

Evaluating Transfer Pricing Methodologies for Multinational Enterprises in Zambia: A Critical Appraisal of OECD-Compliant Approaches and Local Implementation Challenges

Victor Mwape*

PhD Candidate, The University of Zambia, Institute of Distance Education, Lusaka, Zambia

*Corresponding Author

Munyonzwe Hamalengwa, PhD

Professor, School of Law, Zambia Open University, Lusaka, Zambia

Austin Mwange, PhD

Lecturer, The University of Zambia, Graduate School of Business, Lusaka, Zambia

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Abstract:

This article undertakes a critical examination of the principal transfer pricing (TP) methodologies endorsed by the Organisation for Economic Co-operation and Development (OECD) and the United Nations (UN), focusing on their applicability within Zambia's legal and economic environment. Specifically, it evaluates the five primary TP methods—the Comparable Uncontrolled Price (CUP), Resale Price Method (RPM), Cost-Plus Method (CPM), Transactional Net Margin Method (TNMM), and the Transactional Profit Split Method (TPSM)—in the context of Zambia's mining-dominated economy and limited comparable market data. Drawing from the Zambia Revenue Authority's Practice Notes and supported by global jurisprudence and policy analysis, the article identifies methodological suitability, enforcement feasibility, and administrative complexity as pivotal determinants of effectiveness. The findings reveal a disproportionate reliance on one-sided approaches (TNMM, CPM, RPM), limited application of CUP due to data constraints, and the underutilisation of TPSM despite its contextual advantages. The article concludes by recommending a hybridised, context-sensitive TP framework that enhances fairness, enforceability, and alignment with Zambia's development imperatives.

Keywords: Transfer Pricing, OECD Guidelines, Zambia Revenue Authority, Comparable Uncontrolled Price, Transactional Profit Split Method, Multinational Enterprises

1. Introduction

Transfer pricing - the pricing of transactions between entities under common control - represents one of the most technically challenging and economically consequential areas of international tax law.

As multinational enterprises (MNEs) continue to expand operations across jurisdictions, the potential for tax base erosion via intragroup mispricing has intensified, particularly in resource-rich but capacity-constrained countries like Zambia. In response, Zambia has adopted transfer pricing regulations modeled on OECD and UN guidelines, codified in the Zambia Revenue Authority's Practice Notes and aligned with the arm's length principle (ALP).

The article offers a detailed assessment of the transfer pricing methodologies sanctioned under these frameworks, including the CUP, RPM, CPM, TNMM, and TPSM. This article builds on that foundational analysis to explore the theoretical and practical dimensions of these methods within the Zambian context. It interrogates the methods' relative reliability, data requirements, and susceptibility to abuse, while highlighting enforcement and compliance challenges faced by the Zambia Revenue Authority (ZRA). The analysis is contextualised within the broader discourse on the limitations of one-sided pricing models and the difficulties of comparability in developing economies.

2. Literature Review: Transfer pricing methods for MNEs

In line with OECD and UN guidelines, the TP rules set out in the Practice Notes recognize the following standard TP methods: (i) the comparable uncontrolled price (CUP) method, (ii) the resale price method (RPM), (iii) the cost-plus method (CPM), (iv) the transactional net margin method (TNMM) and (v) the transactional profit split method (TPSM). The methods are summarised in Figure 1.

