is a limited understanding of the industry, the easiest approach is to impose fines or make tax adjustments. In fact, numerous adjustments are made in countries like Argentina, Brazil, Colombia, Indonesia, Zambia, South Africa, Ivory Coast, and others.

6. Discussion/Analysis

The bachelor thesis addresses the compelling question of whether the hedging activities managed by commodity trading companies can be freely moved and shifted for tax purposes within the legal and tolerated Transfer Pricing guidelines. This question arises due to an apparent lack of specific guidelines addressing the treatment of hedging activities within transfer pricing frameworks. In fact, despite the tremendous importance of such activities in terms of profitability, existing transfer pricing guidelines primarily focus on the pricing of tangible goods, intangible assets, and services transferred between related entities. However, the treatment of financial transactions, such as hedging activities, is often not explicitly outlined. This leaves room for interpretation and potential manoeuvring by commodity trading companies seeking to optimize their tax positions.

As described in this paper, hedging activities involve complex financial instruments and risk management strategies. Hence, commodity trading companies employ a wide range of derivatives, such as futures, options, and swaps, to hedge against market price volatility and protect their profitability. As such, the complexity and uniqueness of these transactions raise challenges in establishing clear transfer pricing guidelines, as they require a deep understanding of the underlying risks, market conditions, and hedging strategies employed.

The absence of specific guidelines addressing the treatment of hedging activities thus opens up the possibility for commodity trading companies to exploit this gap for tax optimization purposes. Indeed, by shifting or reallocating hedging activities across various jurisdictions, companies may strategically minimize tax liabilities or take advantage of preferential tax regimes.

However, interviews conducted with tax and transfer pricing professionals reveal a notable reluctance among these commodity trading companies to segregate their hedging and physical trading activities across different jurisdictions, despite the potential for viewing hedging activities as movable functions. This finding adds an interesting perspective to the thesis question and highlights the practical and operational considerations that shape companies' decisions regarding the mobility and shifting of their hedging activities.

Nevertheless, it is important to note that despite their initial hesitance, we will come to realize that their reluctance can undoubtedly be overcome as there are no legal impediments that prevent the transfer of these movable functions. Therefore, if

companies do decide to relocate these functions in low-tax jurisdictions, there is a significant potential for substantial gains. Indeed, by leveraging the opportunity to shift hedging activities, trading companies can tap into the advantages offered by different tax jurisdictions, thereby maximizing their financial benefits.

Let us begin by examining the aforementioned barriers that were provided by the interviewees during the course of our discussions.

Willingness of traders

One key factor contributing to the reluctance of moving hedging activities is the alleged willingness of traders to remain in big cities and trading hubs which thus impacts the decision-making process of companies. In fact, cities like London, Geneva, Singapore, and Houston have become synonymous with commodity trading, attracting traders, brokers, and other related service providers. The presence of these hubs creates a favourable ecosystem for traders, facilitating market access, information flow, networking opportunities, and a great standard of living. Consequently, the interviewees related that companies must consider these benefits when making decisions regarding the relocation of hedging activities, which often leads to a preference for maintaining a presence in trading hubs regardless of the tax system and tax rate.

However, as discovered during this research, while traders' preferences and inputs are indeed important in the decision-making, hedging activities can also be (and often already are) effectively managed and performed by the middle-office.

In fact, with the advancements in technology and the availability of sophisticated software solutions, "less educated" employees could perform hedging activities in a systematic and efficient manner, by entering into derivatives positions systematically once physical traders are entering into physical positions. As such, this streamlines and automates the process of executing hedging activities, ensuring that these activities are aligned with the company's overall risk management objectives, limiting the time spent without risk coverage (flat price risk) and reducing human error. Additionally, by separating the two activities, commodity trading companies ensure a reduction of reliance on individual trader preferences and mitigation of potential conflicts of interests. Indeed, it seems important to strike the right balance between the traders' insights and knowledge, and the utilization of the modern technology capabilities to effectively manage risks.

By doing so, trading companies can gain flexibility to set up and execute these fundamental activities across various jurisdictions, including less developed countries

that potentially offer lower labour costs, which ultimately improves overall profitability. However, developing countries often have unfavourable tax systems with higher corporate tax rates compared to more developed nations, which can also weigh on the balance.

On the other hand, applying the Cost-Plus Method (CPM) to the actual salary expenses allows us to identify the prospective profit that a company may shift by strategically selecting a tax-beneficial jurisdiction for its hedging activities. Assuming that labour costs typically account for approximately 10% of the gross profit (suppose \$20 billion) generated by commodity trading companies and considering that the workforce engaged in hedging activities usually represents a proportion of 5% of the overall workforce (2000 full-time equivalent), we can further estimate the profit to be shifted in the major commodity trading companies. Also, we will consider a standard markup rate at 10%.

Total Workforce (FTE)	2000
Hedging activities (FTE)	100
Total Labour costs (in million \$)	2000
Labour costs hedging (in million \$)	100

Transfer price= 100 + 10% = **\$110 million**

The above transfer price corresponds to the expenses charged to another entity of the group. As an example, if a company decides to relocate its hedging activities to Dubai, where the CIT rate is 0%, it can then invoice the salary expenses to its parent company based in Geneva. In this scenario, a total of \$110 million can be invoiced to Geneva, which would generate \$10 million in revenue for the entity in Dubai, taxed at 0%. At the same time, the Swiss entity would record a cost of \$110 million, effectively reducing its taxable profit.

As demonstrated by this example, the CPM proves to be an effective approach for fairly and transparently leveraging the various tax frameworks without engaging in any tax avoidance or evasion.

Accounting and risk management difficulties

Another key reluctance mentioned by the interviewees is that commodity trading companies might face the necessity of having a hedge on the balance sheet for risk management purposes. The non-respect of this requirement may involve accounting difficulties. In their view, it may therefore be inefficient to split physical and hedging activities across different entities and jurisdictions, as it may adversely impact the equity and overall risk management strategies of the company.

As one understands, including hedges on the balance sheet is essential for maintaining the integrity of the financial statements and accurately reflecting the company's risk exposure. Indeed, hedges provide a clear picture of the company's financial position and assist in the assessment of its risk-bearing capacity. If hedging activities are split from physical positions across jurisdictions, it becomes more challenging to accurately present each jurisdiction's risk exposure fairly, potentially distorting the equity and financial stability indicators of each legal entity.

However, while the individual exposure of each entity within the group may be of interest when assessing the performance of specific operations within specific business areas (management reporting), the real focus lies in the consolidated financial statement, cash flow statement, and balance sheet. Indeed, consolidated financials, as part of the financial reporting, provide a comprehensive view of the overall financial performance and risk management of the entire group, rather than focusing on individual entities. This enables the company and investors to assess the combined results of the group as a whole, which provides a more accurate representation of the group's financial health and performance.

On the other hand, management reporting serves the purpose of delivering operational and financial information pertaining to each specific segment of the business and to each individual legal entity of the group, but it has predominantly an internal function. Therefore, it can be easily modified and adjusted to accommodate the separation of physical trading and hedging positions in different legal entities' financials and meet the evolving needs of the reorganized structure without major constraints.

Consequently, the individual performance of each entity should not serve as a blocking factor for commodity trading companies in segregating the physical trading and hedging activities in different legal entities. Indeed, this argument underscores a solely accounting-related issue that can be addressed and resolved.

Profit and Loss Uncertainty

According to the interviewees, another significant factor contributing to the reluctance of moving hedging activities in another jurisdiction is the inherent uncertainty surrounding the profitability of physical trading versus hedging activities. Indeed, commodity trading involves two key components: physical trading, which involves buying and selling physical commodities, and hedging, which entails the use of financial instruments to mitigate price risk. Both activities are closely intertwined, and the profitability of each can vary based on market conditions, commodity price fluctuations, geopolitical factors, and

any other unforeseen events that can have significant impacts on the performance of both activities.

This uncertainty appears to pose challenges in deciding in advance where to locate these activities, as companies cannot predict with certainty which part of the deal will yield profits. Indeed, as per its inherent nature, if the company generates a profit from the derivative instrument used to hedge the physical deal, it will incur a loss on the corresponding physical part, and vice versa.

To better understand the unpredictable impact of the market evolution on both parts of the transaction, a simplified example of a hedge over a physical deal can be found in Appendix 2.

Nevertheless, despite a valid uncertainty, trading companies have several ways to deal with unpredictability without impeding an optimum strategic decision-making process.

On one hand, companies can leverage the different tax frameworks around the world to optimize their tax liabilities thanks to the concept of Loss Carried Forward. In fact, the latter term designates a tax provision allowing companies to offset future profits with net operating losses (NOL) incurred in previous years (*Tuovila, 2020*). Similarly, to corporate income tax rates, each country has different rules regarding loss carried forward practices. Indeed, the time limit for the loss utilization, the loss amount limitations (cap), or the type of income or loss involved can vary according to the jurisdictions (*taxsummaries.pwc, 2023*):

Table 6 – Loss Carry Forward rules

Country/Jurisdiction	Time limitation (LCF)	Additional comments
United Arab Emirates	unlimited	Maximum 75% of the taxable income. Applies to group entities with >75% of common ownership
Guernsey	unlimited	No cap
Ireland	unlimited	No cap
Nigeria	unlimited	Losses made from one line of business cannot be relieved against another line of business
Singapore	1 year	Up to 100'000 SGD
Switzerland	7 years	No cap
USA (New York)	unlimited	Maximum 80% of taxable income

As we can see on Table 6, Ireland and Guernsey are more attractive compared to New York, in terms of loss carried forward rules. Indeed, Ireland and Guernsey laws enable any corporations to report losses to compensate profits on an unlimited period of time, with no cap on the amount. Whereas New York only allows to report the equivalent of 80% of the taxable income. These differences in loss treatment can therefore have a massive impact on the company's tax burden and ultimately its performance.

Allow us to provide a practical example to effectively illustrate the concept of Loss Carry Forward. As we know, New York is an important trading hub and a preferred location for companies to establish their hedging desk along with physical trading activities. In this hypothetical scenario, hedging activities incur a loss of \$300 million in 2021, followed by a profit of \$220 million in 2022. As Table 7 demonstrates, the restricted extent to which losses can be carried forward, capped at USD 176 million (80% of taxable profit), lacks the potential to fully alleviate the tax burden. While the year 2021 resulted in no tax payment, the profitability achieved in 2022 still translates into a tax liability, although substantially reduced, disregarding the full utilization of the previous year's loss.

