Isabella Itkonen

Transfer pricing methods for the PaaS corporations

Constructive case study

School of Accounting and Finance
Master's thesis in Accounting
Master's Degree Programme in Accounting and Auditing

Vaasa 2025

VAASAN YLIOPISTO
Laskentatoimen ja rahoituksen akateeminen yksikkö
Tekijä: Isabella Itkonen
Tutkielman nimi: Transfer pricing methods for the PaaS corporations : Constructive case study
Tutkinto: Kauppatieteiden maisteri
Oppiaine: Laskentatoimi ja tilintarkastus
Työn ohjaaja: Tuukka Järvinen
Valmistumisvuosi: 2025 **Sivumäärä:** 76

TIIVISTELMÄ:
Pilvipohjaiset liiketoimintamallit asettavat siirtohinnoittelussa haasteita johtuen aineettomien hyödykkeiden monimutkaisuudesta ja vertailukohteiden puutteesta. OECD:n siirtohinnoitteluohjeet pyrkivät varmistamaan markkinaehtoperiaatteen noudattamisen, mutta näiden standardien soveltaminen digitaalisiin transaktioihin vaatii usein vaihtoehtoisia lähestymistapoja. Sisäisten hinnoittelukäytäntöjen ja sääntelyiden välinen ristiriita aiheuttaa veroriskejä ja vääristää kannattavuutta. Tämä tutkielma tarkastelee, miten siirtohinnoittelumenetelmiä voidaan mukauttaa PaaS-yrityksille kannattavuuden parantamiseksi samalla kun varmistetaan kansainvälisten verosääntöjen noudattaminen.

Tutkielman teoreettinen osa koostuu kansainvälisestä verokehyksestä ja kirjallisuuskatsauksesta. Kansainvälisen verotuksen viitekehys kattaa verosopimukset, OECD:n siirtohinnoitteluohjeet ja -menetelmät sekä BEPS hankkeen. Kirjallisuuskatsauksessa käsitellään siirtohinnoittelua pilvipalveluyrityksissä sekä yritysten taloudellista suorituskykyä.

Empiirinen osuus toteutettiin konstruktiivisena tapaustutkimuksena suomalaisessa PaaS-sektorilla toimivassa konsernissa (N = 1). Aineistonkeruu yhdisti laadullisia ja määrällisiä menetelmiä, kuten sisäisten dokumenttien tarkastelua, teemahaastatteluja (N = 8), jotka toteutettiin tammi–lokakuussa 2025 talous-, vero- ja T&K-henkilöstön kanssa, sekä taloudellisia raportteja. Haastatteluaineisto analysoitiin deduktiivisella laadullisella analyysillä, ja kannattavuutta arviointiin nykyisen ja kehitetyn siirtohinnoittelumallin välillä. Funktionaalinen analyysi muodosti perustan mallin kehittämiselle.

Tulokset osoittavat, että vertailukelpoisen datan puute on merkittävin este OECD:n menetelmien soveltamisessa aineettomaan omaisuuteen. Nykyiset käytännöt eivät huomioi riittävästi T&K-toimintojen ja immateriaalioikeuksien (IP) taloudellista merkitystä. Kehitetty malli erottelee tytäryhtiöiden IP:hen liittyvät T&K-kustannukset emoyhtiön IP:hen liittyvistä kustannuksista. Tämä paransi läpinäkyvyyttä, vähensi riskejä ja tuottojen allokointia.

Tutkimus osoittaa, että pienilläkin muutoksilla nykyisiin siirtohinnoittelumenetelmiin voidaan parantaa OECD:n säännösten noudattamista ja taloudellisia tuloksia. Funktionaalisen analyysin ja vaihtoehtoisten arvonmääritysmenetelmien yhdistäminen auttaa ratkaisemaan keskeisiä haasteita aineettomien hyödykkeiden arvonmäärityksessä.

AVAINSANAT: transfer pricing, profitability, intangible assets, international tax, cloud services

UNIVERSITY OF VAASA
School of Accounting and Finance
Author: Isabella Itkonen
Title of the Thesis: Transfer pricing methods for the PaaS corporations : Constructive case study
Degree: Master of Science in Economics
Programme: Master's Degree Programme in Accounting and Auditing
Supervisor: Tuukka Järvinen
Year: 2025 **Pages:** 76

ABSTRACT:
Cloud-based business models present unique challenges for transfer pricing due to the complexity of intangible assets and the lack of reliable comparables. OECD Transfer Pricing Guidelines aim to ensure compliance with the arm's length principle, but applying these standards to digital transactions often requires alternative approaches. Misalignment between internal pricing practices and regulatory expectations can lead to tax risks and profitability distortions. This thesis investigates how transfer pricing methods can be adapted for PaaS corporations to improve profitability while maintaining compliance with international tax regulations. The study focuses on identifying specific challenges related to intangible assets, developing a refined transfer pricing model, and assessing its impact on financial performance.

The theoretical part of the thesis consists of the international tax framework and a literature review. The international tax framework covers the tax treaties, OECD framework, including transfer pricing methods, as well as base erosion and profit shifting. In the literature review, the topics related to transfer pricing for cloud service corporations and corporate financial performance are covered.

A constructive case study approach was applied to a Finnish multinational group (N = 1) operating in the PaaS sector. Data collection combined qualitative and quantitative methods, including internal document reviews, semi-structured interviews (N = 8), conducted during January-October 2025 with finance, tax, and R&D personnel, and financial records. Deductive qualitative analysis was used to interpret interview data, while comparative analysis evaluated profitability under the current and refined transfer pricing models. Functional analysis served as the basis for model development.

The findings reveal that the lack of comparable data is the primary obstacle in applying OECD methods to intangible assets. Current practices fail to capture the economic significance of R&D activities and IP ownership. A refined model was developed by separating R&D costs related to legacy IP from those linked to the parent entity's IP. This adjustment improved transparency, reduced compliance risks, and aligned profit allocation with value creation.

The study demonstrates that minor adjustments to existing transfer pricing methods can significantly enhance compliance and financial outcomes for PaaS corporations. By integrating functional analysis and alternative valuation approaches, the refined model addresses key challenges in valuing intangibles.

KEYWORDS: transfer pricing, profitability, intangible assets, international tax, cloud services

Contents

1 Introduction 8
1.1 Purpose of the study 9
1.2 Scope of the study 11
1.3 Structure 12
2 International tax framework 13
2.1 Tax treaties 13
2.2 OECD framework 17
2.2.1 Arm's length principle 18
2.2.2 Comparability analysis 21
2.3 Transfer pricing methods 24
2.3.1 Comparable uncontrolled price method 25
2.3.2 Resale price method 27
2.3.3 Cost plus method 28
2.3.4 Transactional net margin method 29
2.3.5 Transactional profit split method 30
2.4 Base erosion and profit shifting 31
3 Literature review 35
3.1 Transfer pricing for cloud service corporations 35
3.2 Corporate financial performance 39
4 Methodology and data 42
4.1 Methodology 42
4.1.1 Case study 42
4.1.2 Constructive research 44
4.1.3 Semi-structured interview 46
4.1.4 Comparative analysis 48
4.2 Data 50
5 Functional analysis 52

5.1 Case company 53
5.2 Functions performed 54
5.3 Assets 55
5.4 Risks 57
6 Results 58
6.1 Special challenges of intangible rights 58
6.2 Redefined transfer pricing method 59
6.3 Effect on profitability 61
7 Conclusion 63
7.1 Main findings 63
7.2 Evaluation 66
7.3 Limitations 66
7.4 Future research 67
Declaration of Generative AI and AI-assisted technologies 69
References 70
Appendices 76
Appendix 1. Interview framework 76

Pictures

Picture 1. Comparable uncontrolled price method (United Nations, 2017). 26

Figures

Figure 1. Organizational chart. 53

Tables

Table 1. Double tax elimination of transfer pricing adjustments applied. 15

Table 2. Summary of the royalty definition. 16

Table 3. Summary of methods used in transfer pricing analysis, comparability analysis and level of difficulty in its application (Putra & Saptono, 2021, p. 24). 23

Table 4. Process and Outcomes of Deductive Qualitative Analysis (Fife & Gossner, 2024). 47

Table 6. R&D work categorization. 61

Table 7. Effect of the R&D function split on profitability. 62

Table 8. Tax rates (Tax Foundation Europe, 2025; Australian Government, 2025). 62

Abbreviations

BEPS	Base Erosion and Profit Shifting
CAPEX	Capitalized Expenditures
CUP	Comparable uncontrolled price method
EU	European Union
HTVI	Hard-To-Value Intangible
IaaS	Infrastructure as a Service
MNE	Multinational enterprise
OECD	Organisation for Economic Co-operation and Development
OPEX	Operation expenses
PaaS	Platform as a Service
PS	Professional Services
R&D	Research and Development
ROA	Return on Assets
SaaS	Software as a Service
S&M	Sales and Marketing
TNMM	Transactional Net Margin Method
TP	Transfer pricing
TP Guidelines	Organisation for Economic Co-operation and Development: Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations
UN	United Nations
UK	United Kingdom

1 Introduction

In the rapidly evolving landscape of global business, cloud computing corporations face unique challenges in optimizing profitability while adhering to international tax regulations. Transfer pricing plays a crucial role in this context. In business economics, a transfer price refers to the amount charged between associated enterprises for a product, asset, or service provided within the same organization (UN, 2017, pp. 26-27). Organisation for Economic Co-operation and Development (OECD) transfer pricing guidelines were created to address the complexity of international taxation for multinational entities and ensure that the taxable profits are not shifted to lower tax jurisdictions creating tax base erosion. The basis is that the transactions between associated entities should follow the arm's length principle. The arm's length description is found in paragraph 1 of Article 9 of the OECD Model Tax Convention. It states that prices in transactions between related parties should align with those that would be agreed upon by independent entities engaged in comparable transactions under similar circumstances. (OECD, 2022, pp. 29-31.)

Condition for associated enterprise is set forth in sub-paragraphs 1a and 1b of Article 9 of the OECD Model Tax Convention (2022). Enterprises are considered associated in case one of the enterprises participates directly or indirectly in the management, control or capital of the other. The same applies if both enterprises are under common management by the same person.

The cloud service models are classified in three main categories: Software as a Service (SaaS), Platform as a Service (PaaS) and Infrastructure as a Service (IaaS) (Chen et al, 2023, p. 1339). Intangible assets are complex to value and transfer. Their unique characteristics and the lack of physical presence complicate the determination of an arm's length principle, which is essential for compliance with international tax laws.

According to Kelley et al. (2016) choosing the correct transfer pricing method, or methods, can significantly affect profitability. It can lead to substantial tax savings and

improved financial performance. However, mismanagement or non-compliance with transfer pricing regulations can result in hefty penalties and increased tax liabilities. For these reasons, the thesis will focus on selecting the most suitable transfer pricing method for the case company.

1.1 Purpose of the study

This thesis aims to address how different transfer pricing methods can enhance the profitability of global PaaS corporation while ensuring compliance with international tax laws and arm's length principle. The theory underpinning this research is that effective transfer pricing strategies can optimize financial performance and ensure regulatory compliance, thereby contributing to the overall success of PaaS companies operating internationally. Transfer pricing methods have a direct influence on how revenues and expenses are allocated among related entities within a group. By strategically setting transfer prices and choosing the appropriate transfer pricing methods, MNEs can manage the distribution of profits across their various subsidiaries, often with the aim of reducing their overall tax burden (Apriyanti et al., 2023, p. 194).

The previous researchs (Ouelhadj et al., 2023; Oluwafunmike et al., 2022) have found that that transfer pricing can have a significant and positive impact on a company's financial performance. These findings underline the strategic importance of transfer pricing in optimizing profitability and aligning tax obligations with business operations. However, one limitation in existing literature is its geographic focus. Most research has been conducted in jurisdictions outside of Finland, which may limit the applicability of their conclusions to the Finnish regulatory and economic context.

In addition, the traditional tax rules are rooted in the concept of physical presence and tangible property, while modern value creation increasingly relies on intangible assets such as intellectual property, data, and cloud-based services. As Mazur (2016) highlights that uncertainty in characterizing cloud-based transactions for transfer pricing purposes

creates difficulties. Identifying value-drivers in intercompany cloud transactions is challenging, making it hard to find comparable benchmarks.

Given these gaps, this thesis aims to contribute to the literature by conducting a case study on a corporation operating in Finland with a business model heavily involving cloud-based intercompany transactions. By focusing on the Finnish context and the complexities of intangible value creation, the study seeks to provide insights into how transfer pricing methods can be adapted to modern digital business environments. This research will enhance the understanding of transfer pricing in cloud-based operations and offer practical implications for multinational enterprises operating in the landscape of international taxation. The research questions are as follows:

1. How are the special challenges of intangible rights taken into account in transfer pricing?

2. Which transfer pricing method is the most optimal for the case company, and how should it be calculated and implemented going forward to improve practical outcomes?

3. How does the redefined transfer pricing method affect a company's profitability?

It is crucial that the selected transfer pricing method can be applied to the company's actual business landscape. This means considering specific industry, market conditions, and operational realities. A method that is too complex or not aligned with the business model can lead to implementation challenges and compliance issues. Therefore, the chosen method should be practical, scalable, and adaptable to the company's unique circumstances.

The constructive case study approach is applied, combining qualitative and quantitative data through functional analysis, document review, and semi-structured interviews. The

methodology is designed to address real-world challenges in pricing intangible assets and cloud-based services, with a focus on aligning transfer pricing practices with the arm's length principle. Data is sourced from internal documentation and financial records, enabling the development and testing of a tailored transfer pricing model aimed at improving profitability and compliance.

Currently, the case corporation has been mainly using a transactional net margin method where the costs incurred in a controlled transaction are added an appropriate mark-up to those costs to ensure a suitable profit, considering the functions performed and market conditions. The resulting amount, after adding the mark-up, is considered the arm's length price for the original controlled transaction. (OECD, 2022, pp. 113-114.) The transactional net margin method, while straightforward, may not always reflect the true economic value of transactions between related parties.