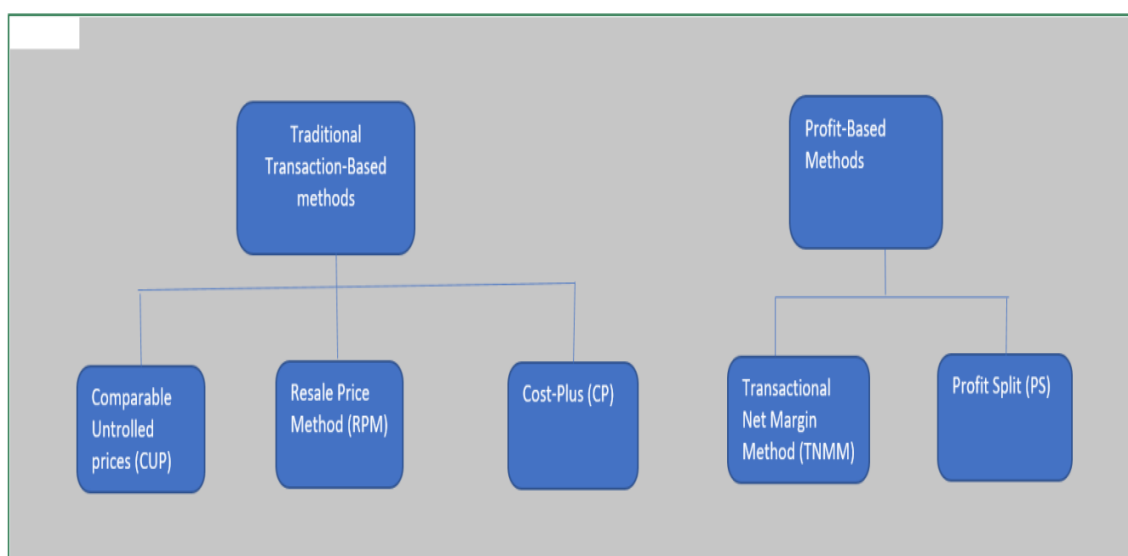


Figure 1: Major TP methods

These methods that can be employed are discussed in subsequent sections in order of preference.

2.1 The comparable uncontrolled price (CUP) method

This approach states that the prices charged for goods and services in a controlled transaction environment or between related companies within the same multinational entity group should be compared with the prices charged in an uncontrolled environment or between unrelated companies. Controlled transactions are defined as transactions between companies within the same group (i.e. related party transactions), while uncontrolled transactions are defined as transactions between independent, unrelated parties involving both willing buyers and willing sellers. (Tyrrall & Atkinson 1999)

This is considered to be the most appropriate approach for multinational enterprises in Zambia. The CUP approach is used if the comparability factors set out in section 10 of Practice Note No. 2/2018 are taken into account and if one or more reliable comparable prices are available. However, determining a sufficiently reliable CUP is often very difficult. According to the Practice Note, if the CUP approach and another TP method are applicable in an equally reliable manner, the CUP approach should be used in preference. When applying the CUP approach, a direct comparison is made between the price charged for a particular product in a controlled transaction and the price of a closely comparable product in an uncontrolled transaction in comparable circumstances. It therefore focuses primarily on the property transferred or the service provided, but also considers the wider business functions and economic environment.

Two transactions being compared are truly comparable only if there are no differences between the two transactions that would materially affect the price, or if reasonably accurate adjustments can be made to eliminate the effect of differences that would materially affect the price. It is important to remember that two transactions are not comparable simply because the products or services transferred are comparable. In addition to product comparability, the impact of the broader business functions and economic environment on price should also be considered.

For example, a canned fruit manufacturer in Zambia may sell its products to its own customers in Zambia (such as wholesalers and large retailers), and it may also sell to uncontrolled distributors in Country B. Even if the product in both transactions is the same, the CUP approach is unlikely to be applicable unless a reliable adjustment can be made. This is because there may be differences between the two transactions that would have a significant impact on the price from an arm's length perspective. These may include different risks (such as exchange rate risk); different costs (such as transportation); differences in market levels (i.e. selling to distributors rather than wholesalers/retailers); and differences between the markets in Country B and Zambia.

The CUP method is generally considered the best method for determining the correct arm's length price compared to other methods. In most cases, it is difficult to determine a similar comparable uncontrolled price due to differences in products and services. It is difficult to find a transaction

between unrelated parties that is exactly the same as a controlled transaction because various factors need to be considered to determine what adjustments need to be made to the price or what adjustments need to be eliminated to achieve an arm's length price that is acceptable to tax authorities.

2.2 One-side methods

If comparable prices are not available, the next step is to consider whether a “unilateral approach” can be applied. A unilateral approach is one that applies the cost plus method, the resale price method or the transactional net profit method (TNMM) to the gross profit or net profit generated by the functions performed by one party to the transaction (the “test party”). This approach can be applied if there are one or more sufficiently reliable comparables for the functions performed by one party to the transaction, taking into account the comparability factors described in Section 10 of the Practice Note, and the information on the relevant financial indicators in the comparables is sufficiently reliable.

Applying a unilateral TP method (RP method, CP method or TNMM method) requires the selection of a testing party, i.e. the party that tests the relevant condition (e.g. gross margin) under the method. The testing party should be the party that can apply the TP method most reliably and for which the most reliable comparables can be found. Usually, the testing party will be the party with the simplest functional profile.

If the unilateral method is applicable, the tested party should: (a) have one or more sufficiently reliable comparables, and (b) have sufficiently reliable information on relevant financial indicators in the comparables. According to the Practice Note, if the cost-plus method or the resale price method and the net profit method are equally reliable, the cost-plus method or the resale price method should be used first.