Table 7 – Loss Carry Forward in New York

USA (NY)	2021 (in million \$)	USA (NY)	2022 (in million \$)
Gain on hedging	800	Gain on hedging	1100
Loss on hedging	1100	Loss on hedging	880
Cumulated gain or (loss)	(300)	Cumulated gain or (loss)	220
Loss carried forward 2020		Loss carried forward 2021	(176)
Taxable profit	0	Taxable profit	44.00
CIT rate	28.00%	CIT rate	28.00%
Tax burden	0	Tax burden without LCF	61.60
		Tax burden with LCF	12.32

Let us now consider that the hedging activities are conducted in Ireland (Table 8), by keeping the same profit and loss for 2021 and 2022. As the Irish Law does not provide any provision on the maximum loss amount that can be carried forward, the full amount of \$300 million can be reported as a loss in the P&L of 2022, which fully offset the taxable profit and therefore the tax burden. In practice, \$220 million loss will be reported for 2022, and the remaining amount (\$80 million) can be used in the years to come if needed.

Table 8 – Loss Carry Forward in Ireland

Ireland	2021 (in million \$)	Ireland	2022 (in million \$)
Gain on hedging	800	Gain on hedging	1100
Loss on hedging	1100	Loss on hedging	880
Cumulated gain or (loss)	(300)	Cumulated gain or (loss)	220
Loss carried forward 2020		Loss carried forward 2021	(300)
Taxable profit	0	Taxable profit	0
CIT rate	12.50%	CIT rate	12.50%
Tax burden	0	Tax burden without LCF	27.5
		Tax burden with LCF	0

As shown in Table 8, the utilization of the loss incurred in 2021 resulted in a substantial reduction of the tax burden for 2022, amounting to \$27.5 million of savings.

In this respect, a trading company should strategically evaluate the various regulations prevailing worldwide while making structural and organisational decisions for the group.

On the other hand, the use of the Cost-Plus Method constitutes a powerful tool to fairly compensate the loss of costs centres. Indeed, the uncertainty of incurring a loss in one entity should not be an obstacle for companies because this can be easily adjusted through authorized accounting entries.

Let us consider an example to illustrate this concept. Suppose our hedging activities are based in Dubai. If these activities result in a loss of \$150 million, this can be invoiced to the parent company in Geneva for \$165 million (cost +10% markup). By offsetting the loss with the revenue of \$165 million, the Dubai entity will achieve a positive P&L of \$15 million, which will not be subject to tax anyway since the CIT rate is 0% in this particular jurisdiction. Moreover, this expense will considerably lower the taxable profit of the entity in Geneva.

Conversely, if the company in Dubai generates a profit on its hedging activities, there is no need to use the CPM method to transfer this profit to Geneva, since the tax rate on income in Dubai is 0%.

BEPS Pillar 2.0

Finally, what may heavily influence location decisions for trading companies is the implementation of the Base Erosion and Profit Shifting (BEPS) Pillar 2.0, which imposes a 15% minimum tax rate globally for all companies reaching the threshold of €750 million of revenue annually. This development significantly diminishes the incentives for companies to relocate their activities, as the tax advantages previously associated with certain jurisdictions are now reduced. As a result, companies will have fewer tax-driven incentives to relocate their activities for tax optimization purposes.

In addition, the threshold set by the OECD is largely exceeded by most of the commodity trading companies, which generate revenue of dozens or hundreds of billion every year. Indeed, by their high-volume/low-margin business model, trading companies have always a significant revenue amount in their P&L, although substantially compensated by the cost of goods sold. Indeed, we usually consider a 3-5% gross margin for these companies. This is precisely the reason why the interviewees emphasized that the BEPS initiative was deemed unsuitable for trading companies.

Nevertheless, despite the significance of BEPS 2.0 as a substantial obstacle, it is imperative to adopt a broader perspective and consider the situation comprehensively.

1. As mentioned in section 5.5, the current global average of corporate income tax rate stands at 23.4%, where only 34 countries have a CIT rate below 15%. As such, the 15% floor rate remains relatively low, resulting in limited effects at the global level.
2. The OECD guidelines, while not possessing legal binding force, entail an expectation for their member nations to effectively incorporate and adhere to them. However, for the 34 countries that have not yet implemented this floor rate, the process may endure for a considerable period, possibly extending over multiple years.

Companies might therefore consider the potentiality of the 15% global tax rate in their tax strategy although the time frame is still highly uncertain.

Furthermore, it is important to acknowledge that the introduction of the 15% global tax rate brings positive implications for Switzerland, notably for the canton of Geneva. Indeed, if the Swiss population approves the 15% tax rate in June 2023 and it is subsequently implemented, Geneva will become even more appealing to trading companies. Currently, Geneva's CIT rate stands at 14%, which is below the global and European averages. A marginal increase of 1% would not significantly impact the attractiveness of Geneva for MNEs. Moreover, if the minimum 15% CIT rate is universally implemented, Geneva would possess the lowest CIT rate worldwide. Consequently, companies could choose to establish their hedging activities in one of the most desirable locations globally, characterized by a high standard of living and excellent infrastructures, while simultaneously optimizing their tax liabilities to the fullest extent.

7. Conclusion

To conclude, a clear statement can be made regarding the result of this research: the hedging activities managed by commodity trading companies can be moved and shifted for tax purposes within the legal and tolerated Transfer Pricing guidelines. In fact, the absence of guidelines specifically addressing hedging activities provides companies with a significant degree of flexibility when it comes to organizing and structuring these essential risk management tools and considerable source of revenue.

Undoubtedly, although some commodity trading companies seem not to be benefiting from the absence of legal impediments, the opportunity for tax optimization remains substantial. In fact, despite operational and accounting barriers and potential challenges associated with this pioneering strategy, being relocating hedging activities for tax purposes, the analysis suggests that commodity trading companies have the potential to overcome these obstacles and achieve significant tax optimization gains by carefully and strategically evaluating tax regulations, leveraging different jurisdictions, and effectively utilizing tolerated tax adjustment tools.

Furthermore, the most notable threat arises from the proposed implementation of a minimum global corporate income tax rate of 15% by the OECD. This measure is intended to apply to all multinational corporations overpassing a global annual revenue of €750 million. If this minimum tax rate is effectively implemented, companies will no longer be able to take advantage of certain current advantageous tax frameworks in specific jurisdictions. However, this development should be seen as an opportunity for Switzerland, particularly the canton of Geneva, which currently offers a 14% tax rate. Indeed, Switzerland could become an even more attractive destination for commodity trading companies seeking a favourable tax environment and a great overall quality of life for their collaborators.

Finally, it is important to bear in mind that this analysis should remain flexible as tax regulations in each jurisdiction are continuously adapting to upcoming events. Indeed, the purpose of this paper is to examine the current situation and evaluate the feasibility of commodity trading companies relocating their hedging activities given that the companies in this industry are constantly striving for efficiency and are keen to adjust their corporate structure to benefit from favourable tax regulations. Furthermore, it is of utmost importance to grasp that this solution is groundbreaking and, as such, requires time, resources, and a thorough case-by-case analysis of its implications, challenges, and potential risks before proceeding with its implementation.

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Appendix 1 – BEPS Action Plan

- Action 1: **Tax Challenges Arising from Digitalisation**. It focuses on identifying the tax challenges deriving from the digitalisation of the economy and developing potential solutions to ensure that profits are taxed where economic activities generating profits are performed and where value is created. (*Action 1 - OECD BEPS, 2022*)
- Action 2: **Neutralizing the effects of hybrid mismatch arrangements** that arise when companies exploit the differences in the tax treatment under the laws of two or more countries in order to achieve double non-taxation. This action aims at developing model rules to prevent entities from using hybrid mismatch arrangements while “minimizing impact on cross-border trade and investment.” (*Action 2 - OECD BEPS, 2022, p. 2*)
- Action 3: **Controlled Foreign Company**. It focuses on strengthening CFC rules, which prevent MNEs from shifting profits to low-tax jurisdictions by attributing the income of a foreign subsidiary to its parent company for tax purposes (*Action 3 - OECD BEPS, 2022*).
- Action 4: **Limitation on Interest Deductions**. While MNE can exploit the differences in the tax treatment of debt and equity in different jurisdictions, this action seeks to limit the ability of companies to deduct interest payments and other financial payments from their taxable income. For that purpose, it recommends that countries introduce a fixed ratio rule to limit interest deductions based on a percentage of the company’s EBITDA (Earning before interests, taxes, depreciation, and amortization) (*Action 4 - OECD BEPS, 2022*).
- *Action 5: **Harmful tax practices**. Action 5 along with Action 6, 13, and 14 are considered as the four BEPS minimum standards where all members commit to implementing those. As for Action 5, it aims at countering harmful tax practices and increasing the level of transparency (*Action 5 - OECD BEPS, 2022*). As defined by the European Parliament, harmful tax practices encompass the lowering of corporate tax rates, patent boxes, shell companies, notional interest deduction regimes, foreign source income exemption regimes, special economic zones, and tax rulings (*VAN DE VELDE, CANNAS, 2021*).

- *Action 6: **Prevention of tax treaty abuse.** It seeks to ensure that tax treaties are used as intended and do not facilitate harmful tax practices such as treaty-shopping arrangements or treaty abuse as a whole. Indeed, the OECD aims to prevent MNEs from benefiting of inconsistencies and gaps in tax treaties to artificially shift profits to low-tax jurisdictions (*Action 6 - OECD BEPS, 2022*).
- Action 7: **Permanent establishment status.** The BEPS Action plan is revising the definition of permanent establishment, previously defined as a fixed place through which a company carries out its business activities, in order to prevent MNEs from avoiding establishing a PE in a jurisdiction under tax treaties (*Action 7 - OECD BEPS, 2022*).
- Action 8-10: **Transfer Pricing.** Action 8, 9 and 10 address Transfer Pricing guidance “to ensure that TP outcomes are better aligned with value creation of MNEs.” (*Actions 8-10 - OECD BEPS, 2022*).

“Action 8 – Intangibles” aims to develop guidance on how to determine the appropriate level of profit for entities engaged in controlled transactions involving hard-to-value intangibles (*Actions 8-10 - OECD BEPS, 2022*).

“Action 9 – Risks and Capital” seeks to ensure that “inappropriate returns do not accrue to an entity solely because it has contractually assumed risks or has provided capital” (*BEPS Action 9 – Transfer Pricing: Risk and Capital, 2015*).

“Action 10 – High-risk transactions” focuses on profit allocation resulting from intra-firm transactions that are not considered “commercially rational”, the correct transfer pricing methods to use, and the use of some specific types of payments within the entity (*Actions 8-10 - OECD BEPS, 2022*).

- Action 11: **BEPS data analysis.** It seeks to develop a data set and analytical tools for the collection and analysis of data on BEPS activities and their impact on tax revenues and tax avoidance, as well as on the economy more broadly (*Action 11 - OECD BEPS, 2022*).
- Action 12: **Mandatory Disclosure Rules.** It proposes the development of mandatory disclosure rules for aggressive tax planning schemes. These rules require taxpayers but also intermediaries, such as tax advisors, lawyers, and accountants, to report their tax planning arrangements to tax authorities. The rules are designed to discourage the promotion of aggressive tax planning and

to enable tax authorities to identify and respond to such schemes more effectively (*Action 12 - OECD BEPS, 2022*).