1.2 Scope of the study

The research is focused on commercial relations. Financial relations are excluded from this study due to their limited number within the group, making them insignificant for the overall analysis. The focus on commercial relations allows for a more comprehensive examination of the primary business activities and their impact on transfer pricing. This approach ensures that the study remains relevant and practical, addressing the most significant aspects of the company's operations.

The study aims to limit the tax effect on corporate income tax, ensuring compliance with international tax regulations while optimizing the company's tax position. By focusing on corporate income tax, the study avoids the complexities and extensive local knowledge required to evaluate local tax impacts, e.g. state tax. This limitation ensures that the transfer pricing methods developed are applicable across different jurisdictions without the need for detailed local tax expertise.

The limited availability of published case law on transfer pricing for cloud services presents a challenge for the study. According to Mazur (2016) the international tax framework has not kept pace with technological advancements, leading to challenges in tax compliance and the risk of double taxation or non-taxation if different interpretations of transfer pricing rules are applied in the cloud context.

1.3 Structure

The structure of the thesis begins with an introduction that presents the research background, the scope of the study and the main structure. The theoretical part consists of international tax framework review and following literature review. Tax framework review will include the relevant tax treaties between Finland and the other party, the OECD transfer pricing frameworks as well as Base Erosion and Profit Shifting, especially affecting intangible assets valuation, framework to be considered. The literature review has two sections. The first one assesses the existing literature and research related to transfer pricing and intangible assets. The latter part assesses the literature and research on the relation between transfer pricing and profitability.

The methodology and data chapter explains the constructive case study approach, data collection methods, and the mixed-method design combining qualitative and quantitative analysis. The functional analysis assesses the identification of functions, assets, and risks within the case company, forming the basis for transfer pricing model development. The final chapters present the results and discuss the conclusions and suggest potential future research areas.

2 International tax framework

This section presents the main theoretical concepts and frameworks.

2.1 Tax treaties

The first tax treaty was signed in 1872 between Great Britain and the Canton of Vaud. Its fundamental purpose was to prevent double taxation, a goal that remains central to modern tax agreements (Kuosmanen, 2014, p. 152). This core principle holds that the same entity should be taxed only once on the same event within a single country. Kuosmanen (2014, p. 153) notes that tax treaties create a predictable economic environment for international companies, which in turn makes a country more attractive to foreign investors. On the contrary, unpredictable tax authorities can prevent investments, especially during difficult economic times when they may use questionable methods to secure tax revenue.

In tax treaties, it is agreed which country has the right to tax in each situation and how to eliminate double taxation (Valtiovarainministeriö, 2025). Currently, Finland has tax treaties with over 70 countries, including tax treaty for income tax with Sweden, Australia, Germany and United Kingdom. The tax treaties are primarily based on the OECD Model Tax Convention. (Verohallinto, 2025a; Verohallinto 2021.) The contracting parties agree to share information on tax matters between their authorities to obtain the necessary information for national taxation in tax information exchange agreements. Executive assistance agreements also cover the recovery of taxes, notification of tax documents, simultaneous tax audits, and participation in tax audits in the other contracting state. (Valtiovarainministeriö, 2025.)

In addition to preventing double taxation, Kuosmanen (2014, p. 153) states that modern tax treaties also aim to prevent "zero taxation". According to him, zero taxation occurs when a tax treaty gives one country the right to tax a person or entity, but that country's

own laws prevent it from doing so. The goal is to design treaties that prevent these loopholes, as they are not in the best interest of any country.

The issue with the intangible assets, such as brand, relationships and knowledge, is that they are not always clearly defined (Marr & Chatzkel, 2004, p. 225). The international nature of transfer pricing cases involving intangibles adds further complexity, as multiple jurisdictions are typically involved, each with potentially differing intellectual property laws and standards. These discrepancies can lead to inconsistent recognition and protection of intellectual property rights across countries, complicating the valuation and allocation of intangible assets in cross-border transactions. (Brauner, 2008, pp. 87-88)

In the tax treaties between Finland and Sweden (1997), Australia (2007), Germany (2017) and UK (1970) it is agreed how the business profits and compensation from intangible assets, e.g. royalties, should be taxed. In general, profits of an enterprise of one contracting state are taxable only in that state, unless the enterprise carries on business in the other contracting state through a permanent establishment. In case there is a permanent establishment, the profits origin from its business may be taxed in the other state. For transfer pricing purposes it should be noted that if two companies agree on terms that differ from what independent companies would have agreed on, any income that would have arisen to one of the companies under arm's length terms, but did not due to the actual terms, can be included in that company's taxable income. However, for transactions between Finland and Sweden, Australia or Germany, if the income is already taxed in one state and included in the taxable income of a company in the other state under similar assumptions, the first state must adjust the tax accordingly, provided it considers the adjustment justified. Such adjustments must consider other provisions of the tax treaty, and the competent authorities of the contracting states should consult if necessary. Table 1 summarizes whether double taxation is eliminated in transfer pricing adjustments between Finland and selected countries under their respective tax treaties.

Table 1. Double tax elimination of transfer pricing adjustments applied.

Tax treaty	Double tax elimination of transfer pricing adjustments applied
Finland - Sweden	Yes
Finland - Australia	Yes
Finland - Germany	Yes
Finland - United Kingdom	No

If the business income is covered under another article in the respective tax treaties, e.g., dividends, interest or royalties, the general rule does not apply directly, and the specific article should be used to evaluate tax treatment. According to Juranek et al. (2018, p.68) the evolution of technology, especially in the areas of digital and e-commerce, presents a significant challenge to current tax systems. They state that a key aspect of this challenge is related to royalty payments, which are closely tied to the digital economy as they represent compensation for intangible assets and intellectual property. For PaaS corporations, the royalties are a key factor to be considered in transfer pricing. While the general rule of business income was relatively consistent across all the tax treaties between Finland and Sweden (1997), Australia (2007), Germany (2017), and UK (1970), there is more variation for the definition of royalty. Table 2 outlines how these tax treaties define royalties.

In the tax treaty between Finland and Sweden (1997), royalty is defined as all payments received as compensation for the use or the right to use any copyright of literary, artistic, or scientific work (including films used in radio and television broadcasts), patent, trademark, design or model, plan, secret formula or process, or for information concerning industrial, commercial, or scientific experience. The same definition can be found in tax treaty between Finland and Germany (2017) as well. For UK (1970), the only difference is the addition of the use of, or the right to use, industrial, commercial or scientific equipment.

The broadest definition of royalty is in the tax treaty between Finland and Australia (2007). In addition to the basic description found in all the previous treaties, royalty is described as any compensation for assistance that is supporting and related to the use or right to use the property or any copyright, patent, design or model, plan, secret formula or manufacturing process, trademark, or other similar property or right. Also, any compensation for knowledge or information related to the provision of technical, industrial, commercial, or scientific knowledge or information is considered as royalty.

In addition, according to the tax treaty royalty refers to payment for the right to use all or a specified portion of the radio frequency spectrum as detailed in a spectrum license, where the spectrum belongs to the contracting state from which the payment arises. Royalty also includes payment for withhold from using or granting the right to use any property or right mentioned previously.

Table 2. Summary of the royalty definition.

Compensation for	**Finland - Sweden**	**Finland - Australia**	**Finland - Germany**	**Finland - UK**
Copyright for literary, artistic or scientific work	Yes	Yes	Yes	Yes
Patent	Yes	Yes	Yes	Yes
Trademark	Yes	Yes	Yes	Yes
Design or model	Yes	Yes	Yes	Yes
Plan	Yes	Yes	Yes	Yes
Secret formula or process	Yes	Yes	Yes	Yes
Information concerning industrial, commercial, or scientific experience	Yes	Yes	Yes	Yes
Information concerning technical knowledge		Yes		

Compensation for	**Finland - Sweden**	**Finland - Australia**	**Finland - Germany**	**Finland - UK**
Use of industrial, commercial or scientific equipment				Yes
The radio frequency spectrum		Yes		
Withhold from using or granting the right to use any property or right		Yes		

All the beforementioned tax treaties have similar definitions of associated enterprises which follow Article 9 of the OECD Model Tax Convention (2022). According to the tax treaties, an associated enterprises exist when an enterprise of one contracting state participates directly or indirectly in the management, control, or capital of an enterprise of the other contracting state or the same persons participate directly or indirectly in the management, control, or capital of both enterprises.

In conclusion, while the tax treaties between Finland and Sweden, Australia, Germany, and the United Kingdom are largely based on the OECD Model Tax Convention and share common principles regarding business profits and transfer pricing, notable differences still exist, particularly in the definitions of royalty. These variations can significantly impact the tax treatment of PaaS corporations and other companies relying on intangible assets across borders. Therefore, a careful analysis of each treaty's specific provisions, especially concerning royalties and associated enterprises, is essential to ensure compliance, accurate transfer pricing, and proper avoidance of double taxation.

2.2 OECD framework

Transfer pricing refers to how transactions are priced between related entities, including both internal group units and other affiliated companies. Regulations require that these

prices follow specific rules to ensure fairness and compliance. Transfer pricing aims to ensure that multinational companies distribute their taxable income fairly among countries, preventing tax avoidance and promoting equitable taxation. (Knuutinen, 2020, p. 255-256)

OECD transfer pricing guidelines (2022) are globally recognized and followed in OECD member countries setting the basis for whole thesis topic. The OECD guideline from 2022 is the latest version (p. 3) and hence contains up to date regulations to be considered when evaluating the most suitable policies. The guidelines serve as dual objectives to secure appropriate tax base in the jurisdictions while avoiding double taxation. This should ease the conflict between local tax administrations and doing international business. (OECD, 2022, p. 12) The main topics to be considered are the arm's length principle, different transfer pricing methods, comparability analysis and special considerations for intangibles. In general, the OECD guidelines can be relied on, in absence of local regulations making the source highly credible. There are 38 member countries in total across the world (OECD, 2025).

2.2.1 Arm's length principle

To ensure fair taxation across countries, cross-border transactions between related companies must follow the arm's length principle. In practice, this means that the transactions should be priced as if the parties were unrelated and acting independently. (Knuutinen, 2020, p. 255-256) The arm's length principle is widely adopted by OECD member countries and other jurisdictions for several reasons. It ensures equal tax treatment for members of MNE groups and independent enterprises, preventing tax advantages or disadvantages that could distort competitive positions. By removing these tax considerations from economic decisions, it promotes international trade and investment. It works effectively in most cases, especially for transactions involving commodities, money lending, and financial indicators like mark-up on costs, gross margin, or net profit indicators. However, it can be challenging to apply in cases involving integrated production of specialized goods, unique intangibles, or specialized services. One

potential solution to such cases is the transactional profit split method. Another practical difficulty in applying the arm's length principle arises when associated enterprises engage in transactions that independent enterprises would not typically undertake. In those cases, there might be a lack of direct evidence of the conditions that would have been established by independent enterprises, yet it does not necessarily mean that the transactions do not meet the arm's length criteria. (OECD, 2022, pp. 31-33.)

The profit shifting refers to situations where companies within the same group, or otherwise related entities, engage in transactions using prices or terms that deviate from what would be agreed upon by independent parties under similar conditions. This deviation violates the arm's length principle. However, profit shifting is not limited to international transactions only, but it can also occur within a single country. It can arise in various business activities. Common examples include the manipulation of prices in the trade of goods, services, and intangible assets such as patents or trademarks. It can also involve the mispricing of management fees, financial services, or capital structures, such as when a company is undercapitalized and relies excessively on debt. To address these practices, tax authorities are allowed to make transfer pricing adjustments. These adjustments aim to correct the reported income of related companies to reflect what they would have earned if all transactions had followed the arm's length principle. This means that even income which could have been earned under market conditions but not actually received, may be treated as taxable income. Similarly, expenses that would not have occurred in a market-based transaction may be disallowed as tax-deductible expenses. (Kukkonen & Walden, 2016, pp. 172-173)

The applicability of arm's length has also been challenged in recent research. For example, Sureth-Sloane et al (2023, p. 272) criticize the method for two reasons. First, the authors argue that the arm's length principle often gives market jurisdictions, where multinational enterprises have customers, very little access to the entities' profits. This is because there might not be a taxable "place of supply," or if there is, the reported profits are very low. This reduces the perceived fairness of the tax system for both

taxpayers and jurisdictions. Secondly, they argue that the rules governing the arm's length principle have become progressively more complex and difficult to implement. They also note that while Pillar One is expected to address the first criticism, the issue of complexity has not been resolved and has even been made worse by the Base Erosion and Profit Shifting (BEPS) project.

Also, Keuschnigg & Devereux (2013, p. 438) examined the use of the arm's length principle in the taxation of multinational corporations. They argue that the arm's length principle, which requires related-party transactions to be priced as if they were conducted between independent entities, introduces a flawed benchmark. According to the authors, transfer prices are not solely tools for tax minimization but also serve as important economic functions within multinational firms. The paper highlights that there are several consequences when tax authorities force multinationals to value intermediate imports at artificially low arm's length prices and to report royalty income that does not reflect actual economic activity. First, the imposition of tax penalties leads to lower transfer prices, which in turn results in reduced profit shifting. Second, this reduction negatively affects the external debt capacity of subsidiaries and limits their ability to invest. Third, these changes tend to increase tax revenues and improve national welfare in wealthier countries. Fourth, they significantly reduce tax revenues and welfare in developing countries. Finally, they suggest that these dynamics can lead to a decline in global welfare due to tax authorities often misinterpreting high transfer prices and low royalty payments as signs of tax avoidance. These pricing decisions may reflect efficient strategies used by firms to navigate financial market imperfections.