Resale Price (RP) method

Resale price applies when there is an independent distributor or seller of a company's goods, services or products. The arm's length price is determined by deducting any resale price margin from the sales price charged by the distributor. (United Nations 2013) When determining the profit of a reselling company, its function and the risks encountered should also be considered. This method is based on gross profit rather than determining arm's length price, such as the CUP method. (United Nations 2013)

When applying the resale method to a transaction, it is important to compare the essential functions performed by the independent entity with those performed by the MNC for unrelated parties to ensure that any differences are identified and adjusted. The resale method generally requires fewer adjustments than the CUP, primarily because the transfer prices set when applying the resale price

are primarily based on the functions performed by the selling and distribution companies. Studies have also found that comparing functional prices can lead to minor differences. In situations where the distributor is more focused on selling the product rather than producing it, the resale price method is more appropriate for determining the arm's length price. (United Nations 2013).

In Zambia, the resale price method is mainly used in group companies where one company is responsible for marketing and sales and the activities of that company will be considered in the TP analysis. When conducting a resale price TP analysis, the company considers the price that the company would charge for the product if the sale was to an unrelated party. This is also known as the resale price. This analysis helps determine the arm's length margin at which the selling company will still retain the cover for selling, general and administrative expenses and still be able to make a profit. (United Nations 2013)

The resale price method begins with the price at which a product purchased from an associated person would be resold to an independent person. This price (the resale price) is then reduced by an appropriate gross margin (the "resale price gross margin") representing the amount out of which the reseller seeks to pay its selling and other operating expenses, and based on the functions performed (taking into account the assets used and the risks assumed), an arm's length gross margin is determined. Gross profit margin. The amount remaining after deducting the gross profit margin, after adjusting for other costs associated with the purchase of the product (such as tariffs), can be considered the arm's length price for the original property transfer between related parties. This method may be most useful when applied to a distribution business. The application of the RP method is shown in Figure 2:

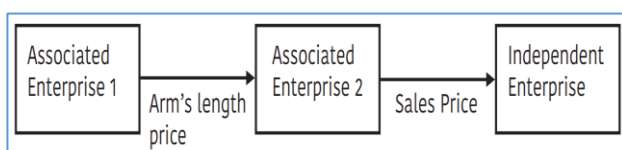


Figure 2: RP method of TP

The arm's length gross margin is determined through a comparability analysis, as shown in Figure 2.2. When applying the RPM method, generally fewer adjustments for product comparability are required than with the CUP method. Minor product differences will have less impact on profit margins than on prices. The RP method is most appropriate when the distributor does not add substantial value to the product or does not use unique assets, such as valuable unique intangible assets. However, according to Shikwambana (2020), there are some challenges in using the RP method. These challenges include the difficulty in finding transactions between unrelated companies that are comparable to transactions between multinational companies and that do not have a significant impact on profits, different accounting policies used by companies to determine gross

margins, and the lack of access to independent data information that would help determine comparable transfer prices between controlled and uncontrolled entities.

Cost-Plus (CP) method

The cost-plus method is the ideal and commonly used method for when one party is the manufacturer and the other is the seller of the product. When calculating the arm's length price using the cost-plus method, the taxpayer bears the costs incurred by the supplier of the goods or services that control the transaction between related companies. The cost-plus markup determined when the parties are not related is then added to the cost, taking into account the functions performed, the risks assumed, the assets used in production, and the market conditions of the affected companies. (United Nations 2013) This method is often used to analyze TP issues involving tangible goods or services, mainly for manufacturing or assembly activities. (United Nations 2013)

In Zambia, the cost-plus method requires an estimate of the arm's length consideration, which is the addition of an "arm's length" markup to the supplier's cost of goods or services in a controlled transaction. The level of the markup is determined through a comparability analysis. This approach is typically used by manufacturers or service providers that do not exploit valuable unique intangible assets or assume special risks. The costs included in a cost-plus analysis should be both the direct costs and the indirect costs incurred in providing the relevant goods or services.

Although finance costs are not included, care should be taken to ensure that the accounting measure of "cost of sales" is consistent between the tested party and the selected comparables. If there are material differences, adjustments should be made. If a reliable adjustment is not possible, a different comparable should be used. Care should also be taken to ensure that any significant controlled transaction costs are not included in the cost basis of the method, as such costs could distort the analysis.

Transactional Net Margin Method (TNMM)

Net profit margin measures the net profit margin relative to an appropriate basis (e.g., sales, costs, or assets that a person receives from a controlled transaction or transactions that are suitable for aggregation). The net profit margin is compared to the results that an independent person would obtain in a comparable transaction. The initial emphasis is on examining the net profit margin relative to an appropriate base. The relative usefulness of the various profitability ratios will depend largely on the facts of the case and the extent to which reliable data are available for both the individual and any comparables. For example, when testing the returns of a manufacturing business that sells goods to related parties, the net profit margin may relate to total costs (including raw material costs) or assets used in production. In other cases, such as when raw materials are purchased from related parties, the ratio may relate only to "processing costs" (i.e. costs other than raw materials) or, where

appropriate, only to labor costs.