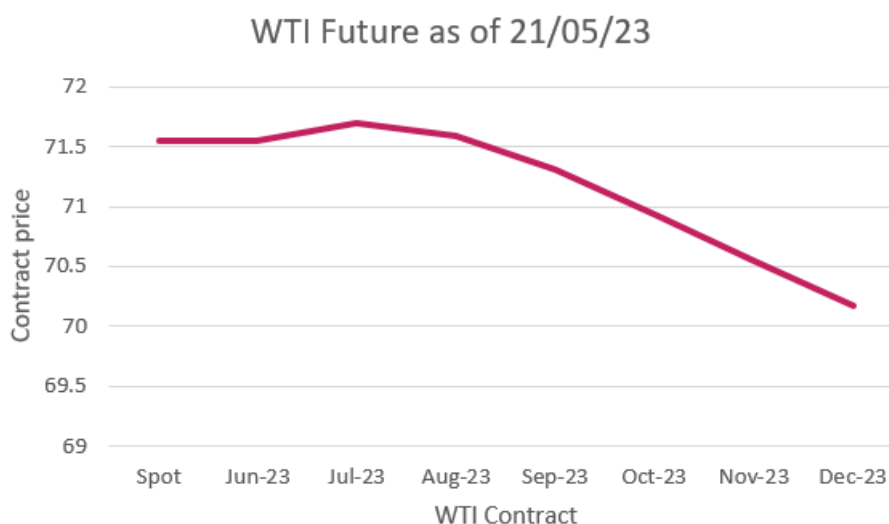
- *Action 13: **Country-by-Country Reporting**. Action 13 seeks to increase the transparency of tax, profit, income, and economic activity allocation through country-by-country reporting (CbC) , to enable tax authorities to improve BEPS risk assessments (*Action 13 - OECD BEPS, 2022*).
- *Action 14: **Mutual Agreement Procedure**. It aims to improve the efficiency, effectiveness, and fairness of dispute resolution mechanisms between tax jurisdictions, in order to limit the length of double taxation disputes (*Action 14 - OECD BEPS, 2022*).
- Action 15: **Multilateral Instrument (MLI)**. It “offers concrete solution for governments to close loopholes in international tax treaties by transposing results from the BEPS Project into bilateral tax treaties worldwide” (*Action 15 - OECD BEPS, 2022*).

Appendix 2 – Example of hedging for futures

Smart Trading SA (STSA) entered into a contract with an oil extraction company. The contract states that STSA will buy 2 million barrels of crude oil between the 15th and the 17th of September 2023. Price is not fixed yet but will be the average of the WTI (West Texas Intermediate) during 5 consecutive days around Bill of Lading (delivery date).

Of course, as a buyer, STSA fears an increase in price in the future. To mitigate the risk of price surge, STSA will lock-in the current price (spot at \$71.55) by buying some futures. In fact, it will buy 2'000 WTI Sep-23 futures contracts at \$71.31. In September 2023, comes two possible scenarios.

Figure 1 – West Texas Intermediate Forward Curve



Source: *investing.com*

Increase in price

If the doubts of an increase in price turned to be real and the price reached \$74 per barrel at the moment of delivery, the company makes an unrealized loss on physical over the differential between the spot price as of 21/05 and the final price it buys its cargo.

Unrealized Loss on Physical : $(2'000'000 * (71.55 - 74)) = -4'900'000$

As for the hedge, STSA bought futures at \$71.31 on the 21/05 and unwinds its position by selling them off at \$74. The company finally makes a profit on its hedge.

$$\text{Profit on Hedge: } (2'000 * 1'000 * (74 - 71.31)) = \mathbf{5'380'000}$$

Decrease in price

Conversely, if the price finally decreased in September and reached \$68 per barrel at the moment of the delivery, the company makes a unrealized profit on physical over the differential between the spot price as of 21/05 and the final price it buys the cargo.

$$\text{Unrealized Profit on Physical : } (2'000'000 * (71.55 - 68)) = \mathbf{7'100'000}$$

As for the hedging part, STSA bought futures at \$71.31 on the 21/05 and unwinds its position by selling them off at \$68. The company finally makes a loss on its hedge.

$$\text{Loss on Hedge: } (2'000 * 1'000 * (68 - 71.31)) = \mathbf{-6'620'000}$$

Appendix 3 – Interview with a Tax Consultant in commodity trading companies

Interview Date:	Wednesday, 19 th of April 2023
Interviewee:	ITW1 – Finance Director, Partner, and Tax advisor at his own commodity trading consulting company in Geneva
Interviewer:	Marion ENGDAHL
Interview conditions:	online through Microsoft Teams, recorded with the interviewer's phone upon interviewee's consent.

The first interviewee (ITW1) has studied Tax Law at several universities, before entering the labour market as a tax consultant in one of the Big Four. Then, he has held roles as tax manager and head of tax for many years in few major oil trading companies. Today, he has built his own Consulting company in Geneva where it represents the Tax Manager for few smaller companies that do not have their own tax department. Furthermore, he has specialized over the years in the energy sector, such as crude oil, bio energy, and LNG (Liquid Natural Gas). Also, in order to benefit from his tremendous experience in different trading companies, we decided not to talk about a specific company per se, but rather to focus on the general practices of big companies active in commodity trading.

Question: How many employees usually work in tax department? How are they geographically distributed among the offices?

Généralement, les équipes de taxe des grosses sociétés de trading vont de 4-5 personnes jusqu'à une dizaine de personnes.

(He now takes the example of a major oil trading company): on sépare souvent les employés dans les bureaux qui font du trading versus les employés qui sont dans les assets. Dans cette entreprise en question, il y a trois raffineries, des sociétés de stockage etc. il y a environ 1000 personnes travaillant dans les raffineries répartis entre la Belgique, Hollande, Allemagne ; les sociétés de stockage sont elles réparties

principalement en Indonésie et Panama, parce que là-bas s'y trouvent les assets (e.g. pipelines au Panama). Au Panama, il y a environ une cinquantaine de personnes qui y travaillent et dans les mines de charbon etc.

Cela est un schéma classique : il y a des assets qui faut faire tourner physiquement, et donc des employés s'y trouvent physiquement (ingénieurs, logisticiens, i.e de la main d'œuvre spécialisée). Dans cette entreprise, 200-300 personnes travaillent dans chaque raffinerie dépendant de sa taille.

Cependant, si l'on regarde la partie Trading, les grands centres restent Genève, Londres, Dubai, Houston et Singapour. Dans cette société en question, il y a 200 employés à Genève, 200 personnes à Houston, une centaine de personnes à Singapour. Ensuite, il y a un centre de services se trouvant à Talin (Estonie) où travaillent environ 250 personnes. Globalement sur un millier de personnes du côté Trading, ils sont repartis à part égale entre Europe, Asie, et Amérique. Cela reste une division « normale » pour une société de trading car elles doivent couvrir toutes les zones horaires du monde entier car le trading ne s'arrête jamais (24h/24 dans toute la planète).

Question: How is your company organized? (Offices, departments, etc.)

Il y a typiquement 4 piliers dans une société de trading :

Front office : où travaillent les traders qui achètent et vendent des matières premières (traders physiques) ainsi que ceux qui trade du papier, c'est-à-dire des instruments financiers pour couvrir les risques liés à la volatilité des prix des matières premières. Ce pilier est ensuite lié au

Back office : où travaillent les personnes s'occupant des opérations. Chaque fois que l'on décide de faire bouger de la marchandise d'un point A à un point B de la planète, une fois que le trader a décidé le trade, une personne doit l'exécuter. Cette partie d'exécution se fait par des Opérateurs qui est un terme très générique. Après, dans les équipes opérationnelles, il y a des spécialistes d'affrètements de bateaux (shipping operator), des gens qui s'occupent de la cargaison en soit (cargo operator), des contrats (contract operator), etc. Certaines fois, ces tâches sont attribuées à des employés différents alors que dans d'autres cas, elles sont effectuées par le même employé.

Puis, il y a les employés qui s'occupent des lettres de crédit et s'occupent donc de toute la partie financement. Mais il ne s'agit pas là de financement global en parlant des banques, mais vraiment de la partie financement d'un achat ou d'une vente spécifique. Finalement, il y a les équipes qui s'occupent de la facturation.

Toujours dans cette même société, il y a des équipes où les employés s'occupent de la préparation du bateau jusqu'à la facturation, alors que dans d'autres, chaque morceau de la transaction est divisé et attribué à plusieurs personnes.

Cela peut dépendre de la personnalité des traders et à leurs besoins. Mais aussi selon le type de trade. Si on a des gros bateaux (capacité d'environ 500'000 MT de marchandise) et donc on a peu de trades mais de très grosses quantités représentant une très haute valeur, cela peut faire du sens d'avoir une seule et même personne qui s'occupe de la transaction. Lorsque les quantités sont plus faibles transportées par barge (capacité d'environ 1000-5000 MT de marchandise) à Rotterdam ou dans la mer de Singapour, ou alors si les marchandises sont transportées par train ou par camion (représente une multitude de petites opérations avec des quantités minimales), cela peut être plus logique de ségréguer les tâches car beaucoup de transactions sont effectuées. Donc, le nombre de transactions peut avoir un impact sur l'organisation d'un département.

Middle Office : qui est le département de risques. Il est justement au milieu entre le front office et le reste de la société. Le middle office s'assure que les traders ne prennent pas trop de risques. Je parle là des risques liés à des positions financières, physiques ou papiers, par rapport à la stratégie globale de la société et des limites qu'on peut se permettre. Evidemment, si on achète énormément de produits, on s'expose aux variations de prix sur ce produit-là. On peut le hedger mais si on part trop loin dans une certaine position, le risque peut être trop élevé.

Donc, une fois que les limites ont été établies, le middle office s'assure de les contrôler et qu'elles ne soient pas dépassées.

Lorsqu'on parle des risques contrôlés par le middle office, on parle uniquement du risque de volatilité du prix (flat price risk).

Trade Finance : ce quatrième pilier (département) parle directement aux banques et met en place des limites de financement. Il s'agit souvent de Borrowing Bases qui sont des lignes de financement où plusieurs banques participent pour financer certains flux de marchandises spécifiques). A partir de là, il y a des lettres de crédits, des garanties bancaires, etc. Toutes ces activités de financement des achats et des ventes de matière première ont comme garantie la marchandise physique

Sans ces départements, une société de trading ne peut pas vivre. Ensuite, on y trouve le Support, qui est un grand mélange de tous les autres qui travaillent dans une société

de trading (comptabilité, légal, taxes, controlling KYC, anti-money laundering, compliance, etc.). L'équipe taxe est considéré comme une équipe de support au groupe dans sa globalité mais surtout aux traders et aux équipes de front office, trade finance et risques qui mènent l'activité.