A common alternative method presented for the arm's length principle is formulary apportionment. Unlike the arm's length principle, which focuses on individual transactions between related parties, formulary apportionment begins by looking at the aggregate profit of the entire business entity (Akhand & Mawani, 2023, p. 228). The authors explain that formulary apportionment has mostly been limited to individual companies and transactions. Further, it considers key elements like knowledge, control, and risk to be

shared across the whole consolidated company, making it difficult to separate them into distinct components for each affiliate. They also see intangibles as benefiting the firm as a whole. According to this perspective, the arm's length principle's requirement to carve out separate components for each affiliate is overly complex and a waste of societal resources.

The major challenges related to implementing the arm's length principle to cloud-related transfer pricing challenges affect both developing and developed countries alike. A key issue is the valuation of intangibles, which remains problematic under current tax systems that were originally designed to tax tangible assets with physical presence, rather than intangible assets like intellectual property. (Tian, 2018.)

2.2.2 Comparability analysis

A comparability analysis is central to applying the arm's length principle, as it requires comparing the conditions of a controlled transaction between associated enterprises with those that would have been established between independent parties in a comparable transaction under similar circumstances. There are two key aspects to this analysis. The first is identifying the commercial or financial relations between the associated enterprises, along with the economically relevant conditions and circumstances, in order to accurately outline the controlled transaction. The second is comparing those conditions and circumstances with those of comparable transactions between independent enterprises. To properly identify the commercial or financial relations, it is essential to develop a broad understanding of the industry sector in which the group operates. This requires considering the factors that affect performance within that sector. It also involves analyzing how the specific group responds to those factors through its business strategies, markets, products, supply chain, functions performed, assets used, and risks assumed. (OECD, 2022, p. 39.)

There can be identified nine typical steps involved in the comparability analysis process (OECD, 2022, pp. 150-151; Putro & Saptono, 2021, pp. 19-20):

1. Determine the years covered.

   The transactions under review and the comparable data should focus on the same period.

2. Conduct a broad-based analysis of the taxpayer's circumstances.

   At this stage, it should be evaluated how different factors, such as competition, regulations, economic conditions, or industry, can affect taxpayers.

3. Understand the Controlled transactions.

   At this stage, the affiliated transactions are identified and examined to determine the tested party, the most appropriate transfer pricing method, relevant financial indicators, and key comparability factors.

4. Review internal comparables, if any.

   Review the internal comparables referring to transactions between the taxpayer and the tested party and an independent party.

5. Identify external sources of comparable data.

   In case there are no internal comparables or those are not reliable, an external comparable should be used.

6. Select the most appropriate transfer pricing method.

   The results from the previous steps and the type of affiliated transactions analyzed determine the most appropriate method.

7. Identify potential comparables.

   To identify potentially comparable uncontrolled transactions, key characteristics must align with five comparability factors: functional analysis, contractual terms, risks, economic conditions, and the nature of the property or service.

8. Make comparability adjustments.

   If potential comparables differ from the analyzed transactions, adjustments must be made to account for those differences and improve the reliability of the comparability analysis.

9. Interpret data and determine arm's length remuneration.

The final step in comparability analysis involves calculating an arm's length price or profit level indicator using data from a reliable comparable.

The comparability analysis process is often non-linear, especially in Steps 5 to 7, which may need to be repeated as data availability can influence the choice of transfer pricing method. Achieving a high degree of comparability between affiliated and independent transactions requires identifying and applying appropriate parameters to assess and adjust for differences. (OECD, 2022, pp. 150-151; Putro & Saptono, 2021, pp. 19-20.)

Putra and Saptono (2021) evaluated the relationship between the comparability analysis and the methods used in transfer pricing analysis as presented in Table 3. They also measured the level of difficulty in its application. The comparable uncontrolled price method prioritizes the similarity of products and services as its key comparability factor. It offers a high level of comparability but is also highly difficult to apply due to the need for closely matched transactions. The resale price and cost-plus methods both emphasize functions performed as their main comparability factor. They provide a moderate level of comparability and are moderately difficult to apply. The profit split and transactional net margin methods consider both functions performed and economic conditions. These methods have a low level of comparability but are easier to apply compared to the others. Based on the result, it is evident that there is a correlation between the level of comparability and the level of difficulty in its application. The more reliable and comparable the method is, the more difficult it is to apply in practice.

Table 3. Summary of methods used in transfer pricing analysis, comparability analysis and level of difficulty in its application (Putra & Saptono, 2021, p. 24).

No	Transfer Pricing Method	Prioritized Comparability Factor	Level of Comparability	Level of difficulty in its application
1	Comparable uncontrolled price	Similarity of Products and Services	High	High
2	Resale price	Functions performed	Moderate	Moderate
3	Cost-plus	Functions performed	Moderate	Moderate

No	Transfer Pricing Method	Prioritized Comparability Factor	Level of Comparability	Level of difficulty in its application
4	Profit split	Functions performed and Economic Conditions	Low	Low
5	Transactional net margin	Functions performed and Economic Conditions	Low	Low

2.3 Transfer pricing methods

The OECD guidelines (2022) recognize five different transfer pricing methods. The methods are classified as traditional transaction methods and transactional profit methods. A comparable uncontrolled price method, a resale price method, and a cost plus method belong to the traditional transaction methods, where a transactional net margin method and a transactional profit split method belong to transactional profit methods. Traditional transaction methods are the most direct way to test whether conditions between associated enterprises meet the arm's length principle, as differences in pricing can usually be traced back to the commercial and financial arrangements, and corrected by substituting the comparable uncontrolled price. However, in some cases, transactional profit methods may be more suitable, particularly where both parties make unique and valuable contributions or engage in highly integrated activities, making a profit split more reliable than a one-sided method. Still, the use of transactional profit methods is not justified solely because data on uncontrolled transactions are difficult to obtain or incomplete. (OECD, 2022, pp. 93-94.)

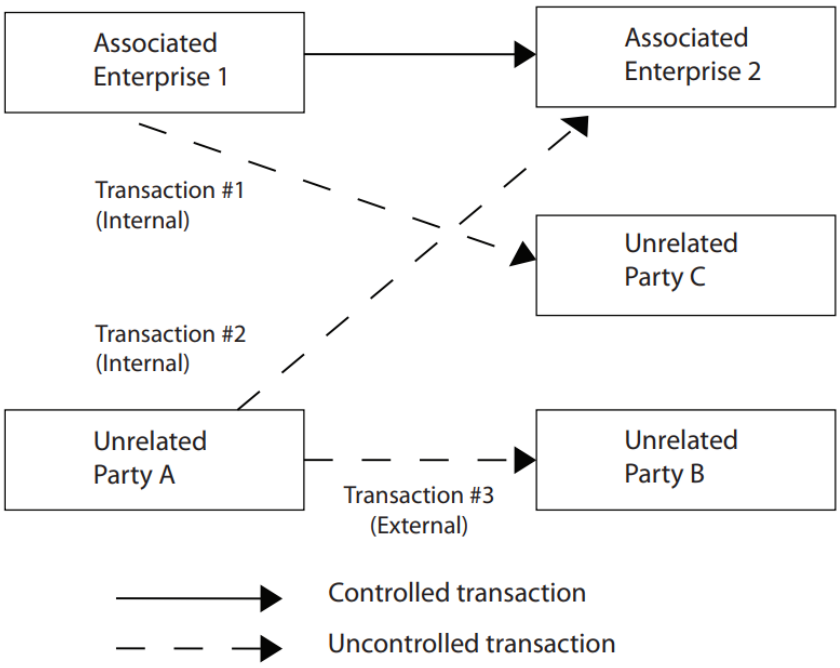
Juranek et al. (2018, pp. 79-80) studied how multinational entities set royalty fees on intangible assets and how those are affected by different transfer pricing rules. It was concluded by the authors that methods considered more direct, such as the comparable uncontrolled price, transactional net margin method, and cost plus method, do not impact a company's capital investment. Because of this, they are generally seen as the preferred choice for transfer pricing audits, especially when comparable transactions can be observed. In contrast, the transactional profit split method can be manipulated by

multinational corporations to encourage greater capital investment. While this provides a potential incentive that could mitigate standard corporate tax distortions, it also leads to higher profit shifting and may result in overinvestment. This method is considered a suitable alternative when parties contribute unique and valuable assets, such as intangible assets. Furthermore, the authors noticed that taxing the royalties is an effective way to reduce the profit shifting associated with intangibles. However, there is a trade-off, as such a tax can also reduce capital investment.

Choosing the most suitable method for a specific case should be the goal when selecting the transfer pricing method. The strengths and limitations should be considered while assessing the most appropriate method. The arm's length principle does not require selecting more than one transfer pricing method, however, it allows multiple methods to be considered. (OECD, 2022, pp. 93-96.)

2.3.1 Comparable uncontrolled price method

The Comparable Uncontrolled Price (CUP) method, as outlined in both the United Nations (2017, p. 154) and OECD (2022, p. 97) guidelines, involves comparing the price charged in a controlled transaction to the price charged in a comparable uncontrolled transaction under similar conditions. Benchmark values derived from transactions between independent parties establish a range within which prices in related-party transactions should fall to comply with the arm's length principle (Kukkonen & Walden, 2016, p. 201). According to the United Nations (2017, p. 154), the CUP method is used to calculate the royalty paid as compensation for the use of intangible assets to meet the arm's length criteria. The comparable uncontrolled prices can be based on either "internal" comparable transactions or on "external" comparable transactions. A discrepancy between the two prices may suggest that the commercial and financial arrangements between the associated enterprises are not consistent with the arm's length principle, and that the price from the uncontrolled transaction may need to replace the price used in the controlled transaction (OECD, 2022, p. 97).



Picture 1. Comparable uncontrolled price method (United Nations, 2017).

The CUP method can be considered the most direct and reliable transfer pricing method, and even the preferred approach, provided that sufficiently comparable and independent benchmark transactions are available. However, the applicability of the CUP method should always be carefully examined and thoroughly justified when determining transfer prices. The overall significance of the CUP method has increased, as it is the only method that has been globally accepted. (Kukkonen & Walden, 2016, p. 201.)

Identifying transactions between independent enterprises that are similar enough to a controlled transaction can be challenging, especially when differences exist that materially impact the pricing (OECD, 2022 pp. 97-98). Therefore, experience shows that the CUP Method is particularly useful in two scenarios. First, when one of the associated enterprises engages in comparable uncontrolled transactions with independent parties, creating an internal comparable. Second, when the transactions involve commodity-type products with only minor variations between them. (United Nations, 2017, p. 160)

2.3.2 Resale price method

The Resale Price Method determines the arm's length price by starting with the resale price of a product sold to an independent enterprise, then deducting a resale price margin that covers the reseller's costs and profit. This margin can be based on internal comparables or external comparables. After adjusting for other costs (e.g., customs duties), the remaining amount represents the arm's length price for the original transaction between associated enterprises. This method is particularly useful for marketing activities. (OECD, 2022, p. 101.)

Under similar conditions as the Comparable Uncontrolled Price Method, a transaction between independent parties is considered comparable to a controlled transaction if one of the following two conditions is met:

1. No differences between the compared transactions or the companies involved would materially affect the resale price margin in an open market.
2. Reasonably accurate adjustments can be made to eliminate the material impact of such differences. (Kukkonen & Walden, 2016, p. 202.)

The resale price method involves a structured approach to determining the arm's length price for transactions between related parties. The first step is markup definition, where the related-party seller sets a markup that reflects the profit they would typically earn in comparable open-market transactions. Next is the selection of comparable data, which involves identifying reliable resale price information from independent sellers offering similar goods or services. This data should reflect market-based pricing and profit margins. The third step is price comparison, where the prices and markups applied in related-party transactions are compared with those in independent transactions. Finally, adjustments for differences are made if significant discrepancies are identified. These adjustments may result in additional income tax payments to ensure compliance with arm's length pricing standards. It is important to note that the resale price method is not frequently used in practice due to the difficulty of finding comparable transactions

and obtaining reliable gross margin data from third parties. (Kuznyetsov et al., 2025, pp. 112–113.)

2.3.3 Cost plus method

The Cost Plus Method begins by identifying the costs incurred by a supplier in a controlled transaction involving the transfer of property or provision of services to an associated enterprise. To these costs, an appropriate cost plus markup is added, reflecting the profit the supplier would expect to earn under comparable market conditions, considering the functions performed, assets used, and risks assumed. The result is considered the arm's length price for the original controlled transaction. This method is particularly useful in scenarios involving the sale of semi-finished goods, joint facility agreements, long-term supply arrangements, or the provision of services between associated enterprises. (OECD, 2022, pp. 106-107.)

In practice, the cost plus transfer pricing approach begins with determining the costs incurred by a related-party seller in producing or supplying goods or services. These costs typically include direct expenses such as materials, labor, and other production-related costs. Once the costs are established, a profit margin is added. This margin should reflect the commercial benefit the seller would normally earn when selling similar goods or services to independent buyers on the open market. The next step involves the selection of adequate comparable data, which includes identifying cost-plus pricing information from independent sellers. This data must reflect both the costs and the margins applied in comparable transactions. Finally, a price comparison is conducted between the prices of related-party transactions and those observed in the open market. The margin applied in the controlled transaction is analyzed to determine whether it aligns with the pricing that would be set between independent entities. (Kuznyetsov et al., 2025, pp. 113–114.)

2.3.4 Transactional net margin method

The Transactional Net Margin Method (TNMM) evaluates the net profit a taxpayer earns from a controlled transaction, relative to an appropriate base such as costs, sales, or assets. It functions similarly to the cost plus and resale price methods and therefore, must be applied consistently to ensure reliability. To apply TNMM reliably, the taxpayer's net profit indicator from the controlled transaction should ideally be compared to the net profit indicators from comparable uncontrolled transactions, preferably using internal comparables. If internal comparables are unavailable, external comparables may be used as a guide. A functional analysis of both controlled and uncontrolled transactions is necessary to assess comparability and determine any required adjustments. (OECD, 2022, pp. 113-114.)