For a manufacturing business that purchases raw materials from related parties and sells directly to independent parties, there may be a net profit relative to sales. For a distribution business, net profit relative to sales is usually appropriate, but in some cases, net profit relative to internal costs may also be appropriate. Under TNMM, profit margin is calculated after operating expenses but before interest and taxes. Assuming TNMM is the most appropriate methodology and the appropriate people/functions are being tested. This will always be a question that needs to be determined based on a comparability analysis.

The main advantage of the method, according to the OECD report, is that, based on the comparison of net profit margins, its result is not affected by particular characteristics of transactions, as in methods based on price comparison. In addition, the different functions of businesses (even in the same industry) can often create significant differences in operating expenses, which are directly reflected in the gross profit margin. The net transaction profit margin method bypasses this problem by focusing directly on net margins, while for the same reason it also bypasses the often lack of data on business operating expenses, which makes the comparison of gross margins ineffective. On the other hand, net profit margin is likely to be affected by factors that would not have a significant impact on price or gross margin comparisons, making it both an advantage and a disadvantage. Finding comparable information can also prove difficult in the absence of internal information.

Transactional profit split method (TPSM)

According to the Practice Note, where the unilateral approach is not feasible, the profit split approach should be considered. This is often most appropriate where both parties to the transaction make unique and valuable contributions, such as certain intangible assets. The TPSM seeks to determine the share of profits that a related party would expect to receive from participating in one or more transactions if the transactions were conducted under arm's length conditions.

The first step of the profit split method is to determine the comprehensive profits earned by the related parties in the controlled transactions. The method then allocates these comprehensive profits to the related parties in an economically efficient manner that approximates the projected profit allocations and is reflected in the arm's length agreement. The main advantage of the transactional profit split approach is that it can provide a solution for highly integrated operations or where both parties assume entrepreneurial risk or contribute unique or scarce capabilities, for which a unilateral approach is not appropriate.

The main advantage of the method is that it can be used in highly vertically integrated groups, where one-sided methods would not be suitable. The method is also suitable for use in cases where the two parties contribute very unique intangible assets to the transaction and wish to allocate profits on this basis. This view is also supported by the fact that it will be difficult to have comparable data for very

unique intangible assets. A key disadvantage of the method is that it is often difficult to use. At first glance, it seems plausible for both taxpayers and tax authorities as it does not rely heavily on external information, but it can often prove difficult. Tax administrations in particular may find it difficult to find data on associated companies, while they may also face great difficulty in combining the available information to arrive at the appropriate allocation of profits and at the same time the taxable amount. However, it is important to note that if one party to the transaction neither bears significant risk nor has valuable intangible assets, the profit split method is generally not applicable. In this case, the unilateral method may be more appropriate. If the TP analysis shows that the unilateral method is most appropriate, the TPSM should not be used simply because no reliable comparables can be found to apply the TPSM. The OECD Guidelines outline two alternative approaches to TPSM:

(i) Contribution Profit Split Analysis

The combined profits, i.e. the total profits of the controlled transactions, will be allocated among the related parties based on a reasonable approximation of the profit allocation that an independent person would expect to realize if participating in a comparable transaction. If comparable data are available, these can be used to support this allocation. If comparable data are not available, it is usually based on the relative value of the functions performed by each related party participating in the controlled transaction, taking into account the assets they use and the risks they assume.

Determining the relative value of each related party's contribution to a controlled transaction can be difficult, and the method of determination often depends on the facts and circumstances of each case. The determination can be made by comparing the nature and extent of the different types of contributions of the parties and allocating percentages based on economic analysis and external market data.

There are many ways to measure the contributions of each party, but it is important that the measure chosen is appropriate to the specific transaction. In general, the measure chosen should reflect the contribution of each party to value - whether through the possession of unique value-added attributes (such as intangible assets) or through the assumption (including management) of significant economic risks.

(ii) Residual Profit Split Analysis

Residual Profit Split Analysis (RPSA) creates a new way for multinational companies to share their profits using advanced techniques in digital business. Standard profit allocation methods, including the ALP, find it difficult to accurately measure the impact of intangible resources and business connections between related companies. The residual profit split method first provides both parties with a base return based on what an independent person would receive for performing similar basic functions without taking on any unusual risks or leveraging any uniquely valuable contributions (such as intangible assets). Other TP methods such as the cost plus method, the resale price method or the

net profit method are often used to achieve this.