Cela représente l'organisation dans la plupart des sociétés de trading. Evidemment, plus petite est l'entreprise, moins d'équipes de support il y a.

Question: Is Transfer Pricing being addressed in your company?

Bien-sûr, il y a pas mal de flux intra-sociétaires.

Des études de transfer pricing sont faites par la plupart des entreprises de commodity trading. Elles utilisent très souvent des grosses sociétés d'audit (Big Four) pour préparer ces études et analyses de transfer pricing. D'autres font aussi appel à d'autres types d'entreprises spécialisées, qu'on appelle transfer pricing boutique.

La première chose faite est l'étude des fonctions, où sont-elles localisées, des différents risques, et l'analyse des comparables pour comprendre si le prix appliqué lors de transactions intra-sociétaires respecte le arm's length principle. La méthodologie est identique.

Ce qui est spécifique c'est comment fait-on cette recherche de comparables, surtout lors d'achat/revente de biens et comment applique-t-on le cas spécifique au moment de l'achat et de la revente. On doit évidemment essayer de trouver une vente qualitativement comparable, ayant les mêmes Incoterms, la même durée du contrat, les mêmes quantités, etc. Tout se joue non pas sur le prix affiché mais sur le premium ou sur le discount. Lorsqu'on regarde une formule de prix pour une matière première, un important composant sera facile à démontrer comme étant un prix de marché. La partie difficile à justifier est le premium que l'entreprise va rajouter au prix du marché, et qui va impacter la rentabilité et la marge d'un trader. Il est pratiquement impossible de trouver une manière de l'expliquer et très difficile de trouver des benchmarks. De ce fait, les règles de Transfer Pricing ne sont pas nécessairement adaptées au trading mais elles doivent être tout de même respectées.

Généralement, il y a 5 méthodes de transfer pricing qui peuvent s'appliquer. Celles-ci figurent dans les guidelines de l'OECD. Au niveau international, le choix de la méthode est libre. Au niveau national, certains pays imposent une certaine méthode.

Il existe d'autres méthodes dans certains pays : the 6th method. Elle a été inventée en Argentine pour contrer les exports de matières premières agricoles des grosses sociétés de négoce. Cette 6th method dit que l'on prend en compte uniquement le prix au moment à la date de la Bill of Lading (BL), c'est-à-dire au moment du chargement de la cargaison. Cette méthode est donc assez stricte, appliquée différemment dans chaque pays, et spécifiquement applicable au trading de matières premières. Cette méthode met de claires limitations sur comment on applique les méthodes de transfer pricing.

Mais dans certains pays, il n'y pas d'obligations de méthode spécifique. Dans ce cas, la méthode la plus utilisée est la CUP (Comparable Uncontrolled Price Method). Le gros avantage du trading est que les prix des matières premières sont publics et donc affichés. Le problème est que ces prix ne reflètent pas nécessairement la logique économique de la vente. Car la logique économique d'une vente dans une société de trading est faite par une position globale (un portefeuille de transactions). Si on prend une stratégie spécifique : on prend toutes les ventes, tous les achats et la valeur des positions physiques ainsi que la position papier honnête. Le problème c'est qu'au niveau transfer pricing, on oublie souvent la partie « papier », ce qui fausse la méthodologie et qui rend compliqué la justification aux autorités fiscales qui est que le prix choisi par la société de trading prend en compte la valeur du produit financier directement relié à la matière première. Les autorités fiscales sont souvent réticentes à ces explications, qui elles se basent uniquement sur le prix coté directement sur le marché (e.g. Brent quotation).

Question: How important is the role of Transfer Pricing in the company?

Le Transfer Pricing est d'une très grande importance pour les sociétés de trading car ces dernières ne peuvent pas y échapper. Il est impossible pour des sociétés de trading de ne pas avoir plusieurs filières entre lesquelles des transactions intra-sociétaires se font, que ce soit des achats/ventes de matières premières, des écritures de financement, ainsi que des écritures liées à des services. Souvent, les traders sont organisés en équipe, et travaillent sur plusieurs régions géographiques pour couvrir la totalité de la planète. Chacun travaille pour une société du groupe différente alors que de leur point de vue, ils travaillent tous sur le même trading book, contribuant au même P&L, pour la même comptabilité du point de vue gestionnaire, que les traders soient basés à Genève, Singapour ou Londres. Du point de vue de l'équipe trading, savoir quelle l'entité légale a procédé à l'achat ou la vente n'a pas d'importance. Au contraire, ils prennent uniquement en compte la globalité du portefeuille sans aucune frontière. Cependant, ce sont les équipes de comptabilité qui vont « caser » ce type de transactions dans une

certaine entité légale. C'est bien là que la difficulté commence à savoir l'établissement de qui a fait quoi dans l'équipe de trading. Il n'y évidemment pas là de règles fixes, car le marché est très volatile et les traders s'échangent pas mal de fonctions au fil des transactions.

Question: Which Transfer pricing problematics do you face in your company?

For which types of transaction?

Il n'y a typiquement pas de flux intra-sociétaires dans les sociétés de trading pour tout ce qui est propriétés intellectuelles. Les sociétés de trading n'ont quasiment pas de propriétés intellectuelles parce que la brand d'une matière première n'est pas relevant. On n'achète pas d'essence à cause de la marque, seulement pour remplir un besoin. Donc, les sociétés de trading n'ont pas besoin d'analyser les royalties.

Cependant, il y a trois autres sujets importants de transfer pricing pour les sociétés de trading :

Achat et revente de marchandise entre sociétés du groupe. Il se peut qu'une certaine société achète dans le pays A et revende à la société B du même groupe pour ensuite vendre ailleurs.

Cela peut s'expliquer de plusieurs façons :

Il se peut qu'il faille une société locale pour acheter en local. Cela peut être une obligation réglementaire, souvent pour des raisons de TVA. De ce fait, la filiale locale dans le pays qui, généralement origine les matières premières et est donc exportateur de ces matières premières, va généralement revendre les commodities à une autre de leur filière. Il est très rare que la société locale dans des pays en Amérique Latine, Asie ou Afrique revende ensuite directement à des tiers. Les sociétés affiliées qui achètent les matières premières sont typiquement basées dans les Hubs (Genève, Londres, Singapour, etc.)

Financement : comme il y a ces grosses lignes de financement, il y a généralement quelques sociétés qui sont mises en place pour faire des prêts avec les banques. Ensuite, se font des prêts intra-sociétaires. Parfois, il y a du cash pooling (rassembler tout l'argent sous une même société) afin de mieux gérer les flux financiers ou tout simplement parce que les banques ne veulent pas forcément prêter de l'argent à des sociétés basés dans certains pays. Ceci explique pourquoi les sociétés sont souvent obligées de faire des prêts intra-sociétaires et d'appliquer des taux d'intérêts au prix du

marché. Or la partie transfer pricing pour les prêts intra-sociétaires est généralement relativement simple. Il y a très souvent des comparables externes (prêts financés par les banques) car les taux d'intérêts sont souvent des données publiques. Evidemment, cela peut être plus compliqué dans certains pays. Par exemple, on peut connaître facilement les taux d'intérêts pour des prêts en Suisse, en Europe, aux Etats-Unis. Or en Afrique du Sud, en Colombie, en Argentine ou dans des pays avec des contrôles monétaires strictes, cela devient bien plus compliqué. Cette partie « prêts intra-sociétaire » est relativement plus simple en termes de recherche de comparables mais cela dépend totalement des pays.

Services : il y a beaucoup de sociétés qui sont créées pour faire de la gestion de services (e.g. services de management). Certains employés sont enregistrés dans une des filiales mais prêtent service à d'autres sociétés du groupe. C'est une pratique très courante. (He then gives the example of a major oil company): Cette société en question a une filiale en Estonie qui fait que du service interne (share service center) : comptabilité, support pour les opérations, les activités de crédit, compliance, taxes, etc. Cette filiale estonienne fournit des services que pour les diverses sociétés du groupe. Ensuite, on doit analyser comment appliquer les règles de transfer pricing à ces fonctions de service. Ce troisième volet ressemble beaucoup aux sociétés plus classiques. La partie achat et revente de biens est la plus complexe en termes de transfer pricing aussi dû aux éléments de hedging.

With which countries in particular?

Les pays les plus compliqués du point de vue Transfer pricing sont des pays où la fiscalité est relativement complexe. Par fiscalité complexe, on parle de corruption, un système peu clair, et des relations complexe avec les politiques.

Si l'on prend l'exemple de l'Afrique : les juridictions francophones ont tendance à copier la législation fiscale française tout en l'ajustant comme elles l'entendent. La fiscalité écrite dans ces pays est très courte, il y a très peu de guidelines ce qui donne lieu à beaucoup d'interprétation. Et ceci donne beaucoup de pouvoir aux autorités, car ce sont elles qui tiennent le couteau par le manche. Dans certaines juridictions, dû aux incertitudes juridiques du pays (non-transparence, corruption, etc.), il est très difficile d'aller contre les autorités fiscales au tribunal. Et il est très facile pour les autorités fiscales de challenger la bassesse du prix.

De plus, beaucoup de pays d'Afrique et d'Amérique Latine n'ont pas encore de système comptable suffisamment bien établi, ou du moins suffisamment de données publiées

pour que les benchmarks soient assez forts. Obtenir de bons comparables est toujours aujourd'hui un problème. Ce qui signifie qu'obtenir de la bonne documentation pour aller à l'encontre de l'autorité fiscale est compliqué. Cela va très souvent se résoudre par négociation. Aller vers le tribunal n'en vaut généralement pas la peine. C'est pourquoi c'est très important d'avoir de bons contacts et de bonnes relations avec les politiques locaux ainsi qu'avec l'administration fiscale locale car ce sont eux in fine qui décident. Bien-sûr que le risque de corruption est présent. Mais les sociétés de trading essaient de mettre en place un certain nombre de précaution pour ne pas se retrouver dans des situations délicates au vu du haut risque de corruption. Si cela n'a pas pu être arrivé, tout doit être reporté au compliance, etc.

Transfer pricing est une arme classique. Aujourd'hui, dans tous les pays, la mise en place de la législation BEPS crée des armes supplémentaires.

Le pays avec la fiscalité la plus complexe reste le Brésil, ensuite les pays d'Amérique Latine de manière générale, qui sont des grands producteurs de matière première (e.g. Argentine, Colombie). Certains pays d'Afrique ont également des systèmes fiscaux extrêmement compliqués, à savoir la Zambie et Angola. Dans ces pays, il arrive souvent que le transfer pricing est utilisé en combinaison avec la TVA par les autorités fiscales.