This method requires that the transactions being analyzed are broadly similar to ensure the reliability of the comparison. There are four steps in applying the TNMM. The first step involves calculating the total profit generated from joint activities between related parties. This profit is typically derived from financial statements or other relevant financial performance data. Next, the contributions of each related party to the joint activity are assessed. These contributions may include assets, labor, risks, or intellectual property. The total profit is then distributed among the related parties based on their respective contributions. This distribution is often done using a percentage key that reflects the relative value of each party's input. For example, if one party contributes 60% of the assets and assumes 60% of the risks, it would receive 60% of the total profit. Finally, the distributed profits are compared with the profit levels that independent parties would have earned under similar conditions. This comparison relies on data from comparable transactions in the open market. (Kuznyetsov et al., 2025, p. 114.)

TNMM is generally not reliable when both parties to a transaction make unique and valuable contributions. In such cases, the Transactional Profit Split Method is usually more appropriate. However, if only one party makes all the unique and valuable contributions,

a one-sided method like TNMM may still be applicable, with the less complex party being selected as the tested party. (OECD, 2022, pp. 113-114.)

2.3.5 Transactional profit split method

The transactional profit split method aims to determine arm's length outcomes for controlled transactions by approximating the results that independent enterprises would have achieved in comparable circumstances. It begins by identifying the relevant profits arising from the controlled transactions and then splits these profits between the associated enterprises based on an economically valid basis that reflects how independent parties would have divided the profits. The method ensures that the profits allocated to each associated enterprise are aligned with the value of their contributions, and with the compensation that would have been agreed upon in comparable independent transactions. It is particularly useful when the relative shares of contributions to the profits can be more reliably assessed than the direct valuation of those contributions. The term "profits" in this context also includes losses, meaning the method should be applied consistently regardless of whether the transaction results in a gain or a loss. While asymmetrical splits where profits and losses are treated differently may be acceptable under arm's length principles, they should be used cautiously and must be properly documented. (OECD, 2022, p. 128.)

There are several approaches to determining how profits should be distributed. Contribution Analysis involves aggregating the profits from controlled transactions and distributing them among the associated enterprises based on their relative contributions, such as assets, labor, risks, or intellectual property. Under the Comparative Profit Distribution approach, the combined profit or loss is distributed according to how independent enterprises would have shared profits in comparable transactions. Residual Analysis is a two-step method. First, profits are allocated to routine activities that do not involve unique contributions. Then, the residual profits are distributed based on an economically sound basis, reflecting the value of unique contributions made by each party. The transactional profit split method is particularly suitable when there is a series of related

transactions rather than a single one. However, it is considered the most controversial and difficult to justify in disputes with tax authorities, as transactional profit methods can be challenging to defend. (Kuznyetsov et al., 2025, p. 115.)

2.4 Base erosion and profit shifting

The BEPS, short for Base Erosion and Profit Shifting, is one of the most important forms of international tax coordination, and its Multilateral Instrument, BEPS MLI, was signed in Paris in 2017 (Jiménez, 2019, p. 197). The project was initiated through a collaborative effort between the OECD and the G20 member countries. As part of this initiative, the OECD endorsed the BEPS Action Plan, which outlines a total of fifteen targeted actions. (Torkkeli & Kukkonen, 2020.) Actions 8-10 of the BEPS Action Plan aim to align existing transfer pricing standards, including the OECD Transfer Pricing Guidelines. These actions seek to ensure that the arm's length principle is effectively applied in contexts where value is generated across complex, multinational operations. (Lang, 2019, p. 30.)

Many studies highlight similar issues with applying the arm's length principle to cloud-related transactions, e.g., lack of comparables, complexity of intellectual property, and a lack of information available, and seek to find the answers from BEPS action plan (Mazur, 2016; Tian, 2018). The primary objective of the BEPS project is to safeguard tax revenues by aligning taxation more closely with actual economic activity and value creation. Central to this initiative is the principle that income should be taxed in the jurisdiction where it is generated. However, implementing this principle is complex, as countries may hold differing views on where value is truly created. A key goal of the BEPS project is to develop recommendations that inform national legislation or propose amendments to the OECD Model Tax Convention. These recommendations must remain consistent with the policies and directives of the European Union. (Torkkeli & Kukkonen, 2020.)

Action 8 of the BEPS Action Plan led to the development of transfer pricing rules for hard-to-value intangibles (HTVI) to prevent tax base erosion through intra-group transfers (OECD, 2018, p. 11). The criteria for identifying hard-to-value intangibles (HTVI), as

outlined in paragraph 6.189 of the OECD Transfer Pricing Guidelines (2022, p. 304), are that no reliable comparable exists and there is a high uncertainty in projections or assumptions. To meet the first criterion, there are no sufficiently similar transactions or market data available to benchmark the value of the intangible in question. The second criterion means that at the time of the transaction, the future cash flows or income expected from the intangible, or the valuation assumptions, are highly uncertain. This makes it difficult to predict the ultimate success or value of the intangible.

Avi-Yonah & Xu (2017, pp. 7-8) argue that despite its goals of aligning taxable profits with economic activities and value creation, the BEPS project is ultimately an inadequate "patch-up" of existing rules rather than a fundamental reform. The main reason for this, they contend, is the project's adherence to the outdated "benefits principle" of international tax law. This principle dictates that active business income should be taxed at its source, and passive investment income should be taxed at the taxpayer's residence. The authors believe this principle is flawed because it requires the cooperation of too many jurisdictions and has been undermined by tax competition and tax avoidance schemes.

The article (Avi-Yonah & Xu, 2017, pp. 4-5) illustrates these problems with two case studies of US multinational corporations. The authors explain how Apple used cost sharing agreements and the "check the box" rule to shift billions in profits from intellectual property developed in the US to its Irish subsidiaries, which paid an effective tax rate of less than 2%. Caterpillar, they explain, used a billing arrangement created by PriceWaterhouseCoopers to declare over 85% of its parts profits in Switzerland, despite the parts business being run from the US.

Avi-Yonah & Xu (2017, p. 9) propose an alternative: reversing the benefits principle. They suggest that passive income should be taxed primarily at the source, and active income should be taxed at the residence. This would be more effective because the number of jurisdictions for passive income is much smaller, and most large multinationals are headquartered in G20 countries, which could coordinate to tax active income.

In the OECD Guidance for Tax Administrations on the Application of the Approach to Hard-to-Value Intangibles (2018, p. 12), it is instructed that Tax administrations may use actual results after the transaction as presumptive evidence to evaluate whether the pricing at the time of the transaction was appropriate. Further, Tax administrations can assume that there is presumptive evidence if the actual income or cash flows are significantly higher or lower than projected, which may indicate that the original valuation was flawed. Presumptive evidence may trigger scrutiny of the probability-weighting and assumptions used in the original valuation. However, actual outcomes alone cannot justify a revised valuation. The original valuation must be considered alongside what was reasonably knowable or foreseeable at the time of the transaction.

The OECD Guidance (2018, p. 12) states that the application of the HTVI approach must promote tax certainty for taxpayers and aim to minimize the risk of double taxation. Also, Tax administrations must apply the HTVI approach in a manner that respects domestic laws and is consistent with the relevant treaty frameworks. Tax administrations are encouraged to identify and address HTVI transactions as early as possible.

Action 9 aims to develop rules that prevent base erosion and profit shifting through the artificial allocation of risks or excessive capital among group entities. This involves creating transfer pricing rules or implementing special measures to ensure that entities do not receive inappropriate returns solely because they have contractually assumed risks or provided capital. The new rules will require that returns be aligned with the actual value creation, e.g., by limiting interest expense deductions and other financial payments. (OECD, 2013, p. 20.)

Action 10 focuses on other high-risk transactions. Other high-risk transactions are transactions that would not typically occur between independent third parties or would do so only in rare circumstances. This includes adopting transfer pricing rules or other special measurements to achieve three goals. First, to clarify when and how transactions

may be recharacterised for tax purposes. Second, provide clearer guidance on the application of transfer pricing methods, especially profit split methods in the context of global value chains. Lastly, to offer protection against common forms of base-eroding payments, such as management fees and head office expenses. (OECD, 2013, pp. 20-21.)

The conclusion is that BEPS shifts the focus of transfer pricing from legal form to economic substance. Previously, SaaS companies could rely on a business model with minimal physical presence to avoid creating a permanent establishment and therefore avoid corporate income tax in a foreign country. Under the BEPS framework, this is no longer a viable strategy.

3 Literature review

To gather relevant literature for this study, a systematic search is conducted using several databases. The primary databases to be utilized are Google Scholar and the University of Vaasa's Finna database. These platforms are chosen for their extensive collections of academic texts and research papers. Additionally, other transfer pricing research are reviewed, and references within those papers are scanned to identify further relevant sources. This approach will ensure a comprehensive collection of texts pertinent to the research topic.

The keywords are selected to capture the core elements of the research problem and theory, focusing on the intersection of transfer pricing, financial performance, and regulatory compliance. Keywords used for the research are transfer pricing, profitability, intangible assets and international tax.

The selection of texts is guided by several criteria to ensure relevance and quality. Given that transfer pricing regulations are largely based on OECD guidelines (2022), these guidelines are a primary reference point for the study. Academic texts are scanned for specific keywords, and their introductions and conclusions are read to assess their relevance to the research topic. Texts are included if they provided insights into transfer pricing methods, their impact on profitability, and compliance with international tax laws. The goal is to identify literature that could support the thesis statement and contribute to a comprehensive understanding of the research problem.

3.1 Transfer pricing for cloud service corporations

Abdallah and Murtuza (2006) investigate multinational companies' transfer pricing strategies for intangible assets and how e-commerce and international taxation are affecting the strategies. The paper (Abdallah and Murtuza, 2006) concludes the factors, such as tax and non-tax strategies, objectives behind the system, environmental conditions, incorporate short-run active features, potential income tax consequences, choosing best

transfer pricing methos and practical solutions to avoid tax audits, which should be considered when designing an effective transfer pricing strategy.

Kelley et al. (2016) writes that many multinational corporations have implemented tax-motivated restructurings with minimal operational changes to shift profits to low-tax jurisdictions. This practice can enhance profitability by reducing overall tax liabilities. It also highlights the importance of detailed risk assessments and maintaining thorough documentation to support the transfer pricing strategies. Proper documentation and compliance with transfer pricing regulations can mitigate the risk or Tax Authorities challenging the strategy ensuring that profitability is not compromised by unexpected tax liabilities, interest or penalties.

According to Mazur (2016, pp. 643-647) MNEs must apply transfer pricing rules to internal cloud platform transactions to establish arm's-length prices. However, the international tax framework has not kept pace with technological advancements, leading to challenges in tax compliance and the risk of double taxation or non-taxation if different interpretations of transfer pricing rules are applied in the cloud context. Mazur (2016, pp. 649-650) recognizes the challenge of determining the most appropriate transfer pricing method for cloud computing services. The core issue is the lack of specific regulatory guidance on how to characterize cloud computing transactions.

The first issue with the characterizations starts with identifying whether the transferred assets are classified as tangible or intangible. Second, there is a need to identify if the transactions are classified as the provision of services or a computer program. It is also possible that the transactions are subject to both elements of provision of services and transfer of tangible or intangible assets and single cloud computing transaction may need to be analyzed as multiple separate transactions for transfer pricing purposes. This is because a cloud service provider often offers a mix of services to its affiliates, some of which are similar to a software transfer, while others are more similar to a traditional service. By breaking down the transaction, different transfer pricing methods can be

applied to each element, which may lead to a different arm's-length price. (Mazur, 2016, pp. 651-657)

Huang (2024) discusses the challenges of taxing cross-border cloud services. He notes that cloud transactions blur the distinction between goods and services, making it difficult to determine the tax base. From the previous studies (Huang, 2024; Tian, 2018) a list of the characterization of cross-border cloud services can be determined. The list which mainly includes the diversity of service types, virtualization of the service forms, digitalization of transaction content, and the invisibility of transaction subjects. Cross-border cloud services are highly diverse and complex and can be divided differently depending on the classification standards. For virtualization of the service forms, he defines that users can access these services from anywhere using any device, as the resources aren't tangible, fixed entities. The user doesn't need to know the specific location where the application is running. The digitalization of transaction content characterization means that the transaction details, including contracts, bills, and even payments, are in the form of electronic data that can be easily modified and are only stored on the computers of the parties involved. Invisible transaction subjects occur in virtual cyberspace, and the service provider exists only as a website hosted on a server, which can be easily moved between different servers.

Huang (2024) also highlights the challenge of locating the supply sites, as these transactions do not physically enter a jurisdiction. Further, he explains that the virtual nature of cloud computing creates new opportunities for VAT fraud and tax avoidance. The reduced visibility of these transactions makes it easier for taxpayers to conceal their true place of consumption. Additionally, the remote provision of services from low or no-tax jurisdictions allows for tax avoidance.

Tian (2018) identifies four different strategies for intellectual property and cloud-related transactions. In the first strategy the decision between transferring the intellectual property ownership to abroad, e.g., to a low tax jurisdiction versus cloud service relocation

strategy is considered. In the current SaaS environment, the transfer of intellectual property is no longer the key characteristic in transfer pricing strategy, but rather relocating cloud service providers entirely to a low-tax jurisdiction. This will result in shifting all the intragroup cloud service payments to low-tax markets, and not only intellectual property related compensations.

The second strategy (Tian, 2018) focuses on shifting the focus from the intellectual property licensing strategy to the SaaS subscription strategy. In the traditional intellectual property licensing strategy, a parent company located in a high-tax jurisdiction may establish an IP licensing and holding company in a low-tax jurisdiction to manage and exploit intellectual property rights. This offshore affiliate can license or sublicense the IP not only for the parent company but also for its foreign subsidiaries, including those operating in other high-tax countries. This structure is often used to centralize IP management and potentially reduce the overall tax burden across the group. Cloud-based business models, especially SaaS, where compensation is paid e.g., every month instead of a one-off licensing fee, have significantly changed the relevance of traditional intellectual property licensing strategies in transfer pricing.