The profits remaining after the first step will be divided among the parties in the same way as residual profits are divided among independent persons. In the above example, the distributor's return will take into account its right to a return on its intangible assets. Meanwhile, the manufacturer's residual return will take into account any significant economic risk it has assumed and any unique and valuable contribution it has made.

2.3 Other TP methods

Notwithstanding the guidance on approach highlighted in the Practice Note, taxpayers or tax commissioners may adopt a different approach if the tax commissioner is satisfied that:

None of the approved methods could reasonably be used to determine the arm's length terms of the controlled transaction, and

Such other methods produce results consistent with those obtained by independent persons engaging in similar uncontrolled transactions under similar circumstances.

If a taxpayer wishes to adopt a different method, the taxpayer must state why the five TP methods mentioned above are considered less appropriate or unfeasible in the circumstances of the case and why the selected method is considered most appropriate to meet the ALP. The main TP methods are summarized as shown in Table 1.

Table 1: Summary of five main transfer pricing methods

Method	Description	Application	Strengths	Weaknesses
CUP	Comparison of intra-group prices with comparable uncontrolled transactions	Applicable to independent businesses selling the same product under similar conditions	Reliable and direct	Comparability is a challenge especially in LMICs due to lack of comparable data
RPM	Compare gross profit within group to resale margins in comparable uncontrolled transactions	Best for dealers, distributors or manufacturers	Less adjustments are usually made to consider differences, because the difference is unlikely to have a greater impact on profit margins than on prices	This is a one-sided approach. It is believed that these are not always the most appropriate methods for TP analysis.
CPM	Compare the controlled party's markup costs	The most useful	Simple and easy to apply. It is based on	This method is based on actual

Method	Description	Application	Strengths	Weaknesses
	with those of comparable non-controlled parties	To the manufacturing and service industries	internal costs and information is easily accessible	costs. Controlled manufacturers may not have the motivation to control costs.
TNMM	Examines the relationship between a taxpayer's net profits from controlled transactions and the appropriate basis (e.g., sales, costs, and assets)	Commonly used in transactions involving provision of services between related companies	The method most commonly used by taxpayers, which is easier to find comparability The net profit method is also used by tax authorities to determine which companies need to be audited.	It is a one-sided method and is not as reliable as the first three methods mentioned above because it uses net profit which is sensitive to cost structure
TPSM	Profit distribution to related companies	More useful in situations where a unilateral approach is not appropriate	There is no danger of underestimation TPSM is a two-sided approach. In addition, it provides flexibility, taking into account Unique features of related companies	Obtaining information about foreign subsidiaries can pose tax challenges to Authorities and make applicability of TPSM difficulty

3. Conclusions

Zambia's adoption of OECD-recommended transfer pricing methods marks a crucial step toward aligning with global tax governance standards. However, the country's institutional realities, including limited access to reliable comparable data, insufficient transfer pricing expertise, and economic dependence on extractive industries, significantly constrain effective implementation. The CUP method—ideally the most accurate—is often impracticable due to the lack of comparable transactions. Meanwhile, one-sided approaches such as TNMM and RPM, though more feasible, introduce reliability concerns and may not capture the full value created by both parties in a transaction.

This article concludes that Zambia's current transfer pricing framework, while normatively consistent with international best practices, requires contextual adaptation. Greater emphasis should be placed on developing domestic comparables, building ZRA capacity, and exploring two-sided methods such as the TPSP in cases involving valuable intangible assets or highly integrated operations. A hybrid model that incorporates domestic enforcement realities with international norms offers the most viable path for enhancing TP governance and mitigating base erosion in Zambia.

References

- Avi-Yonah RS, *International Tax as International Law: An Analysis of the International Tax Regime* (Cambridge University Press 2007)
- Bhat VG, *Transfer Pricing and Tax Avoidance in Developing Countries* (Cambridge University Press 2021)
- OECD, *Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations 2022* (OECD Publishing 2022)
- Shikwambana L, 'Transfer Pricing and Tax Planning: Implications for Revenue Mobilisation in Africa' (2020) 12 *African Journal of Business Ethics* 151
- Tyrrall D and Atkinson M, 'International Transfer Pricing – A UK Perspective' (1999) 10 *Journal of International Accounting, Auditing and Taxation* 85
- United Nations, *Practical Manual on Transfer Pricing for Developing Countries* (UN 2013)
- Zambia Revenue Authority, *Practice Note No. 2/2018 on Transfer Pricing*
- Zambia, *Income Tax (Transfer Pricing) Regulations*, SI No. 24 of 2018, SI No. 107 of 2021, SI No. 89 of 2022