Il est arrivé qu'une société de trading avait accumulé un montant important de TVA qu'elle devait récupérer auprès de l'Etat Zambien. Or, selon l'autorité locale, l'impôt que la société payait dans le pays était trop faible dû au transfer pricing. Il y a donc eu un chantage de la part des autorités qui acceptaient de rendre la TVA à la société de trading uniquement si la société augmentait sa part d'impôt. Ce sont des situations qui arrivent régulièrement dû au fait que ces deux types d'impôts vont dans deux sens opposés. Les états peuvent donc utiliser la TVA comme effet de levier.

Ces problématiques de transfer pricing arrivent également beaucoup en Asie, notamment en Chine et en Indonésie.

A noter que la plupart des problématiques liées au transfer pricing arrivent lors d'achats de matières premières dans ces grands pays exportateurs, plus que pour les ventes.

Question: How do you deal with them? Do you have internal guidelines?

Oui, il y a généralement des guidelines internes, surtout adressées à la comptabilité, mais aussi pour le trading. Typiquement, lorsqu'on a établi une politique de transfer pricing en analysant les différents flux, on analyse ensuite de manière trimestrielle afin

de faire des ajustements tout en suivant ces guidelines. Généralement, la manière de procéder est à la suivante :

Premièrement, on essaie d'établir chaque flux. Lorsqu'il y en a des nouveaux, on les mappe en déterminant où le bateau est chargé, déchargé, qui sont les acheteurs/vendeurs, etc.

Une fois qu'on a analysé les fonctions et les risques, l'étude complète de transfer pricing avec le benchmark peut commencer, ce qui est complètement inutile si on n'arrive pas à l'implémenter de manière pratique et efficiente. Généralement, les big Four ou les sociétés de conseils font une étude de transfer pricing très longue et complète.

Puis, il faut transformer ce document très complexe en guideline interne (qui est transféré aux autorités fiscales si besoin) pour que l'opérateur sache comment l'appliquer et que la comptabilité puisse faire les ajustements de transfer pricing de manière régulière (généralement de façon trimestrielle).

Question: Which transfer pricing methods do you mostly use (Traditional Transaction method, Transactional Profit methods)? Why?

Pour les commodities, le CUP est la méthode qui ferait le plus de sens. Or la méthode transactionnelle pour la vente et achat de biens physiques est bien souvent la PSM (Profit Split Method). Cette méthode est plus complexe et donne plus de latitude à l'administration fiscale malheureusement, en demandant de justifier pourquoi on a alloué le profit d'une certaine manière. Or si une équipe est organisée avec plusieurs traders, des back officers, etc. sous une certaine entité légale, et d'autres collaborateurs sous une autre entité l'égale, ce sont effectivement des éléments qu'on va regarder pour essayer de créer les bons pourcentages pour allouer le profit à l'entreprise A ou B du même groupe. Dans ce cas, on est obligé d'utiliser une méthode du type profit split.

Pour la partie services, on utilisera plutôt la Cost Plus Method. Cette méthode est également utilisée pour les sociétés qui font du raffinage ou du stockage.

Il est donc très usuel qu'un même groupe utilisera plusieurs méthodes différentes selon le type d'activité, de fonction, de flux. Si par exemple le même desk travaille sur des flux complexes avec plusieurs entités au milieu, on sera obligé de faire une analyse société par société et voir qui dans l'équipe sera attribué à une certaine entité légale. D'où l'importance d'avoir des guidelines internes très précises. Et on ne peut pas facilement le mettre en place dans un ERP comme dans d'autres entreprises plus classiques car une société de trading a beaucoup plus de flux et de combinaisons différentes même si

moins complexes (achat/vente), ce qui oblige de les analyser un par un. De plus, les montants importants de chaque transaction font évidemment augmenter le risque.

Question: Was BEPS/Arm's length principle difficult to implement within the company?

Je dirais que c'est coûteux avant tout. Ce n'est pas difficile dans le sens où nous comprenons ce que l'on fait. La difficulté est plutôt d'organiser la documentation. Il est très coûteux et long d'aller voir les entreprises de conseils en leur expliquant chacun de nos flux pour ensuite recevoir toute la documentation afin de la transformer en guideline interne.

De ce fait, il faut que la société de trading soit capable de couvrir le coût de compliance du transfer pricing. Si ce sont des grosses sociétés qui ont d'importantes ressources organisationnelles et financières, ce coût pourra être facilement absorbé. Or, pour les plus petites structures avec une vingtaine de traders qui ont potentiellement des flux autant complexes voire plus complexes que les grosses firmes, elles n'ont quasiment aucune chance de réussir à mettre en place ce genre de documentation.

Question: BEPS 2.0 reform seeks to set a new global minimum tax rate of 15% for MNEs with a turnover exceeding EUR 750 million. What are the impacts for the company?

Aujourd'hui, on a pratiquement mis en place partout les actions 13-14-15 de BEPS sur le country-by-country report, le master file et local file ce qui a eu de gigantesques impacts sur toutes les sociétés et spécialement pour les sociétés de trading. Il est très facile pour ces sociétés de dépasser les 750 millions. Je pense que cette limite est très bien pour les sociétés qui ne font pas de trading, mais est beaucoup trop basse pour les commodity trading companies. Cet aspect n'a pas du tout été pris en compte par l'OECD dans leurs guidelines.

Je dirais que le minimum de taxe est pratiquement le même chez tout le monde. Cela étant dit, toutes les sociétés basées à Genève auront un petit impact car la fiscalité suisse se rapproche déjà ces 15%. Il y a cependant plus d'inquiétude pour les sociétés basées à Singapour, où il y a des incentives pour avoir une fiscalité plus favorable. Cela dit, c'est plus un facteur extérieur. Si ce taux est vraiment appliqué dans le monde entier, l'impact sera général. La vraie question est plutôt de savoir si ce taux sera réellement appliqué partout. Et dans tel cas, cela prendra beaucoup de temps. On peut s'y préparer un peu mais c'est difficile sans savoir si ce taux sera vraiment appliqué.

Question: Has your company already been audited by tax administrations? What was the result?

Oui, des centaines de fois. En plus, il est très facile pour les autorités fiscales d'attaquer les sociétés de trading. Il y a là derrière un aspect politique. Il est plus compliqué d'attaquer des sociétés qui font du bien dans le monde. Les traders jouissent malheureusement d'une mauvaise réputation pour plein de raisons. Donc les administrations fiscales, et ce dans le monde entier, trouvent bien plus facile de créer un gros cas autour des sociétés de trading telles que Glencore, Gunvor ou encore Trafigura. C'est pourquoi ces sociétés sont sujettes à beaucoup de contrôles. De plus, les sociétés de trading traitent des produits clés pour beaucoup de pays, pour lesquels leur richesse entière est en jeu. La fiscalité est donc vue d'une manière à récupérer un peu de cette richesse.

Pour une société de trading basée en Suisse, elle sera sujette autant bien à des audits de la part de l'autorité fiscale Suisse que par les administrations locales dans les pays où l'entreprise opère. Je dirais même encore plus par les administrations locales car il y a de très bonnes connaissances du métier lié au commerce de matières premières en Suisse. L'administration genevoise connaît très bien ce que font les traders et peuvent répondre à toutes questions. Ce qui est bien plus compliqué dans les pays producteurs de ces matières premières. Il y a très peu d'entreprises qui font ce type d'activités et les autorités locales n'ont que peu l'habitude. Du coup, lorsqu'il y a peu de connaissance, le plus simple est d'imposer une amende ou de faire un redressement fiscal.

Encore aujourd'hui, après avoir essayé d'éduquer les administrations locales, les contrôles sont extrêmement fréquents, et ce dans le monde entier. Mais la plupart des redressements arrivent en Argentine, Brésil, Colombie, Indonésie, Zambie, Afrique du Sud, Côte d'Ivoire, etc. Evidemment, il y a toujours un dialogue entre l'administration fiscale et le trader mais les audits sont très réguliers.

Question: Current regulations are mainly focusing on transfer pricing practices related to physical transactions. But what about hedging activities? Are there some specific guidelines?

Il y a eu quelques drafts mais il ne me semble pas qu'il y a eu des guidelines transfer pricing spécifiques au hedging, du moins pas dans celles de l'OECD. En Suisse, et à Singapour, les activités de hedging sont plus traitées au niveau de la TVA qu'au niveau transfer pricing.

Le vrai problème est cette liaison entre les positions de hedge et la position physique. Si les deux parties sont exécuter dans la même entité juridique, il n'y a aucun problème.

Les problèmes comment à partir du moment où l'achat ou la vente de la position physique se fait dans la société A alors que la couverture du risque se fait dans la société B du même groupe.

Prenons un exemple : la société A est acheteuse de commodities (long). Il y a une montée de prix. Dans ce cas, le côté physique de la transaction fera un profit car les prix seront hauts lors de la revente.

Comme il y avait évidemment un grand risque que le prix baisse, la société B avait également vendu des futures sur ce même produit. Or avec la montée des prix, la vente de future devient une perte. Si l'on nette le profit du physique et la perte du hedge, il est possible que la société soit quand même gagnante. Mais du point de vue du Légal, il y aura beaucoup d'argent gagné dans la société A, disons en Suisse, et beaucoup d'argent perdu dans la société B, disons aux USA.

Est-ce vraiment juste de transférer ce gain ou cette perte ? et quelle société transfère à qui ?

Si le profit et la perte sont faits dans des pays différents, il s'agit, selon moi, plus d'un problème que d'une perspective d'optimisation fiscale. Economiquement, les deux devraient aller ensemble. Car la réalité économique veut que le « papier » serve à couvrir le risque qu'il y a sur le physique. Dès le moment où on les sépare légalement, on peut finir par payer beaucoup plus d'impôts dans un des pays (A) et zéro dans l'autre (B). Evidemment, on pourrait essayer de faire que des gains dans une société basée dans une juridiction à basse fiscalité. Le vrai problème est que l'on ne sait pas à l'avance où le gain se fera... parce que l'on ne connaît pas au préalable comment les prix vont bouger. C'est justement un aléa trop grand. On ne sait pas si le gain sera réalisé sur le papier ou le physique.

Imaginons que je fais un pari et je traite tout le physique depuis la Suisse et tout le papier depuis les USA. Les impôts étant élevés aux USA, j'espère faire mon gain sur le physique. Pour une raison quelconque le prix baisse, je perds beaucoup d'argent en Suisse et je gagne beaucoup aux Etats-Unis. C'était donc une très mauvaise optimisation. C'est pourquoi il est plus safe d'avoir le trading physique et le hedging sous la même entité.

Il y a évidemment des manières de résoudre ces problématiques.