The third strategies are related to service agreements where multinational enterprises use intellectual property service agreements that bundle the sale or licensing of intellectual property with related technical services, such as software maintenance or infrastructure support, making the transaction price more complex and harder for tax authorities to evaluate under arm's length principles. This strategy has become increasingly relevant in the cloud computing environment, where multinational enterprises can relocate their core IT functions, e.g. technical support, to low-tax jurisdictions far from their user markets. Through cloud service agreements, profits can be reported in these low-tax locations, even though the economic activities generating those profits may occur elsewhere. (Tian, 2018)

A cost sharing arrangement is a strategy used by multinational enterprises in which related companies agree on how to allocate the costs of research and development (R&D) for creating intangible assets, such as software or patents. Under the agreement, each participating entity contributes to the R&D expenses and, in return, obtains rights to the resulting intellectual property in proportion to its contribution. (Tian, 2018)

3.2 Corporate financial performance

Several previous studies have found a significant and positive link between a company's transfer pricing strategies and its financial performance. For example, Ouelhadj et al. (2023) examining 60 corporate groups across different sectors found that transfer pricing had a significant and positive impact on their financial performance.

Oluwafunmike et al. (2022) found that an increase in profitability followed a company's decision to use transfer pricing to reduce its tax expenses. According to Oluwafunmike et al. (2022), transfer pricing affects a company's financial performance through tax optimization. They defined tax optimization as where companies strategically set prices for transactions between their subsidiaries to move profits to jurisdictions with lower tax rates. The authors state that tax optimization is used to legally minimize tax liabilities and maximize profitability. This can lead to a reduced overall corporate tax burden, which in turn increases net income and improves financial metrics like profitability and cash flow.

Similar findings were presented by Widjaja (2021), where study focusing on the international hotel industry found that there is a direct relation between transfer pricing transactions and how the entities are allocating their income for tax expenditures. This will not only affect the allocation of reported profits in each country and the allocation of tax liabilities, which influence net income and cash flow, but also the sustainability of operation, as profitability in each location affects the long-term viability (Widjaja, 2021). This suggests that strategically shifting profits to lower-tax jurisdictions can be an effective way to improve a company’s overall financial health.

In modern financial statement analysis, the company's financial success is determined based on its targets set by investors for the company's success. Equity investors evaluate the company's profitability and risk by comparing them with the returns of other alternative investment targets. One key metric to evaluate the performance is the return on investment (ROI),

$$ROI = \frac{Profit\ before\ tax}{Invested\ capital}, \quad (1)$$

which measures how much the company has made in relation to the equity and debt capital invested in the business. (Kallunki 2022, p. 82)

DuPont equation is used to divide return on invested capital (ROI) and return on equity (ROE) into components. Although presented with slight variations across sources, it typically draws directly from income statement and balance sheet items in financial statements. Operational business items are not differentiated from financing items and investment assets. (Kallunki 2022, p. 111)

$$ROI - \% = \frac{Net\ profit}{Balance\ sheet\ in\ total} = \frac{Net\ profit}{Turnover} x\ \frac{Turnover}{Balance\ sheet\ in\ total} \quad (2)$$

$$ROE = \frac{Net\ profit}{Equity} \quad (3)$$

Similar ratios have been used in previous study, where Ouelhadj et al. (2023) used return on assets (ROA),

$$ROA = \frac{Net\ income}{Total\ assets}, \quad (4)$$

which is a commonly used metric to assess financial performance, measuring how effectively a company uses its assets to generate profits. According to Ouelhadj et al. (2023), a high ROA indicates strong profitability and efficient asset use, but it may also incentivize tax evasion, particularly through transfer pricing. Companies with higher ROA may seek to reduce their tax burden via transfer pricing strategies, reinforcing the connection between financial performance and transfer pricing.

The formulas for ROI-% and ROA are effectively identical, as net profit and net income refer to the same measure. Similarly, total assets correspond to the balance sheet total, meaning both ratios use the same underlying components.

A company's profitability can also be measured by using profit margins. Profit margins are calculated by dividing the profit and loss item by turnover

$$Gross\ profit\ margin = \frac{Gross\ profit}{Turnover + other\ operating\ income}. \quad (5)$$

The higher the margin figure, the more profit remains from the selling price of products or services after cost deduction. Therefore, high profit margins indicate efficient cost management and strong pricing power. (Kallunki 2022, p. 91)

The findings are not consistent across all research. Holtzman & Nagel (2014) study, which focused on non-financial multinational companies in Indonesia, concluded that profitability was not significantly related to the intensity of transfer pricing practices. However, they noted that intangible assets did have a significant positive effect on transfer pricing decisions.

4 Methodology and data

4.1 Methodology

4.1.1 Case study

According to Woodside (2016) Case study research can be broadly defined as an inquiry into any individual unit with the goal of describing, understanding, predicting, or controlling behavior or processes whereas Yin's (1994, p. 13) definition is more specific. Yin describes a case study as an empirical investigation of a contemporary phenomenon within its real-life context, especially when the boundaries between the phenomenon and context are unclear. Case Study Research can serve multiple purposes but its principal objective should be achieving deep understanding of actors, interactions, sentiments, and behaviors over time within a specific process (Woodside, 2016).

Woodside (2016) defines that deep understanding should involve:

1. Sensemaking, which explains how individuals interpret and respond to impulses. It aims to answer questions about what people perceive, how they frame perceptions, and how they interpret actions and outcomes.
2. Meta-sensemaking, which is seen as broader analytical tools such as systems thinking, policy mapping, and systems dynamics modeling.

Deep understanding uncovers the subjective significance of individuals and linkages and influence paths among conceptual variables. To achieve deep understanding in case study research, the researcher usually follows triangulation. The triangulation refers to the use of multiple methods and sources to gather data, which helps enhance the credibility and depth of the findings. It often involves three key approaches. The first one is the direct observation by the researcher within the natural environment of the case. This allows the researcher to witness behaviors, interactions, and contextual factors. Investigating through interviews or conversations with case participants. Second, the

researcher asks participants to explain and interpret operational data, which provides insight into their perspectives and decision-making processes. Third, the analysis of written documents and natural sites found within the case environment. These materials offer additional context and evidence that support or contrast with observational and interview data. (Woodside, 2016.)

The framework outlined by Woodside (2016) and Yin (1994) can be applied to conduct a case study in a PaaS corporation with significant intercompany transactions involving intangible assets. Following Yin's (1994) guidance, the case is a PaaS corporation, and the phenomenon is the transfer pricing methods. Context is the real-life operational, financial, and regulatory environment of the corporation. Some of the details are modified to protect the company's identity.

Following Woodside's (2016) logic, the goal is to achieve a deep understanding of research questions and focus on sensemaking. This is achieved by triangulation, where direct observation is done in internal meetings, transaction planning sessions, or compliance reviews. Semi-structured interviews are conducted with relevant finance, tax and R&D personnel and document analysis is done on the relevant internal documents.

The document and site analysis will be conducted as a data study based on the corporation's current transfer pricing policies, documentation, and financial reports. First, a functional analysis will be conducted to identify the economically significant activities and responsibilities undertaken, assets used or contributed, and risks assumed by the parties involved in the transactions. Second, a comparative analysis will be constructed to explore potential changes in transfer pricing models and their impact on profitability from both the individual company and group perspectives. The profitability metrics to be used are gross margin, ROI, and DuPont analysis. Also, the impact on the global tax burden will be assessed.

In addition, the semi-structured interviews will be held with the key personnel. Hirsijärvi and Hurme (2022) consider interviews a highly flexible research method that can be adapted to various research purposes. They state that during an interview, the researcher engages in direct verbal interaction with the interviewee, which allows for the collection of information to be guided and shaped in real time. This interaction also enables the researcher to uncover the underlying motives behind the interviewee's responses. The structure and topics of the interview can also be adjusted during the conversation, making the method dynamic and responsive to the situation.

4.1.2 Constructive research

The research will be conducted using a constructive research approach which is subdivision of case study research. It starts with a real-world business problem that also holds theoretical research value. The goal is to solve practical problems in collaboration with the personnel of the organization being studied. Originally developed to address issues in business economics, this research method is well-suited for its purpose in the study. (Lukka, 2005.)

According to Lukka (2002) and Kasanen et al. (1993) the constructive research process can be divided into seven steps:

1. Identifying a significant problem with theoretical value, considering both practical and theoretical aspects, and exploring minimally analyzed topics in previous literature.
2. Investigating the possibilities for long-term research collaboration with the target organization.
3. Acquiring a deep understanding of the research topic both practically and theoretically.
4. Creating an innovative solution that addresses the problem and has the potential to contribute to theoretical knowledge.
5. Implementing the solution and testing its effectiveness.

6. Considering the applicability of the solution. Reflecting on the learning process with the target organization and analyzing the results and prerequisites.
7. Recognizing and evaluating the theoretical impact of the research findings.

In constructive research the outcome is evaluated by using market tests. Kasanen et al (1993) divide the market tests into three approaches: weak market test, semi-strong market test and strong market test. Even the weak market test is considered relatively strict. The key evaluation is whether any responsible manager has applied the developed construction in the actual decision making. Semi-strong market test evaluates if the developed construction has become widely adopted by companies. Finally, strong market test is evaluating if the construction has been able to result in better financial performance in those unis where it has been applied compared to those not using it. This research results will be evaluated according to weak market test.

Lukka (2005) has identified potential benefits and risks of constructive research. Lukka states that constructive research offers significant advantages by providing practical benefits and bridging the gap between practice and theory. It involves rigorous testing of solutions and requires commitment from both researchers and target organizations to achieve meaningful results. According to Lukka, constructive research also involves risks. Researchers must be aware of potential conflicts of interest, especially regarding sensitive findings and publication issues. Long-term commitment from the target organization is crucial, and researchers should maintain continuous contact. Concerns from the target organization include the loss of trade secrets and the effectiveness of the research process. Researchers must balance innovative development with a neutral, critical attitude. Publication challenges may arise due to the unestablished nature of the methodology.

The thesis aims to construct a practical transfer pricing method by grounding its approach in real-world data from a Finnish case company operating in the cloud-based PaaS sector. The model will be designed to be implementable within the company’s

current systems, avoiding excessive complexity. They will also be scalable, allowing adaptation as the business evolves or expands internationally.

4.1.3 Semi-structured interview

In the semi-structured interview, some aspects have been predetermined, but not all (Hirsjärvi & Hurme, 2022). It is largely based on the focused interview developed by Merton et al. (1956) in which the key characteristics are described as follows. First, the interviewees are known to have experienced a specific situation. Second, the social scientist has preliminarily analyzed the phenomenon under study, identifying its presumably important elements, structures, processes, and whole phenomena. Based on this content or situational analysis, the researcher forms certain assumptions about the consequences of the defining features of the situation for those involved and develops the interview framework. Finally, the interview is directed toward the interviewees' subjective experiences of the situations that the researcher has previously analyzed.

Although the method was inspired by Merton's focused interview, the theme interview differs in that it does not require a specific experimentally induced shared experience. Instead, it assumes that all of an individual's experiences, thoughts, beliefs, and feelings can be studied using this method. The approach emphasizes the interviewees' own definitions of situations. The advantage of the method is that it does not tie the interview to a particular qualitative or quantitative method, nor does it dictate the number of interview sessions or the depth of exploration. What matters is that the discussion proceeds based on certain themes. (Hirsjärvi & Hurme, 2022.)

The method was chosen to allow flexibility while still covering key themes. Instead of requiring participants to have undergone a controlled or experimental situation, it focuses on their professional experiences, opinions, and interpretations. In total, eight semi-structured interviews were conducted in January-October 2025 for finance, tax, and R&D personnel in the case company. Participants were selected based on their roles within the case company and the degree to which those roles were related to the

transfer pricing framework. The majority of the interviewees were in managerial positions, ranging from middle to upper management, and were based in Finland. The interview framework presented in Appendix 1 served as the basis for the semi-structured interviews, which progressed in a free-form manner and occasionally touched on topics beyond the scope of the interview guides. Interviews were conducted both in person and online. Remote interviews were conducted using Microsoft Teams. All interviews ranged from 28 min to 57 min and were recorded.

The transcripts were documented in a password-protected folder and analyzed further in Excel. The interviews were analyzed using deductive qualitative analysis. As presented in table 4, deductive qualitative analysis begins by formulating a research question and selecting a guiding theory from existing literature to ensure a clear link between theory and the phenomenon under study. The theory is then operationalized into practical constructs or working hypotheses that guide the analysis. Researchers collect a purposive sample that provides sufficient variation to examine and refine the theory. Data analysis combines deductive coding based on the theory with inductive coding to capture emerging themes, resulting in a nuanced understanding supported by evidence that confirms, contradicts, or expands the theory. Finally, the findings are synthesized to refine the guiding theory, integrating both theory-driven constructs and inductively derived insights (Fife & Gossner, 2024).

Table 4. Process and Outcomes of Deductive Qualitative Analysis (Fife & Gossner, 2024).