La mise en place interne d'ISDA (International Swaps and Derivatives Association). Ce sont des instruments contractuels qui servent à échanger un produit financier avec un

autre. Ces produits aident à déterminer qui échange un produit contre qui. Or, on peut imaginer que la société A a une position physique qui est lié à des prix variables (floating prices) et que la société B s'occupe que de la position de hedge. Les deux sociétés font faire un ISDA qui dit que pour chaque position sur prix variable pour lesquelles du hedge a été fait, la société B récompense l'autre société et vice versa. Ces swaps donnent justement cet effet de transférer le profit entre des sociétés du même groupe. En revanche, ce n'est donc pas un simple transfert de cash. Il y a vraiment un instrument juridique qui est mis en place pour faire le miroir de ce qui s'est passé dans la vie réelle. C'est un instrument très puissant. Evidemment, c'est écrit nulle part, c'est quelque chose fait dans la pratique.

Mais expliquer cela à une administration fiscale est probablement la chose la plus compliquée qui existe...

S'il n'y pas de guidelines, pourquoi pas « juste » faire de simples transferts de cash ?

Evidemment, à chaque que l'on bouge l'argent, il faut pouvoir l'expliquer. Ça ne peut pas être un simple cadeau. Cela peut soit être lié à une vente de produits, ou des produits financiers différents. Or pour cela, il faut faire très attention à ne pas devenir broker pour une autre société. C'est une activité financière réglementée. Donc créer un ISDA entre deux sociétés du même groupe aide à résoudre ce problème de transfert de cash. Ce produit financier habille du point de vue juridique de manière plus correcte.

Cependant, mettre en place les ISDA correctement n'est pas chose facile car il faut absolument régler les différentes règles de toutes les trades. On essaie de simplifier en regardant la globalité du portefeuille, mais il faut le faire par groupe de contrats qui ont plus ou moins les mêmes caractéristiques.

Dans le cadre de la spéculation, soit du trading papier de positions complètement séparée de celles sur le physique, on va toujours essayer de placer cette activité dans une juridiction à fiscalité favorable même si en réalité on ne sait pas en avance si on fera un gain ou une perte.

Question: Currently, are hedging activities and physical trading performed by the same people? Do they require different sets of skills?

Cela dépend complètement des entreprises. Certains traders traitent que du physique, certaines équipes s'occupent uniquement de la partie hedging. Dans des plus petites structures en revanche, il arrive souvent que les personnes fassent les deux activités

simultanément, en traitant premièrement le physique et en le hedgeant directement. Aussi, au sein même d'une équipe de traders physiques, certains feront que des achats (originator) et d'autres que des ventes.

Les skills requises peuvent varier légèrement. L'achat et vente de produits financiers demandent de connaître les plateformes, mais finalement les deux activités sont très liées car elles requièrent une grande connaissance des marchés et des matières premières. Globalement, ce ne sont pas des sets of skills complètement différents.

Question: Where are hedging activities performed (physical location)? Why?

Généralement, les traders sont basés à Genève, Londres, Singapour, Houston. Mais les traders ne sont pas directement enregistrés sur les marchés. Ils traitent principalement via des brokers.

Le principal problème est que les traders ne veulent pas bouger facilement. Ils veulent préférentiellement vivre à Genève, Paris, etc. Il est donc plus facile de déplacer des équipes pour des entreprises plus classiques où il est plus simple de remplacer le personnel. Un trader qui a des connaissances de marché très spécifiques est très difficile à remplacer. Donc l'entreprise doit se plier à la volonté des traders.

Question: How are hedging activities financially reported? Are they segregated from the revenue derived from physical trading?

Techniquement, d'un point de vue strictement comptable, si une activité d'achat ou vente de produits financiers devait être reportée dans le P&L, on devrait la reporter tout à la fin là où l'on reporte généralement l'activité financière. Ça serait donc la bonne théorie comptable.

Or les hedge sont tellement liés à l'activité physique que selon moi cela ferait plus de sens de les reporter ensemble, au même titre que les ventes et achats physiques. Mais devrait-on les reporter avec les ventes ou les achats ? car on ne sépare pas la position nette du hedge entre les achats et les ventes. On pourrait mais cela requerrait un travail compliqué de séparer chaque transaction. Or les transactions physiques sont généralement en nombre limité, mais le nombre de transactions papiers est gigantesque. C'est donc un travail comptable qui n'est pas forcément fait car in fine on regarde simplement le net de la position à la fin de la journée ou du mois.

Est-ce que les profits iront dans le revenu et donc augmenter le revenu ou alors cela diminueraient-ils les COGS ?

Justement, c'est bien là qu'est le problème. Si l'on suivait la théorie comptable, on ne devrait le mettre ni dans le revenu, ni dans les COGS mais dans la partie « financière ». J'irais même plus loin en disant que le revenu, les COGS, du hedge et physique, devraient être combinés et reportés dans un compte de perte et profit spécifique aux traders. Car la comptabilité classique et le format d'un P&L n'est pas adapté aux traders à cause de cet élément de hedge qui est très lourd et immatériel. On pourrait peut-être imaginer faire un prorata en reportant moitié dans le Revenu, moitié dans les COGS... Il me semble que de mon ancienne entreprise, les activités de hedging étaient allouées directement au Revenu pour le management reporting. Mais pour la comptabilité stricte, ils les mettaient avec les produits financiers. Ce qui faisait sauter toute la logique de comment regarder un P&L.

C'est pourquoi, il faut absolument regarder le P&L dans sa globalité, et ne pas s'arrêter au Revenu. Si l'entreprise fait une année exceptionnelle en termes de hedging, mais très mauvaise sur les trades physiques, seul le revenu ne suffira pas à indiquer la santé de l'entreprise.

Quant aux activités de spéculation pure, elles seront reportées directement dans les produits financiers. Du coup, pour la comptabilité, il est bien souvent impossible de séparer les revenus liés au hedge de ceux de la spéculation. Surtout qu'il est difficile de déterminer jusqu'à quel point on peut parler de hedging et pas de spéculation ? si par exemple on fait du hedge à 120% ou à 200% sur une position physique, est-ce purement le résultat d'une stratégie de hedging ? Ou considère-t-on uniquement comme hedge la couverture à hauteur de 100%, au-delà étant de la spéculation ?

Cela est discutable et justifiable.

Appendix 4 – Interview with a Tax Expert in commodity trading

Interview Date:	Wednesday, 19 th of April 2023
Interviewee:	ITW2 – Tax Director in a European Energy Company supporting the Trading and Shipping
Interviewer:	Marion ENGDAHL
Interview conditions:	live interview, recorded with the interviewer's phone upon interviewee's consent.

The second interviewee (ITW2) has studied Tax Law at university before starting his career as Sales Operations Manager in a multinational company. Following several years spent in a Big Four, he worked for ten years in a very famous oil company in Geneva as the Head of Direct Tax. At the beginning of the Covid lockdown, in 2020, he joined a European Energy Company as a Tax Director in utility supporting the Trading and Shipping. Unlike ITW1, we agreed to discuss the transfer pricing issues in relation to the current company he is working for, in order to get a practical example of what a company does in terms of transfer pricing.

Question: How many employees work for the Group? How are they geographically distributed among your offices? How is your company organized? (offices, departments, etc.)

The group I am working for now is a big European utility. We have almost 27'000 employees but only 326 of them are part of the trading department. It represents a small part of the utility. We own the grid, and we own all the production assets. So you can imagine that a large part of the company is made of engineers, maintenance people, technical people more focused at keeping the power plants alive and keeping the grid alive. Building that for the conversion to decentralized, you know people with solar panels, smaller wind parks, etc. which are only being integrated into the grid. So, there is much bigger focus on that than trading, which is really like a small part in the company. But it is becoming a big contributor to the P&L of the group. People wise, we are quite small, economically it is quite important.

So, on the 326 people in trading, we have roughly 50 outside our Head-Office which is located in Germany. And we have roughly 30 in the UK, 18 in Switzerland, and 2 in Oslo.

We started diversification three years ago around 2018. Turning around our trading department which used to be hedging business around power production, nuclear and coal-fire power plant. The last nuclear power plant was shut down this week in Germany. And the coal-fire power plant, they had to change, they have to convert it into gas first, and then to low-carbon production with hydrogen or ammonia.

With that in mind, they said ok we should start transforming the trading department to incorporate gas and LNG into the mix for 2018 to be more geographically diversified in trading, not only in Germany but also in the other European markets.

We started LNG in 2019. We did our first cargo; they we got our first slots at European LNG terminals.

With that change, we had the Head of Trading that joined the company from a major energy company around 2017 to start that transformation of the trading department. So, in 2018, they launched plants to be more diversified across products and geographically. I joined in 2020 just at the beginning of the lockdown. But before that, there were a number of people here from Geneva region who have also joined, also some from the UK. They were all prior to the lockdown commuting in on Monday morning to Germany spending their work week there, and then going back to their family.

Then, when the lockdown arrived, countries agreed that when people went back to their family and stayed, they would not maintain the social security coordination rules. It means that if your employer is in one country and you live in another, if you spend more than 25% of your time in the other country (i.e., in your country of residence), then you have to be insured for social security pension, accident insurance in your country of residence instead of the country of employment.

Therefore, during the Covid lockdown, they (EU, Switzerland, and Norway) agreed to suspend those rules and not enforce them because of home office due to Corona. Then, the same for the tax treaties, where you have this 183-day rule if you spend more than 183 days in another country, then you create a tax rule presence permanent establishment in the other country and also about where your income is personally subject to tax. So, with that, all the families were sent home and there was no tax consequence about it. People stayed under the German payroll and had a German salary. Then as the lockdown took much longer than everybody expected, we were

already quite well prepared, everybody was already on MS Teams so we had a quite smooth transition and our trading results were also not bad, everybody being in home office. Communication was good, the infrastructure was good technically.

Then, as we were critical infrastructures also when some of the rules were relaxed and people started to coming back at the office, but we weren't because they said just to critical people to keep the grid up and the electricity production up. They come and then to make sure we don't get fall out in critical teams because of Corona infection, the rest had to stay at home. Trading department was home. Only some of the operators scheduling department, they could come because they had to actually monitor all the nominations and the intraday optimisation of the grid, etc. Those were the only people allowed to come to the office and that lasted until 2022. Then, during 2021, it was decided that we had a company wide project whereby people could choose whether they wanted to come back to the office or not. Roughly 70% of the people in the whole company opted for three days home office. That included trading as well. The company understood that people did not want to come back to the office, and it did not want to force them but if it let people doing that all around Europe, it will become a mess because we've got permanent establishment everywhere, so they had to decide where they wanted to be.

They chose to be in Oslo, that the company wanted to develop anyway because Oslo kind of the Hub for Nordic power trading in the Nordic Energy market. Also in the UK, because London is a financial centre, and Switzerland because it is the global commodity trading hub and also because it's where most of the specialists come from. We have some other people from the Netherlands, Belgium, Austria.

We chose these locations in Europe strategically and that's where we want to develop. In 2021, we incorporated a Norwegian subsidiary, where there are two employees. In the UK, we had another issue with Brexit, and we already started hiring during Covid when people did not have to come to Germany to work. We agreed with some of them that they can come like four days a week in office. But this already means that for the social security coordination you go over 25% so you need to arrange for UK social security pension. So then, we set up in 2021 a UK company to employ people there and then some people were still under the German payroll. So we let the employees choose if they wanted to stay under the German payroll where they have much more job security and protection for the whole life; or if they opt for a UK contract. The only catch is that if they want to keep their German contract, they have to physically come to Germany minimum four days per week and worked in the German territory.

All the UK employees that we employed over the course of 2020 and 2021, they all opted to become UK employees. So, they had their checks switched.

In 2022, it became clear that the suspensions of the tax treaties between Germany and Switzerland would also end. So, we registered a branch office in Lausanne where we rent an office space. In July 2022, we had 12 employees there in Switzerland that switched their German contracts into Swiss contracts. Today, we are 18 so as there are more specialists in trading available in Switzerland than in Germany, it is easier to hire people here in the hub directly.

Then, we had set it up and we had to deal with it from a transfer pricing perspective. Because before we did not really have any big transfer pricing issues in trading. We had most of our power assets in Germany, some in France (nuclear plant), in Austria (water reservoir), but there were more like production shares. So not a lot of transfer pricing around that. We had trading company in Germany with satellite offices in other places. And all the trading taking place in the name and for the risk of the German head office because you have your counterparty base which are all registered, then you have your financing lines of your hedge accounts. It's very inefficient to spread that capital over more locations. So, we decentralized trading book with agents in another country.

That is specifically explained in the OECD 2010 report under Profit Attribution to permanent establishment in the authorized OECD approach for global trading and financial derivatives, chapter 3 or the report (commodities are included in the financial derivatives). We set up that last year, in that sense we apply trading department a Profit-Split method taking the P&L on an IFRS basis year-to-date. There is always a debate whether to take it on the German GAAP basis instead what the German taxes based on IFRS basis. All our trading P&L is measured on IFRS basis because it also takes the hedge account into account. In the German GAAP, you only look at the realized part, so it doesn't measure your hedges Mark-to-Market.

So, we take the IFRS P&L, then we take all the costs attributed to trading (support department in trading but also charges for the use of the building, IT infrastructures, etc.) and then we take out the front office costs (salaries, remunerations, overhead costs). We have 5 main trading (front) areas:

- Assets trading around our power plant in Germany
- Physical trading outside Germany and throughout Europe

- Origination (business developers bringing new business, new contracts) and they do lots of P&L sharing deals with the asset desk
- LNG desk
- Smart and Digital (algorithmic trading development)

From our P&L, we deduct everything that is not linked to front office and mark it up by 10%. That's the Cost Plus Method (CPM). Then, we take a risk capital deduction. In fact, there is a risk capital allowance to each desk that is the amount of equity that the group is willing to lose on trading positions.

We multiply that by our pre-tax WACC and we deduct it from each risk capital allowance. We do this pre-tax WACC deduction times the risk capital. The total is 1.1 billion now and the pre-tax WACC is 11.2% so that's then deducted and then there is financing costs. We end up with a residual P&L which follows basically the residual profit formula and then we do an allocation table where we looked at the different front offices and we look at the total compensation pack per country relative. We look at the different desks and see what the composition pays in Germany, in Switzerland, in UK, in Oslo, we get percentage from it. We multiply that to the residual profit, we get allocation to each country. Then, there is the target trading revenue for each country that they are entitled to. Then we look at the local support costs. We mark them up with 10%

Support costs + 10% + profit-split for the country – deduction of what have already been charged throughout the quarter or the year.

From that, the local have to pay all the front office (salaries, bonuses, overhead). What's remains is profit before tax in the country.

That's how we set up our profit-split method (PSM). This is fully OECD compliant, and the German tax law also says that transfer pricing method has to follow the authorized OECD approach.

It has not been audited. But we are voluntarily sharing it with a specialist transfer pricing team. We have never been audited for transfer pricing because it has always been a small part. We had some intra-group financing, loans, lots of other transactions were within one single country. For instance, we have wind farms on sea, subsidized assets. These are residual profit centres and our main group entity in Germany only takes a resale minus spread on the market price realized. Everything goes back to the asset.

In 2022, this was the first time we have big transfer pricing position. We pro-actively share with the auditors before the end of the year. We developed the model with one Big Four and another one is our auditor. Transfer pricing team also reviews the application and the sources of our data. The model is one thing but how you apply it is a second.

We still need to finalize a documentation and then we will share it also with the transfer pricing specialists' team. We are not asking for an APA (Advance Pricing Agreement) but we're sharing it so that they can get their mind around it and see if they want to challenge it or not. But in the back of it, we can always ask for a multilateral APA, multilateral arbitration procedure, so then the German inspectors have to contact our counterparts in Switzerland and in the UK and come up with whatever they think is fair.

Which Transfer pricing problematics do you face in your company?

The biggest problematics are the Profit-Split trading result.

With which countries in particular?

Germany, Switzerland, UK, and Norway.

Question: How do you deal with them? Do you have internal guidelines?

We have an internal Transfer pricing policy which was set up before. Then we developed the Profit-Split methodology for trading specifically. We are building the first unsubsidized wind park in Germany. Also, we pushed to get away from the "Resale minus" also this was desirable from a market perspective. But to tear us apart, since they are not subsidized, there is no formal pricing, so we benchmarked on the CUP method a fixed price for the wind park.

After, we optimized within trading around the power assets by entering into long term PPAs but also by keeping part of the portfolio merchant and hedging.

Question: Does the risk appetite of the company influence your behaviour towards Transfer Pricing?

It's got to do with the perception also around the power assets. In my view, they cannot risk managed themselves, well technically maybe but not market. I'm always pushing to de-risk them from the market as much as possible. But not all the people in the tax department feel they should be very proactive on that. They are more like it's the business who decides, law documents, etc.

Question: Which transfer pricing methods do you mostly use (Traditional Transaction method, Transactional Profit methods)? Why?

On the utility side, it's more like the traditional transfer pricing method. On the financing, we do a spread on some resale minus and Cost-plus methods. On the trading, it's the transactional profit split method. For all the reasons explained above.

Question: Was BEPS/Arm's length principle difficult to implement within the company?

Not difficult to implement in the company.

Question: Has your company already been audited by tax administrations? What was the result?

We haven't been audited before, so we are going proactively by sharing what we are doing but not asking for an APA because this is a different process, and it does not make sense to have only one country. But we have the option to ask for multilateral arbitration (mutual agreement procedures).

Question: BEPS 2.0 reform seeks to set a new global minimum tax rate of 15% for MNEs with a turnover exceeding €750 million. What are the impacts for the company?

Pillar 2 is a big issue for us. Pillar 1 not because utility does not make 10% margin. Only maybe for amount B, but we don't really have LRDs (Limit Risk Distributors) set up. Pillar 2 is a big thing as we need to calculate for each country. In Germany, there is the Foreign Tax Act, (the Aussensteuergesetz) which already qualifies each group entity whether they have active income or passive income. Passive income can be if you only have passive activities such as financing dividends, holding, IP but also if you are abroad and you only perform services for the group company and there the minimum tax rate for the CFC is 25% and everything below that is then surtaxed to the German level but you only get tax credit for the Federal income tax which is 15%. If we get a minimum tax rate, here in Switzerland it goes to 15% with the top-up tax for us. If our income is considered as passive then we still get a tax credit for the same 15%, so that's fine. Let's say the new global minimum tax rate is not a big issue for us. The German Foreign Tax is much bigger.

I would say that Pillar 2 is an admin' effort. It's a whole new accounting method that we are adding to calculate. But beside the admin, the tax rate itself is not a big issue.

We are not driven by tax planning anyway.

Question: Current regulations are mainly focusing on transfer pricing practices related to physical transactions. But what about hedging activities? Are there some specific guidelines?

On physical transactions, as I said, we do our Profit-split on IFRS basis so all the hedges are measured on Mark-to-Market and are included in the IFRS result. They are included there as well.

Question: Do you encounter some loopholes/gaps with the current framework?

As we start each year with 0 with IFRS result we should not have overlap in the trading profit or loss for a year.

Question: Currently, are hedging activities and physical trading performed by the same people? Do they require different sets of skills?

Hedging and physical trading are sometimes performed by the same desks and sometimes not. It depends. We have diversified teams. Some people are trading physical cargos, other are more paper focus. If we buy LNG on a FOB US basis and we have delivery obligations in Germany, first we lock-in the Henry Hub - TTF spread and freight. Then there is a TTF-THE swap there to be matched with the delivery date. There is a time frame when the cargo is coming to the German terminal, then there is a time frame for regasification, and when we get the gas nominated to us at the German Hub and we ... to the portfolio company. So do we have paper traders on the desk who are specialized in that. There is a team who is trading the liquid period say 3 years, then there is an intraday optimization team. They are not hedging or anything, they are just balancing and playing the balancing market and optimizing like that. Whereas the team who is managing the liquid period for assets, they are trading and hedging.

Gas desk has the people who manage the gas storages etc. they also do the hedging. There are the same people. But on desks, there are different specialists on physical dealing and hedging.

Question: Where are hedging activities performed (physical location)? Why?

Hedging activities are performed in all 3 locations. That has to do with the start of Corona when people went back to their families and did not want to come back full time. Then after, our recruiters found out that they could also offer bringing people that were willing to work with us but not ready to move to Germany. They then became more flexible.

Question: How are hedging activities financially reported? Are they segregated from the revenue derived from physical trading?

Hedging activities are reported in the P&L in the management reporting. In our consolidated financial statement, we do have some lines about financial income and financial hedging positions. Some of them are linked to the 7 billion bonds outstanding, green bonds, and listed bonds. And then, obviously we have all the hedges on our portfolio. LNG desks hedges the portfolio, smart and digital they get some illiquid products that they are trying to make them liquid and tradable at certain time spread etc.

The profit LNG traders do on physical is linked to the profit on hedging. Everything is on the P&L. And it's also reported in our consolidated financial statement.

Some companies put the hedge result, positive and negative, in their COGS, because it's like an insurance. My previous employer used to report separate financial outcome, but they were also thinking about moving it into the COGS.