Component	**Description**	**Outcome**
Developing research question and selecting guiding theory	Researchers review relevant literature and select a theory to guide the research. Theories can be formal theories (e.g., Bronfenbrenner's bioecological theory) or informal theories (e.g., relevant constructs that have been examined previously in the literature)	Research question that clearly connects the theory with the phenomenon under investigation
Operationalizing theory	Researchers operationalize theory by either generating sensitizing constructs, key concepts from	Useable version of the guiding theory that includes

Component	Description	Outcome
	the guiding theory, or by creating working hypotheses, which are active, provisional hypotheses that are revised throughout analysis	descriptions of its relevant components and mechanisms, as well as statements of relationship between components of the theory
Gathering purposive sample	Researchers gather purposive sample that allows for thorough examination of the guiding theory	Data that can be analyzed using the guiding theory that includes sufficient variation to test or refine the guiding theory
Coding and analyzing data	Researchers alternate between an initial deductive approach to coding and inductive coding, including negative case analysis, and code the data in multiple iterations. New, inductive themes are added, and sensitizing constructs are refined	Rich, nuanced understanding of the phenomenon under investigation. Compilation of four types of evidence: Supporting, contradicting, refining, and expanding evidence
Theorizing	Researchers interpret supporting, contradicting, refining, and expanding evidence and propose confirmations, interconnections, and potential revisions of the guiding theory	Refined theory that includes data-supported sensitizing constructs and inductively derived themes, with sufficient explanation for any proposed changes to the guiding theory

4.1.4 Comparative analysis

The effect on profitability is studied using the comparative analysis. Porta (2008, p. 200) identifies three main approaches in comparative analysis: the experimental method, the statistical method, and the comparative method. Each aims to control most variables by converting them into parameters, thereby isolating the effects of the remaining variables. These approaches differ in strength, with experimental designs offering the highest level of control and comparative methods the least. This thesis applies the comparative method within a mixed qualitative-quantitative research design.

The experimental method achieves control by creating artificial conditions where only one variable is manipulated while all others remain constant, typically through the use of identical groups and introducing a stimulus to one group. The statistical method approximates experimental control by applying mathematical techniques to empirical data after collection. It seeks to isolate variable effects through subsamples where other influences are held constant, typically using correlation analysis. While effective for testing theories, its main limitation is the need for large sample sizes to ensure statistical significance, which can be costly or impractical when homogeneous cases are scarce. (Porta, 2008, pp. 200-201.)

The comparative method is an alternative to the statistical approach when the number of cases is too small for quantitative analysis, with many variables, but small N. It applies the same logical principles as statistical methods but relies on systematic comparative reasoning rather than partial correlations. This approach is particularly suited for studies where there are many variables, but few cases where complexity exists, and large datasets are unavailable. (Porta, 2008, p. 201.)

The approach was chosen because the study aims to compare profitability outcomes under two scenarios: the current transfer pricing method and a newly developed method based on functional analysis. By conducting this comparison within the same case company and using real financial data alongside qualitative insights from interviews and documentation, the analysis isolates the effect of methodological changes while keeping other factors constant. The design reflects a small-N case study, focusing on depth rather than statistical generalization. Qualitative data informs the functional analysis, which serves as the foundation for developing the new pricing model, while quantitative data enables a systematic comparison of results. This combination ensures that the comparative method effectively captures the impact of transfer pricing methods on profitability in the case company.

As the parent company is located in Finland, the ratios used to measure profitability are calculated based on Finnish standards, and all the local currencies are converted to euros, which is the group's official reporting currency. According to the Finnish Accounting Act (1336/1997), Article 6 paragraph 6, the foreign currency income statement is converted using the average rate for the reporting period, and the balance sheet using the closing rate.

4.2 Data

Following the triangulation method (Woodside, 2016), both qualitative and quantitative data were gathered in addition to semi-structured interviews. According to Morgan (2014), using a combined method based on sequential contributions enables researchers to link different methods in a way that one informs or enhances the other. This approach is particularly valuable when the strengths of one method can inform the other method, allowing for deeper insights than either method could provide alone. Morgan outlines several variations of this approach. For example, a qualitative phase might precede a quantitative one, where initial interviews help shape survey questions. Alternatively, a quantitative phase might come first, with follow-up interviews used to explain or elaborate on statistical findings. This flexible sequencing allows researchers to adapt their design to the evolving needs of the study while maximizing the complementary strengths of both methods.

In this thesis, a combined method approach is applied, utilizing both quantitative and qualitative data to address different research questions. The first phase of the study emphasizes qualitative methods, drawing on data collected through semi-structured interviews and internal documentation, such as transfer pricing policy documents. In addition to semi-structured interviews, there has been informal discussion with several stakeholders to gather the needed information either through teams or in person. These sources inform a functional analysis, which serves as the foundation for assessing the alignment of intercompany transactions with the arm's length principle. The functional analysis serves as a basis for the transfer pricing method development. Based on the

findings from this qualitative assessment, a refined transfer pricing model is developed. This model is then used to simulate and compare the potential effects of methodological adjustments on the company's financial outcomes.

To evaluate the impact of the developed transfer pricing method on corporate profitability, the analysis primarily relies on quantitative financial data. This includes historical income statements and balance sheets, intercompany transaction records, internal employee allocations, cost allocation data, commission data, and tax-related information. From these sources, key financial ratios are derived to facilitate a comparative analysis of profitability outcomes between the current method and the developed method. The data is gathered from one fiscal year. The goal is to build a tailored transfer pricing method based on functional analysis and empirical findings, combining both qualitative and quantitative information.

The data utilized in this study was obtained through the researcher's role within the case company's finance function. Although access to confidential information was necessary for the analysis, no sensitive details are disclosed in this thesis. All data presented has been anonymized to ensure confidentiality and compliance with disclosure requirements.

5 Functional analysis

Functional analysis is a key component of transfer pricing, especially in the context of intercompany transfers of tangible property, intangible property, or services between related entities. It is particularly relevant for income tax purposes, where it supports the allocation of income and expenses among taxpayers. (Reilly, 2020, p. 215.) The primary objective of functional analysis is to identify economically significant activities, responsibilities, assets employed or contributed, and risks assumed by each party in the transaction. This assessment focuses on the actual actions and capabilities of the entities, including decision-making processes related to strategy and risk management (OECD, 2022, p. 46).

In practice, functional analysis in transfer pricing involves systematically organizing information about the roles, functions, assets, and risks of related parties in a transaction. It helps identify which entity controls key activities, owns or uses assets, and assumes risks. By mapping these elements across the value chain, functional analysis clarifies each party's contribution to profit generation. The correlation between functions, risks, and assets is critical, as it directly influences the allocation of income and the determination of arm's length pricing. (Muzychuk & Fomina, 2021, p. 939.)

Specifically, it is crucial to comprehend how the group as a whole generates value, the interdependencies of the functions carried out by associated enterprises within the group, and the specific contribution of these enterprises to the overall value creation. Furthermore, the legal rights and obligations of each party in performing their functions are relevant. While one party might execute a greater number of functions than the other, the economic significance of these functions, considering their frequency, nature, and value to the respective parties, is what truly matters (OECD, 2022, p. 46).

Consequently, when undertaking a functional analysis to understand commercial or financial relationships in fragmented activities, it is important to ascertain the degree of interdependence among these activities. If a high level of interdependence exists, the

nature of these interdependencies and the coordination mechanisms for the commercial activity to which the associated enterprises contribute must be determined (OECD, 2022, p. 47).

5.1 Case company

The case company develops and provides comprehensive software solutions for retail and supply chain planning. The group has customers in over 40 countries. The parent company is established in Finland, and it has 25 subsidiaries globally. The research will focus on the largest markets, including Finland, Sweden, Australia, Germany, and the UK. Figure 1 shows the organizational chart of the selected entities of the case group. The chart does not represent a full group structure. At the top is the "Parent Company," which is connected to five subsidiaries below it. The parent company has full ownership and control of its subsidiaries. Some of these countries also hold intellectual property rights. All the aforementioned countries are OECD members (OECD, 2025).

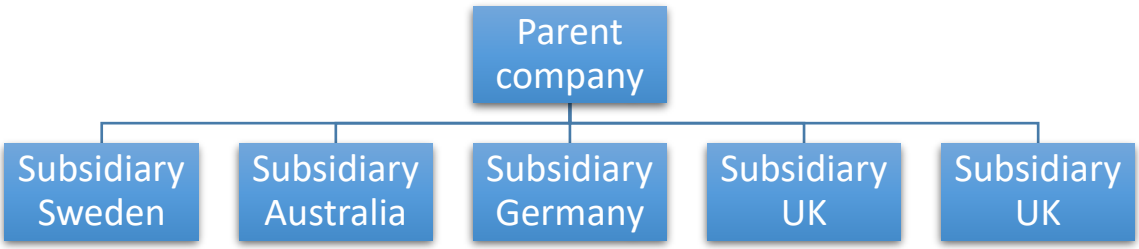


Figure 1. Organizational chart.

This thesis focuses on commercial intercompany relations, while financial relations are excluded due to the limited number within the group, and therefore, have minimal impact on the overall analysis. Concentrating on commercial relations enables a more comprehensive assessment of core business activities and their influence on transfer pricing outcomes. None of the Group companies has concluded advance pricing agreements or similar arrangements with their respective tax authorities.

The most significant intra-group transactions within the group include administrative services, marketing and sales services, and licensing of intangible assets. The parent entity invoices subsidiaries for administrative support services such as financial administration, IT, and HR. Most subsidiaries act as marketing and sales service providers, offering these services exclusively to the parent entity, including professional services. Additionally, the parent entity licensed selling rights and other rights related to legacy products from the UK, and distribution and development rights from subsidiaries in Australia and Sweden following an acquisition.

5.2 Functions performed

In determining the comparability of transactions for transfer pricing purposes, it is essential to assess the functions performed by each party. These may include research and development, product design, manufacturing, purchasing, marketing, distribution, transportation, and various support services such as legal and financial management. While eight key functions are commonly referenced, the list is not exhaustive, and additional functions may be relevant depending on the specific transaction context. (Reilly, 2020, p. 219.)

From the internal documentation review, four main functions can be identified, presented in figure 2. R&D activities are central to value creation in the software business, with the parent entity leading and controlling these efforts. Within R&D, the work is further categorized into new product development, where the parent entity owns the IP, and legacy products, which have been acquired through mergers and acquisitions. Subsidiaries in the UK and Sweden provide R&D services to the parent entity, while subsidiaries in Sweden and Australia also conduct their own R&D for the technology assets they own. Sales and marketing are also key to value creation, with most strategic decisions and pre-sales activities managed by the parent entity. Local sales teams in subsidiaries contribute by leveraging their knowledge of local markets and customer needs, but they operate under the guidance and control of the parent entity, effectively acting as service providers.

Professional services, such as software implementation, are supportive functions and are often sold by the parent entity, with subsidiaries providing these services as part of their sales and marketing roles. A significant portion of professional services is outsourced to external providers. Administrative support functions like finance, legal, IT, and HR are primarily centralized at the parent entity, which also oversees the administrative aspects of subsidiaries through its partner network. This centralized structure ensures consistency and efficiency across the group.

Functions typically align with the risks and assets involved in a transaction and are closely tied to the economic value they generate. Control over the most profit-driving functions gives tax authorities justification to claim taxing rights in the jurisdiction where those profits are created, reinforcing the link between functional control and tax allocation. (Muzychuk & Fomina, 2021, p. 939.)

Currently, functions are compensated using the transactional net margin method, which applies an appropriate markup to the total cost base. The UK subsidiary, which retains ownership of its legacy IP, is excluded from this model and instead receives compensation through licensing arrangements. Recently acquired subsidiaries in Sweden and Australia continue to develop their own legacy IP. In addition, they may perform R&D activities for the parent company's IP. Since these legacy assets are already licensed, the subsidiaries receive separate compensation for those R&D activities. Consequently, it is necessary to distinguish R&D costs related to legacy IP from the TNMM cost base to prevent double compensation for these activities.

5.3 Assets

In conducting a functional analysis, it is essential to evaluate both the type and nature of assets utilized in the transaction. This includes tangible assets such as plant and equipment, valuable intangibles, and financial assets. Additionally, characteristics such as the age, market value, location, and the level of legal protection for property rights must be

considered to ensure an accurate assessment of each entity's contribution to value creation. (OECD, 2022, p. 47.)

The parent entity owns significant intangible assets and conducts extensive R&D activities, ensuring that the ownership and governance of key intangible assets remain under its control. This includes performing the most critical development, enhancement, maintenance, protection, and exploitation functions. The parent entity's technological intangible assets include expertise in different technologies. Marketing-related intangible assets include brands, trademarks, distribution channels, customer relationships, and market knowledge. Intellectual property assets consist of software, business secrets, trademarks, trade names, domain names, patented inventions, and other copyrighted materials such as documentation, marketing, and sales materials.

The parent entity also owns servers and maintains agreements with external providers, alongside a growing network of business partners. Subsidiary UK and subsidiaries Australia and Sweden own certain legacy IP and old customer agreements. The parent entity pays royalties to the subsidiary UK for utilizing its legacy IP, while subsidiaries Australia and Sweden continue to develop and maintain legacy technology post-acquisition. These subsidiaries license necessary intangible assets to the parent entity for commercial and development purposes, with an annually declining licensing fee determined through IP valuation.

The subsidiaries whose main role is to carry out sales and marketing activities are not considered to own unique or particularly valuable intangible assets. Although these entities naturally possess certain forms of know-how, such as expertise in sales and marketing, technical knowledge, and established customer relationships, these are generally viewed as standard or routine intangibles. Similar types of assets are commonly found among independent companies operating in the same industry and, therefore, do not provide a distinct competitive advantage.

5.4 Risks

Risk in transfer pricing is inherently linked to uncertainty and potential reward. It is evaluated similarly to other business risks, with the principle that the entity assuming the greatest risk is typically entitled to the largest share of the profit. This relationship underscores the importance of accurately identifying and allocating risks in transfer pricing analysis. (Muzychuk & Fomina, 2021, p. 941.) As OECD guidelines (2022, p. 48) state, the risk is an indistinguishable part of business operations as companies perform commercial activities in order to generate profits. Certainly, there is always the possibility that the business opportunity will generate greater profits or that the expected return on investment falls short.

The parent entity is responsible for making the most significant business decisions and bears the majority of the business risks within the group. As the entity directly selling to customers and managing group-level costs, it is exposed to key risks, including software failures. Such failures could have severe consequences. Ensuring operational reliability of the software and addressing data management and privacy concerns are critical for mitigating these risks. However, similar risks can be identified in the subsidiaries that own the legacy IP, sell directly to customers, and perform R&D activities on their own IP.

6 Results

This chapter presents the research findings. The discussion of results follows the order of the research questions. The first subsection addresses the special challenges of intangible rights, the second focuses on the redefined transfer pricing method, and the third analyzes the effect on profitability.

6.1 Special challenges of intangible rights

Internal document review revealed that the group has flexibility in selecting price-setting mechanisms for related party transactions based on administrative or practical considerations. However, tax authorities evaluate the arm's length nature of these transactions using OECD Transfer Pricing Guidelines methods, such as the transactional net margin method. While groups may set prices using methods like adding a profit mark-up to costs, tax authorities are likely to assess the operating margin of either the vendor or purchaser to ensure compliance with arm's length principles. The choice of OECD transfer pricing method depends on the group's operating model and data availability.

In the interviews, the challenges related to defining and managing the group's operational model and intellectual property ownership were discussed. The discussion highlights challenges in applying OECD transfer pricing methods to intellectual property transactions due to the lack of comparable data. For example, royalty rates and commission systems used within the group are not directly based on traditional OECD methods like the comparable uncontrolled price method but are instead derived from internal valuation processes. This creates difficulties in aligning with OECD guidelines, as the group's methods rely on value assessments rather than external benchmarks. While newer OECD updates provide some justification for alternative methods in specific situations, the absence of reliable comparable data remains a key challenge in ensuring compliance with transfer pricing standards.

In addition, it was discussed regarding determining the value of intellectual property within the group between Swedish and Australian subsidiaries. The starting point is the external purchase price paid for the business, which serves as the basis for calculating the value of routine functions performed by the subsidiaries. Routine functions are considered standard operations that these entities will continue to perform in the future. The value of the IP is derived by subtracting the value of routine functions from the external purchase price. This IP value is then allocated through royalties, which are determined based on future revenue projections and valuation methods. The approach aligns with methodologies commonly used by tax authorities, such as Finland's tax administration, which evaluates external transaction prices and deducts routine functions to establish IP value. While the method is not directly linked to any existing OECD methods, it still follows the arm's length principle through external valuations and the royalty rates based on those. It is also noted in the OECD guidelines (2022, p. 281) that when conducting a comparability analysis for transactions involving intangibles "a transfer pricing analysis must consider the options realistically available to each of the parties to the transaction".

The interviewees mentioned that the current model for the UK, which splits responsibilities and benefits between entities, has not been functioning effectively. There are complexities in determining where valuable IP was created, whether it was created more, e.g. in Finland or the UK, and what the appropriate compensation should be. It was also highlighted that the need to ensure that the UK entity receives adequate compensation for its contributions, especially given that the parent entity currently controls and makes significant decisions regarding the IP. It was acknowledged that addressing these issues has been delayed, making it challenging to fix retrospectively, but it emphasizes that certain corrections are still necessary.

6.2 Redefined transfer pricing method

Currently, the entity has been applying the transactional net margin method as its main transfer pricing method. As explained in the interviews, the method was selected based

on pragmatic considerations, primarily due to its ease of application. Overall, the current method seems to be feasible, but certain problems can be identified related to legacy IPs. While easy to use, one risk in the model is related to over-simplification, which could result in too high compensation.

Based on the results of functional analysis, R&D activities performed for the legacy IP in subsidiaries in Australia and Sweden should be distinguished from the R&D activities performed towards the parent entity's IP. As OECD guidelines (2022, p. 273) state, the compensation based solely on cost reimbursement plus a modest markup does not always reflect the anticipated value or the arm's length price of the R&D team's contributions. In many cases, such an approach fails to capture the economic significance of the functions performed and the associated risks, particularly when these activities generate unique and valuable intangibles. Therefore, the legacy IP is compensated through royalties, whereas other R&D activities should be included in the cost base for markup compensation.

In practice, this division can be made either based on the proportion of personnel costs within each cost center or based on the number of personnel. The R&D personnel and expenses are reported under their own division, which makes the tracking more reliable. Both approaches are considered valid, and based on the initial calculations, there are no significant differences in the resulting percentages. However, as the divisional cost base is easily available from the financial data and is more accurate, it was chosen to be the basis for further distinction.

The basis for R&D categorization was clarified in collaboration with the R&D team. Initially, from a taxation perspective, the preferred method was to use hour-based data from project management systems. However, upon closer examination, it became evident that the distinction between current and legacy projects had not been made with sufficient accuracy to allow reliable data extraction. As a next step, an alternative solution was identified with the R&D team. The alternative method was a percentage-based

allocation method, relying on management's best estimate, which results are presented in table 5.

Table 5. R&D work categorization.

	Parent entity IP	**Legacy IP**
Subsidiary Australia	0%	100%
Subsidiary Sweden	19,09%	80,91%

After the percentages between R&D activities of the parent entity's IP and the legacy IP were identified, those were applied in the transfer pricing calculation model. For subsidiary Australia, all the R&D personnel expenses were deducted from the markup cost base. For subsidiary Sweden, the total R&D personnel expenses were split based on the management's estimates, and all the costs related to legacy IP were deducted from the cost base, whereas costs related parent entity IP were still included in the base.

6.3 Effect on profitability

Table 7 presents the profitability ratios with and without function split for three entities selected based on the findings in functional analysis: Subsidiary Australia, Subsidiary Sweden, and the Parent entity in Finland. The ratios analyzed are ROI, ROI-%, ROE, and ROA. Subsidiaries show extremely high ROI values compared to the parent entity. The subsidiaries appear highly profitable under both scenarios, while the parent entity shows losses. This suggests that the allocation of functions significantly impacts perceived profitability at the entity level. Function split reduces profitability ratios for subsidiaries but improves transparency and strengthens the arm's length principle. Therefore, the results from functional analysis distribute costs and revenues more accurately, reducing inflated profitability figures for subsidiaries and reducing the parent company's losses.

Table 6. Effect of the R&D function split on profitability.

	Legacy split	**Original method**	**Legacy split**	**Original method**	**Legacy split**	**Original method**
Ratio	Subsidiary Australia		Subsidiary Sweden		Parent entity	
ROI	237,25 %	284,75 %	1065,03 %	1664,35 %	-1,06 %	-1,65 %
ROI - %	39,53 %	42,47 %	29,41 %	36,51 %	-0,46 %	-0,70 %
ROE	62,93 %	63,96 %	44,73 %	51,70 %	-1,19 %	-1,83 %
Gross profit margin	78,16 %	80,27 %	71,72 %	74,70 %	90,13 %	89,66 %

In addition, it is to be noted that the lower profitability in subsidiaries will decrease the overall tax burden for the group. The parent entity will have decreased losses, but remains in a loss-making position, hence not generating taxable income. Whereas the subsidiaries have decreased profit, resulting in lower taxable income. In this scenario, the parent entity is located in a country where the corporate income tax rate, presented in table 7, is the lowest of the group countries. Still, Finland specifically is not considered a low-tax jurisdiction, and the difference to, e.g. Sweden is marginal. The enhanced arm's length principle resulted in 16,91% lower tax burden in Australia and 36,01% lower tax burden in Sweden.

Table 7. Tax rates (Tax Foundation Europe, 2025; Australian Government, 2025).

Country	**Corporate Income Tax Rate**
Finland	20,00 %
Sweden	20,60 %
Australia	30,00 %

7 Conclusion

The objective of this master's thesis was to examine how different transfer pricing methods can improve the profitability of a global PaaS corporation while ensuring compliance with international tax regulations and the arm's length principle. The analysis was grounded in the premise that effective transfer pricing strategies not only optimize financial performance but also support regulatory compliance, which is critical for multinational enterprises operating in the digital economy. The empirical part of the study addressed the following research questions:

1. How are the special challenges of intangible rights taken into account in transfer pricing?
2. Which transfer pricing method is the most optimal for the case company, and how should it be calculated and implemented going forward to improve practical outcomes?
3. How does the redefined transfer pricing method affect a company's profitability?

The empirical section answered these questions through a case study of a Finnish corporation with a business model heavily reliant on cloud-based intercompany transactions. It included a detailed description of the functional analysis process, which formed the basis for developing a tailored transfer pricing model. The study then evaluated the impact of the proposed method on profitability using quantitative financial data and qualitative insights, ensuring that the selected approach is practical, scalable, and aligned with the company's operational realities.

7.1 Main findings

A major challenge identified is the application of OECD methods to intangible assets due to the lack of reliable comparable data. Royalty rates and commission systems within the group rely on internal valuations rather than traditional OECD benchmarks, creating

compliance difficulties. Although recent OECD updates allow alternative approaches, the absence of comparables remains a critical issue.

These challenges are not new, as intangibles have historically been a significant source of transfer pricing disputes due to the difficulty of finding comparable transactions. Pricing intercompany transactions involving intangibles, particularly in the context of cloud computing, remains a complex challenge. The high level of integration in cloud business models makes it difficult to isolate value drivers and determine where value is created, complicating the application of transfer pricing rules. A lack of comparable independent transactions and the inherent differences between intangibles further exacerbate these challenges. In cases where comparable data is unavailable, alternative valuation methods that deviate from the arm's-length standard may be necessary. Additionally, the varying levels and types of risks retained by cloud service providers further reduce comparability between intercompany and unrelated transactions. (Mazur, 2016, pp. 659-683)

Also, Brauner (2008, pp. 106-107) recognizes that the valuation of intangibles using the market approach is significantly hindered by their natural uniqueness and complexity. Intangible assets often lack sufficient comparable transactions, and even when such comparables exist, firms are typically reluctant to disclose detailed information needed for establishing comparability and making appropriate adjustments. This lack of reliable data and the relative uniqueness of intangible-related information represent key obstacles to applying market-based valuation methods effectively. Similar challenges are recognized in OECD guidelines (2022, p. 280).

Overall, the challenges outlined in the previous studies (Mazur, 2016; Brauner, 2008) and OECD guidelines (2022) align closely with the findings from the interviews. Both highlight the lack of reliable comparable data as a major obstacle in pricing intangibles, particularly for cloud-based business models. The interviews also emphasized the difficulty in determining where value is created and how to fairly allocate compensation for contributions to IP development, which mirrors the previous studies' discussion on isolating

value drivers in the cloud. Furthermore, the interviews pointed out the need for alternative valuation methods, as traditional OECD transfer pricing methods often fall short in addressing the unique complexities of intangible assets and cloud services. All the sources underscore the need for updated guidance and methodologies to address these persistent challenges effectively.

Further, this thesis demonstrated that the current transfer pricing approach, based on the transactional net margin method, does not fully capture the economic contributions of entities performing significant R&D and owning intangible assets. The functional analysis revealed that subsidiaries developing legacy IP require separate compensation. The refined transfer pricing model, developed through qualitative insights and tested with quantitative financial data, resulted in a more accurate allocation of profits and improved alignment with the arm's length principle. Comparative analysis suggests that the new method enhances transparency and reduces compliance risks while maintaining profitability.

In relatively small adjustments to current transfer pricing methods, the group had a significant impact on the global tax rate. This finding is supported by Abdallah and Murtuza (2006, p. 7), who stated that strategic tax planning for intangible assets by multinational corporations can significantly influence their effective global tax rate without requiring substantial relocation of operational activities. Further, Kelley et al. (2016) highlight that it is critical for multinational enterprises to comply not only with the letter but also the spirit of the law, to avoid potential tax risks.

Implementing the refined model can improve compliance with OECD guidelines and reduce the risk of tax disputes. It ensures fair compensation for entities contributing unique intangibles and aligns profit allocation with value creation. This approach also strengthens documentation, which is critical for defending transfer pricing positions during audits.

7.2 Evaluation

According to Rautiainen et al. (2016), in constructive research, reliability is achieved through careful planning of the research process, disciplined execution according to the plan, and the preparation of a high-quality report documenting the design work. According to Porta (2008, p. 199), research validity relies on applying scientific inference to generalize beyond observed data. While large-N studies use statistical designs across many cases, small-N approaches, such as case studies, focus on a few cases to provide an in-depth understanding.

The research process was carefully planned and executed according to the predefined design. The interview framework was prepared, the interviews were recorded, and transcribed. Additionally, a report was prepared to describe the design work and its implementation, supporting transparency and reproducibility. Although the study follows a small-N approach typical of case studies, it provides an in-depth understanding of the phenomenon under investigation rather than statistical generalization. The research questions were linked to the theoretical framework, and the results were interpreted in relation to existing literature and OECD guidelines.

Furthermore, the inclusion of a market test as part of the research process strengthens the overall credibility of the findings. The key evaluation is whether any responsible manager has applied the developed construction in the actual decision making (Kasanen et al., 1993). In this case, the responsible manager was identified to be Head of Group Tax, who is leading the transfer pricing decisions. The transfer pricing method and calculations were redefined based on the findings of this study and are currently used in the group.

7.3 Limitations

When interpreting the research findings, it is important to consider the limitations of the study. While the findings are consistent with prior literature emphasizing the challenges

of valuing intangibles and the limitations of cost-based methods for R&D activities, the analysis is based on a single fiscal year and one case group, which limits generalizability. Therefore, depending on the group structure and the parties involved in the transactions, the results may vary. The study focused on the cloud services industry, specifically on the PaaS segment. This specific scope limits the applicability of the findings to companies operating in other industries.

In qualitative research, there is a risk that the researcher's own views and preconceptions may influence both the interview process and the analysis and interpretation of the data. In this research, only eight participants were interviewed, which may further restrict the generalizability of the results. Although qualitative research often prioritizes the depth and quality of interviews over sample size, a small number of participants can still affect the reliability of the findings. Since both the researcher and the interviewees approach the phenomenon from their individual perspectives, this can lead to interpretive bias and reduce the reliability of the study. Subjective factors may affect how the data is handled and how the results are ultimately formed.

Additionally, the study excludes financial transactions and focuses solely on commercial relations, which may omit certain tax implications. Data confidentiality constraints restrict the inclusion of detailed figures in the thesis and limit the clarity and reproducibility of the research. Further, reviewers may find it harder to assess the validity of the methodology and results when key data points can't be accessed, which can affect the perceived reliability of the research.