Now, since we are growing our LNG portfolio, we need to have marketing capacity into Asia as well. And we need to be able to optimize our portfolio into Asia. The set up of a trading agent in Singapore will be the next step for our company. But the decision is not linked to tax. Also, if we set up another trading agent in Singapore, because we are a German group with a German portfolio, there is no use in having a smaller trading agent in Singapore that could be optimized using the 5% tax rate on trading. because there is still the third tax in Germany anyway under the German Foreign Tax Act. There is no tax-driven optimization, this is purely business driven. You cannot optimize a portfolio if you are not in the time-zone. If you want to stay tune with the JKM, you have to be in Asia and probably Singapore is the best choice.

Appendix 5 – Interview with a Transfer Pricing specialist in commodity trading

Interview Date:	Wednesday, 2 nd of May 2023
Interviewee:	ITW3 – Head of Tax South and Southeast Asia regions for a major trading company, Amsterdam
Interviewer:	Marion ENGDAHL
Interview conditions:	online interview through Microsoft Teams, recorded with the interviewer's phone upon interviewee's consent.

The third interviewee (ITW3) is the Head of Tax South and Southeast Asia regions for a major trading company. Prior to this role, he was the Senior Manager Global Transfer Pricing in that company. Before joining this company, he started as Transfer Pricing manager in the Big Four, in the Netherlands.

Question: How many employees work for the Group? How are they geographically distributed among your offices?

The group has around 40'000 employees globally, depending on if we count seasonal workers, contractors, etc. We are organized in 6 regions: North America (US), South West LATAM (Argentina, Mexico, Uruguay, Colombia), North LATAM (Brazil), EMEA (Europe, Middle-East and Africa), North Asia (China), and South and Southeast Asia (Singapore, Australia, Indonesia, India, Malaysia). We are basically present in quiet a lot of jurisdictions, a global footprint basically.

Question: How is your company organized? (offices, departments, etc.)

We are organized in different product lines, called platforms, by major agricultural commodities groups, that is coffee, cotton, grains and oil seeds, juice, sugar, rice, etc. Then, we have traders in each of these territories, in each of the platforms. So, we look at the origination (where does it come from) and our destination (where does it go to). We have our main trading hubs in between over the globe. Basically, there are trading desks where the traders are concentrated, but we also need to be close to where we buy

and sell our products. As we are dealing with physical commodities, we do 80 millions metric tons of cargo annually, it's a big logistical operations where we have assets everywhere in order to be able to ship the products globally.

Question: Is Transfer Pricing being addressed in your company?

Yes, of course!

Question: How is Transfer Pricing organized within the company?

There are like 3 people working in the transfer pricing desk. It is a global function. We don't have a lot of global functions within tax, so it's a coordinating role, setting out guidelines and policies, advising as well. But the main activities are done by our regional tax teams. We have basically regional tax teams and local tax teams. Where they have a bit more headcounts than the global headcount, so it's let's say top-down, bottom up. We try to ensure consistency for some global activities that are touching each and every country and region. We have transactions that are very domestic or very regionally centralized because we have different activities in different regions. Overall, the policy or the transfer pricing approach are likely the same but they will be nuances in relation to that.

Question: Which Transfer pricing problematics do you face in your company? For which transactions? With which countries in particular?

I think it's the same for many multinationals. It's basically transfer pricing in inter-company transactions with countries with less developed tax authorities I would say. So, emergent markets are pretty aggressive but not very technically skilled in the Transfer pricing area. There are always new challenges. We trade commodities and so we generally apply market referenced price CUP (Controllable uncontrolled price). This is our standard transfer pricing method. That's also a challenge because not a lot of multinationals do that outside the commodity space. Maybe agricultural commodities, metal commodity trading , energy trading where you have market prices, liquid future exchanges, and market referenced prices that is less valid to a specific product than a general product category. Therefore, tax authorities are not very familiar with that. So it's mostly explaining what the market price is and why certain benchmarks are taken or market data is taken to support intercompany prices. That's mostly the education towards tax authorities. And then obviously we are challenging tax authorities in the various jurisdictions that normal multinationals in order to see if we have the same issues.

Question: How do you deal with them? Do you have internal guidelines?

Yes, we do have internal guidelines. We identify and we are in very integrated tax region so it's not like a real structure but if a new transaction comes up, and more than one jurisdiction or region is involved there will be coordination amongst regions, coordination with global tax to see whether there are specific characteristics to the transaction and whether CUP is appropriate. So, our main starting point is CUP and then everything else is if nothing is available. It looks very simple but it's quite some analysis. It's done on a case-by-case basis so it's a dynamic environment where everybody is aware of our policy. But then how to implement and how to have the support around is basically something that is coordinated globally and within the regions as well.

How often do you have to set new guidelines for new transaction flows?

Guidelines are pretty fixed. It's more about how you interpret those. You say hey you use market price for commodity transactions, we do a Cost-Plus for services, etc. Services are the ones which are pretty straight forward. But some jurisdictions may not be familiar with certain commodities. Because they haven't dealt with this commodity in the past or there is a new flow into a new jurisdiction or a new region. Whereas we have done similar flows in other jurisdictions and regions, then we just make sure processes are consistent globally. They all reach out to regions. It's not that we set a new policy, it's more like ok we are doing something new, how do we try to support it, defend it and what is the information around that we need.

Question: Does the risk appetite of the company influence your behaviour towards Transfer Pricing?

We work within the limits of what we are allowed to do (Regulatory and compliance which is very key in the group). We do market prices so we trade between related parties as we would do with unrelated parties. In that sense, we are not aggressive, but we are not the best in class. But I wouldn't say we aren't overly non-aggressive. I think we are pretty much neutral in that sense. If we do a transaction, it needs to be supported. It needs to be aligned with business. We don't do artificial transactions. If our transfer pricing approach does not meet business rationale, we don't implement. But we may change the business to reflect transfer pricing rationale if that makes sense. But in any case, our transfer pricing is aligned with business. We basically follow business, so we are not aggressive.

Question: Which transfer pricing methods do you mostly use (Traditional Transaction method, Transactional Profit methods)? Why? TNMM

We mostly use CUP. TNMM is generally the second one. Many companies still do TNMM. That's more for routine services, back office, admin, tax, legal, etc.

Question: Was BEPS/Arm's length principle difficult to implement within the company?

We obviously following BEPS and arm's length principle. We are pretty much aligned globally on that one. We follow local transfer pricing guidelines as well. So, it's not only OECD. Brazil is one of the countries where we operate in and they have different rules around transfer pricing. So we follow first and foremost local and we follow OECD to ensure consistency across the group.

Most countries have OECD guidelines, so it's not that difficult in that sense. We try to align that across the group. The only exception may be Brazil, which has its own transfer pricing rules. Other countries may follow the OECD but may have different pricing standards for determining what is a market price. For example Argentina has published a price index for certain commodities that are important for the country. That's not our general approach to set market prices but then again we do follow their market prices but then in this case it's published by the government. So there might be different sources of data to determine what the market price is that may depend on the country in which you try to set or support the market price data.

Question: Has your company already been audited by tax administrations? What was the result?

We get audited on a regular basis by local tax administrations.

Question: BEPS 2.0 reform seeks to set a new global minimum tax rate of 15% for MNEs with a turnover exceeding €750 million. What are the impacts for the company?

We are currently assessing. We are first and foremost currently assessing whether we have the data already available to determine the global minimum tax on a country basis or entity basis, and whether we need to change some accounting schedules and ledgers. First and foremost, we basically try to be able to do CUP base on the extensive guidelines that have been provided in global minimum tax. But there is some unclarity on how to describe certain things so not everybody is on the same page and our advisers, the big 4 often don't know how to interpret some of the guidelines. That's where the challenges are at this stage. We will all probably have some impacts on those. We operate in Singapore, sometimes the tax rate can be lower than 15%, so in these jurisdictions, we

will definitely be impacted. But most of the jurisdictions have already adopted this tax rate and they go for qualified domestic top-up tax. So we may see countries that actually fall below the threshold, they will introduce their own top-up tax. So whether there will be top-up tax globally we don't know, but we don't expect a lot actually. I think the local jurisdiction will tax it anyway.

Question: Current regulations are mainly focusing on transfer pricing practices related to physical transactions. But what about hedging activities? Are there some specific guidelines?

We hedge on exchanges so it's not a real intercompany transaction. Hedging is booked through the exchanges and the counterparties, which we don't know. Hedging is key to our operations because we buy and sell something, and we hedge. So, for accounting, it depends. It's mostly accounting treatment where you can have tax accounting differences. If it's a qualifying hedge, you can net it off against the physical. So basically, it offsets the mark-to-market. We have a buy or a sale transaction and it moves during the day along with the commodity prices, that move on a second basis and against it you have your hedge so if you make a gain on your physical, there should be a loss on your future. For accounting, you can basically consolidate. Therefore, you don't see a huge gain on your physical and a huge financial loss. You can offset. That's for accounting. But for tax, it can be different. For tax, sometimes you are not allowed to do mark-to-market, there are some jurisdictions that don't allow that: for example, African countries, South and Southeast Asia less developing countries. Europe is pretty much straight forward, even Brazil you can hedge and do mark-to-market. And then, you will have your accounting and tax results that are very different.

Basically, unrealized losses are non-deductible. They should be realized losses so there is a mismatch in timing and that's something that you need to explain why your tax books are so much different from your accounting books.

Question: Currently, are hedging activities and physical trading performed by the same people? Do they require different sets of skills?

It may depend on the platform, but it's often the same people. Because you trade physical, then there is the hedge that needs to go against this.

If we can separate the people, then why not putting the hedging team in a low tax jurisdiction?

The idea of the hedging is that you have your P&L somewhere. You wanna have the same P&L on your future in the same jurisdiction. Because that's the whole purpose of hedging. That it does not create the volatility. In a global consolidated basis, it does not matter but we don't have a global consolidated tax space. So the tax authority in the US doesn't care if you have a hedging loss in Netherlands, they will not allow for a deduction. In any case you want to avoid. That's why you wanna have it on the same accounting books and tax books as well. Because if you separate it, on a legal entity basis, it looks like you are having two propositions. One is cash long, your physical is very long and you are somewhere in another jurisdiction in future short. It looks like you have an unhedged position in one of the jurisdictions. And that creates a lot of volatility in the local P&L of the entities. That's gonna kill the equity of an entity. Because you don't have enough equity to absorb those losses if they materialize. And they do materialize because futures go up and down. That's why you wanna have the two activities in the same trading book.

Question: How are hedging activities financially reported? Are they segregated from the revenue derived from physical trading?

Local GAAP may differ whether it's reported on the financial income or whether they can be offset against your inventory or your sales. It depends. Sometimes, it's reported in the financial income/loss and sometimes it's just reflected in the inventory.

Do you use ISDA?

We also do OTC where we negotiate with banks on derivatives, that can be options, swaps, etc. We also trade on future exchanges, CBOT, ICE, CME.