7.4 Future research

Future studies could expand the scope to include multiple fiscal years and additional jurisdictions to assess the long-term impact of refined transfer pricing models. Research could also explore the integration of profit split methods for highly integrated global value chains and examine the role of advance pricing agreements in mitigating uncertainty. Also, while no major findings were made for the German subsidiary, which is

mostly operating with routine transactions and doesn't own any IP, it was discussed in the interviews that, for further research, it could be assessed whether a sales commission-based full risk transfer pricing model could better reflect the true economic value.

Declaration of Generative AI and AI-assisted technologies

The thesis follows the University of Vaasa's guidelines for utilizing artificial intelligence in the preparation of the thesis.

During the preparation of this work, the author used Copilot and Google Gemini in order to research the suitability of different articles for the thesis. When planning the structure and content of the thesis, AI applications were used to improve the presentation and organization of the text. In addition, Grammarly was used for linguistic assistance. This included clarifying sentence structures, suggesting alternative phrasings, translations, and condensing the text.

However, no ready-made text was produced for the thesis using the application, and the material generated by the application was critically evaluated. After using the tools, the author reviewed and edited the content as needed and takes full responsibility for the content of the publication.

References

Abdallah, W. M., & Murtuza, A. (2006). Transfer pricing strategies of intangible assets, e-commerce and international taxation of multinationals. The International Tax Journal. vol. 32, iss. 2. https://heinonline-org.proxy.uwasa.fi/HOL/Page?collection=journals&handle=hein.journals/intaxjo32&id=60&men_tab=srchresults

Akhand, Z., & Mawani, A. (2023). Arm's Length Principle vs. Formulary Apportionment in BEPS Action 13: Stakeholders' Perspectives. Accounting in Europe, 20(2), 225-243. https://doi.org/10.1080/17449480.2023.2192356

Apriyanti, H. W., Sulaiman, S., & Jamaluddin, A. (2023). Transfer pricing optimization in the developing economy: A tax consultant's view. Corporate Governance and Organizational Behavior Review, *7*(2), 190–196. https://doi.org/10.22495/cgobrv7i2p17

Asetus Ison-Britannian ja Pohjois-Irlannin Yhdistyneen Kuningaskunnan kanssa tulon ja omaisuuden kaksinkertaisen verotuksen ja veron kiertämisen estämiseksi tehdyn sopimuksen voimaansaattamisesta 16.1.1970/2. Finlex. Referenced on 25.4.2025. https://www.finlex.fi/fi/valtiosopimukset/sopimussarja/1970/2

Asetus Pohjoismaiden välillä tulo- ja varallisuusveroja koskevan kaksinkertaisen verotuksen välttämiseksi tehdyn sopimuksen voimaansaattamisesta ja sopimuksen eräiden määräysten hyväksymisestä annetun lain voimaantulosta 15.5.1997/26. Finlex. Referenced on 25.4.2025. https://www.finlex.fi/fi/valtiosopimukset/sopimussarja/1997/26

Australian Government. (2025). Income tax for business. https://business.gov.au/finance/tax/income-tax-for-business

Avi-Yonah, R. S., & Xu, H. (2017). Evaluating BEPS. Erasmus law review, 10(1), 3-11. https://doi.org/10.5553/ELR.000080

Brauner, Y. (2008). Value in the eye of the beholder: the valuation of intangibles for transfer pricing purposes. Virginia Tax Review, 28(1), 79-164. https://heinonline-org.proxy.uwasa.fi/HOL/Page?lname=&public=false&collection=journals&handle=hein.journals/vrgtr28&men_hide=false&men_tab=citation_tab&kind=citation&page=79

Chen, S., Moinzadeh, K., Song, J., & Zhong, Y. (2023). Cloud Computing Value Chains: Research from the Operations Management Perspective. Manufacturing & service operations management, 25(4), 1338-1356. https://doi.org/10.1287/msom.2022.1178

Fife, S. T., & Gossner, J. D. (2024). Deductive Qualitative Analysis: Evaluating, Expanding, and Refining Theory. International Journal of Qualitative Methods, 23. https://doi.org/10.1177/16094069241244856

Hirsjärvi, S., & Hurme, H. (2022). Tutkimushaastattelu: Teemahaastattelun teoria ja käytäntö (2. painos). Gaudeamus.

Holtzman, Y., & Nagel, P. (2014). An introduction to transfer pricing. The Journal of management development, 33(1), 57-61. https://doi.org/10.1108/JMD-11-2013-0139

Huang, Y. (2024). International law framework for the taxation of cross-border transactions in cloud computing services. Applied mathematics and nonlinear sciences, 9(1), . https://doi.org/10.2478/amns-2024-1992

Jiménez, A. J. M. (2019). The External Tax Strategy of the EU in a Post-BEPS Environment. IBFD.

Juranek, S., Schindler, D., & Schjelderup, G. (2018). Transfer pricing regulation and taxation of royalty payments. Journal of public economic theory, 20(1), 67-84. https://doi.org/10.1111/jpet.12260

Kallunki, J. (2022). Tilinpäätösanalyysi. Alma Talent.

Kasanen, E., Lukka, K., & Siitonen, A. (1993). The constructive approach in management accounting research. Journal of management accounting research, 5, 243.

Kelley, T. J., Koontz, D. L., & Kadet, J. M. (2016). Profit Shifting: Effectively Connected Income and Financial Statement Risks; Multinational Corporations Could Be Subject to High Levels of Tax on Effectively Connected Income. Journal of Accountancy,vol. 221. https://www.journalofaccountancy.com/issues/2016/feb/profit-shifting-effectively-connected-income.html

Keuschnigg, C., & Devereux, M. P. (2013). The arm's length principle and distortions to

multinational firm organization. Journal of international economics, 89(2), 432-440. https://doi.org/10.1016/j.jinteco.2012.08.007

Kirjanpitolaki 31.12.1997/1336. Finlex. Referenced on 16.04.2025. https://www.finlex.fi/fi/lainsaadanto/1997/1336

Knuutinen, R. (2020). Verosuunnittelun oikeudelliset ja yhteiskunnalliset rajat. Alma Talent Oy.

Kukkonen, M., & Walden, R. (2016). Pk-konsernin verosuunnittelu (2. uudistettu painos.). Talentum Media Oy.

Kuosmanen, T. (2014). Siirtohinnoittelu tulo- ja arvonlisäverotuksessa. Helsinki Law Review, 2014(2), 149-182.

Kuznyetsov, O., Maslov, V., Kuznyetsova, A., Alieksieiev, I., Bila, Y., & Mazur, A. (2025). Essence, criteria and conditions for choosing transfer pricing methods. Financial & Credit Activity: Problems of Theory & Practice, 3(62), 108–119. doi: 10.55643/fcaptp.3.62.2025.4810

Lang, M. (2019). Implementing Key BEPS Actions: Where Do We Stand? IBFD.

Lukka, K. (2002). The Constructive Research Approach. https://www.researchgate.net/publication/247817908_The_Constructive_Research_Approach

Lukka, K. (2005). Approaches to case research in management accounting: the nature of empirical intervention and theory linkage. Accounting in Scandinavia–The northern lights, 375-399.

Marr, B., & Chatzkel, J. (2004). Intellectual capital at the crossroads: Managing, measuring, and reporting of IC. Journal of intellectual capital, 5(2), 224-229. https://doi.org/10.1108/14691930410533650

Mazur O. (2016). Transfer Pricing Challenges in the Cloud. BCL Rev. vol. 57, iss. 2. https://heinonline-org.proxy.uwasa.fi/HOL/Page?lname=&public=false&collection=journals&handle=hein.journals/bclr57&men_hide=false&men_tab=toc&kind=&page=643

Merton, R., Fisk, M. & Kendall, P. 1956. The focused interview: a report of the bureau of applied social research. New York: Columbia University.

Morgan, D. L. (2014). Integrating qualitative and quantitative methods: A pragmatic ap proach. Thousand Oaks, Calif: Sage. https://doi.org/10.4135/9781544304533

Muzychuk, M. I., & Fomina, O. V. (2021). Functions, assets and risk analysis in the prep aration of transfer pricing documentation. Universal Journal of Accounting and Finance, 9(5), 935–945. https://doi.org/10.13189/ujaf.2021.090505

OECD. (2013). Action Plan on Base Erosion and Profit Shifting, OECD Publishing. http://dx.doi.org/10.1787/9789264202719-en

OECD. (2018). Guidance for Tax Administrations on the Application of the Approach to Hard-to-Value Intangibles, BEPS Action 8-10. OECD/G20 Base Erosion and Profit Shifting Project, OECD, Paris https://doi.org/10.1787/5e402215-en

OECD. (2022). OECD Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations 2022. OECD Publishing, Paris. https://www.oecd.org/en/publications/oecd-transfer-pricing-guidelines-for-multinational-enterprises-and-tax-administrations-2022_0e655865-en.html

OECD. (2025). Members and partners. https://www.oecd.org/en/about/members-partners.html

Oluwafunmike, E., Ibidapo, O., Godwin, A., Hope, O., & Bamidele, O. (2022). Optimizing corporate tax strategies and transfer pricing policies to improve financial efficiency and compliance. (2022). Journal of Advance Multidisciplinary Research, 1(2), 28-38. https://synstojournals.com/multi/article/view/147

Ouelhadj, A., Bouchetara, M., & Zerou ・, M. (2023). Transfer Pricing and Financial Performance: The Case of Algerian Companies. Financial Sciences, 28(1). https://doi.org/10.15611/fins.2023.1.03

Porta, D. d. (2008). Comparative analysis: Case-oriented versus variable-oriented re search. Cambridge University Press. https://doi.org/10.1017/CBO9780511801938.012

Putra, A. L., & Saptono, H. W. (2021). Comparability Analysis in Transfer Pricing: Problem and Guideline in Selecting the Most Appropriate Method. Journal of Research in Business and Management. Volume 9. Issue 1, 18-25.

Rautiainen, A., Sippola, K., & Mättö, T. (2016). Perspectives on relevance: The relevance

test in the constructive research approach. Management Accounting Research, 34, 19–29. https://doi.org/10.1016/j.mar.2016.07.001

Reilly, R. (2020). Functional Analysis in the Intellectual Property Valuation, Damages, or Transfer Price Measurement. Ies Nouvelles – Journal of the Licensing Executives Society, Volume LV No. 3. https://ssrn.com/abstract=3658634

Sureth-Sloane, C., Schreiber, U., Rohlfing-Bastian, A., Overesch, M., & Greil, S. (2023). Towards an Amended Arm's Length Principle: Tackling Complexity and Implementing Destination Rules in Transfer Pricing. Intertax, 51(Issue 4), 272-289. https://doi.org/10.54648/TAXI2023024

Tasavallan presidentin asetus Australian kanssa tuloveroja koskevan kaksinkertaisen verotuksen välttämiseksi ja veron kiertämisen estämiseksi tehdyn sopimuksen voimaansaattamisesta ja sopimuksen lainsäädännön alaan kuuluvien määräysten voimaansaattamisesta annetun lain voimaantulosta 23.11.2007. Finlex. Referenced on 25.4.2025. https://www.finlex.fi/fi/valtiosopimukset/sopimussarja/2007/91

Tax Foundation Europe. (2025). Corporate Income Tax Rates in Europe, 2025. https://taxfoundation.org/data/all/eu/corporate-income-tax-rates-europe/

Tian, George Yijun. (2018). Cloud computing and cross-border transfer pricing: implications of recent OECD and Australian transfer pricing laws on cloud related multinational enterprises and possible solutions. Rutgers Computer and Technology Law Journal, 44(1), 33-92.

Torkkeli, A., & Kukkonen, M. (2020). The role of BEPS as an accelerator for corporate capital gains taxation reforms in the European Union. Nordic tax journal, 2020(1), 15-28. https://doi.org/10.2478/ntaxj-2020-0002

United Nations. (2017). Practical Manual on Transfer Pricing for Developing Countries. https://www.un.org/esa/ffd/wp-content/uploads/2017/04/Manual-TP-2017.pdf

Valtioneuvoston asetus tuloveroja koskevan kaksinkertaisen verotuksen välttämiseksi ja veron kiertämisen estämiseksi Saksan kanssa tehdyn sopimuksen voimaansaattamisesta ja sopimuksen lainsäädännön alaan kuuluvien määräysten

voimaansaattamisesta annetun lain voimaantulosta 26.10.2017. Finlex. Referenced on 25.4.2025. https://www.finlex.fi/fi/valtiosopimukset/sopimussarja/2017/86

Valtiovarainministeriö. (2025). Verosopimukset. https://vm.fi/verosopimukset1

Verohallinto. (2021). Voimassa olevat verosopimukset. https://www.vero.fi/syventavat-vero-ohjeet/ohje-hakusivu/49062/voimassa_olevat_verosopimukse/

Verohallinto. (2024). Yhteisöjen globaali vähimmäisverotus (OECD:n pilari II). https://www.vero.fi/tietoa-verohallinnosta/uutishuone/verotuksen_muutoksia/yhteis%C3%B6jen-globaali-minimiverotus-oecdn-pilari-ii/

Verohallinto. (2025a). Verosopimukset. https://www.vero.fi/henkiloasiakkaat/vero kortti-ja-veroilmoitus/suomesta_ulkomaille/verosopimukset/

Widjaja, G. (2021). Impact of transfer pricing toward benefits and sustainable of multinational hotel industry.Linguistics and Culture Review,5(S4), 2090-2101. https://doi.org/10.21744/lingcure.v5nS4.1927

Woodside, A. G. (2016). Case Study Research. Emerald Publishing Limited.

Yin, R. K. (1994). Case study research: Design and methods (2nd ed.). Sage Publications.

Appendices

Appendix 1. Interview framework

Themes covered in the interviews.

1. Introduction and context setting
2. Current transfer pricing practices
3. Functional segmentation and value creation
4. Intangible assets and cloud services
5. Compliance and risk management
6. Strategic outlook