Master thesis

A global formulary apportionment in a world of separate entities, is the (tax) world ready yet?

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“Expressing my heartfelt gratitude to everyone who have made it possible for me to experience my final year as a student writing this thesis while being part of an international tax reform.”

Abbreviations

ADB	Asian Development Bank
ATAF	African Tax Administration Forum
BEFIT	Business in Europe: Framework for Income Taxation
BEPS	Base Erosion and Profit Shifting
CARF	Crypto-Asset Reporting Framework
CbC	Country-by-Country
CCTB	Common Corporate Tax Base
CCCTB	Common Consolidated Corporate Tax Base
CIT	Corporate Income Tax
CUP-method	Controlled-Uncontrolled Price method
DEMPE	Development, Enhancement, Maintenance, Protection, Exploitation
EC	European Commission
EU	European Union
FA	Formulary Apportionment
FX	Foreign Exchange
FAR	Functions, Assets, Risks
GloBE	Global anti-Base Erosion
IF	Inclusive Framework
IP	Intellectual Property
IMF	International Monetary Fund
MAP	Mutual Agreement Procedure
MLC	Multilateral Convention (to Implement Amount A)
MNC	Multinational Corporation
MNE	Multinational Enterprise
MTC	Model Tax Convention
MDSH	Marketing and Distributions profits Safe Harbour
OECD	Organisation for Economic Cooperation and Development
OECD TPG	OECD Transfer Pricing Guidelines
R&D	Research and Development
STTR	Subject-To-Tax-Rule
TNMM	Transactional Net Margin Method
UK	United Kingdom
UN	United Nations
US	United States
UTPR	Undertaxed Payments Rule
VAT	Value-Added Tax

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1. Introduction

1.1. Introductory remarks on the research

The discussion surrounding the usage of formulary apportionment is not one that is only relevant to this time period. When the international tax rules, as it is still currently used, were invented by the League of Nations in the 1920s, one of the primary questions was whether to use a formula-based allocation of profits or use one that is based on our current system with physical presence.[1] [2] Considering how the times were back then, with factories and few internationally operating organisations, it was much more practical to decide that aligning with a 'brick-and-mortars' principle for taxation is the most viable solution. From that point onwards, the international tax system as we know it was created, relying on a separate entity approach.[3]

The question whether formulary apportionment is a better system has been a point of discussion for many years after that, but the answer has remained firmly that it is not the case. To further underpin these discussions against formulary apportionment, we can possibly look at international guidance. For example, in the OECD Transfer Pricing Guidelines (hereinafter: OECD TPG), there is a chapter dedicated to the discussion whether transfer pricing or formulary apportionment would be a better and feasible option. The conclusion derived from that (political) discussion is that the current system – of transfer pricing, tax treaties and mitigating double taxation – is a practical solution to most of these problems surrounding taxing rights and allocation of profits arising from international taxation.[4]

However, the combination of globalisation and digitalisation have placed significant pressure on the current system of international taxation. Where the current system is based predominantly on taxpayers having a physical presence in a jurisdiction before that jurisdiction may tax over their taxable income, digitalised companies like Google, Apple and Meta and additionally the e-commerce sector are not constrained by this criterium.[5] They could operate, from a distance, using the internet in market jurisdictions from which revenue is being generated without an entity or a permanent establishment. Since these digitalised multinational enterprises (MNEs) are more often than not situated in rich, first world countries, it might seem unfair that those revenue might get taxed in a country that essentially does not need that additional tax compared to a market jurisdiction.[6] Furthermore, there is an expected

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[1] A.W. Oguttu, *The parallel rise of multinational enterprises and the historical development of international tax rules – introspection for the new rules to tax the digital economy,* Bulletin for International Taxation, Vol. 76 no. 10 (2022), IBFD, paragraph 5.
[2] V. Chand, A. Turina, L. Ballivet, *Profit allocation within MNEs in Light of the ongoing Digital Debate on Pillar 1 – A "2020 Compromise"? From using Facts and Circumstances Analysis or Allocation Keys to Predetermined Allocation Approaches,* World Tax Journal (August 2020), IBFD, paragraph 1.
[3] Ibid.
[4] Referring to paragraphs 1.19-1.31 of the OECD TPG, to be read here: https://read.oecd-ilibrary.org/taxation/oecd-transfer-pricing-guidelines-for-multinational-enterprises-and-tax-administrations-2022_0e655865-en#page37
[5] R. Collier, *The Evolution of Thinking on Tax and the Digitalization of Business 1996-2018,* World Tax Journal (May 2023), IBFD, paragraph 2.1.
[6] M.D. Astuti, *Three Approaches to Taxing Income from the Digital Economy – Which Is the Best for Developing Countries?,* Bulletin for International Taxation (December 2020), IBFD, paragraph 4.1.

uncertainty that taxable profits might not end up being taxed in the jurisdiction where the headquarters are situated, which might result in profit shifting.

To try and address this issue, the Organisation for Economic Cooperation and Development (hereinafter: OECD) has launched Action Report 1 on tackling challenges arising from the digital economy.[7] Within Action Report 1, several proposals are being developed. The main report is centred around Amount A of Pillar One, which is reallocating excess profits of the biggest multinationals to market jurisdictions.[8] This project is essentially built around a formula-based reallocation of profits, albeit one that is heavily limited in its scope of applicability. This thesis will be conducting research on Amount A, and it's sales-based single factor allocation key.[9] Additionally, Action Report 1 is also centred around the taxation of the platform economy.[10] This is less relevant for the thesis since it is predominantly a VAT-related project. Another topic is the taxation of cryptocurrencies which can be read in the Crypto-Asset Reporting Framework (CARF), although this is also less relevant for the thesis.[11]

As mentioned in the previous paragraph, the first foray into applying a formulary apportionment of taxable profits have already begun in the form of Amount A. Some authors believe that Amount A is a failure.[12] Therefore, based on this project, it is highly interesting to research whether Amount A is enough, or whether an extended system based on multiple allocation keys is necessary to essentially consider a formula to be a neutral and equitable international allocation of taxable profits of MNEs.

1.2. Research question

The principal research question of this thesis is formulated as follows:

Would the usage of a global formulary apportionment, and thereby following allocation keys, provide for a more neutral and equitable allocation of tax revenues?

To better delineate the different research topics associated with the principal research question, a series of sub questions will be answered within the 3 substantive chapters of this thesis after which a conclusion will be provided in chapter 5. The separate sub questions are therefore formulated as follows:

[7] To be read here: https://www.oecd.org/tax/beps/beps-actions/action1/
[8] Introduction can be read here: https://www.oecd.org/tax/beps/multilateral-convention-to-implement-amount-a-of-pillar-one.htm
[9] A. Pepper, J. Coleman, T. D. Bettge, *Why It's Still Not Time for Global Formulary Apportionment,* Tax Notes International, Volume 107 (August 2022).
[10] R. Collier, *The Evolution of Thinking on Tax and the Digitalization of Business 1996-2018,* World Tax Journal (May 2023), IBFD, paragraph 3.2.3.
[11] For more information, see: https://www.oecd.org/tax/international-standards-for-automatic-exchange-of-information-in-tax-matters-896d79d1-en.htm
[12] A. B. Moreno, Y. Brauner, *Pillar One and Alchemy: What Can We Learn from Past Mistakes,* INTERTAX, Vol. 51 issue 12 (2023), Kluwer Law International.

Chapter 2: What is a formulary apportionment and how does it compare to our current international tax system?

Chapter 3: How does the Multilateral Convention to implement Amount A of Pillar One function as a reallocation of taxing rights and does it sufficiently encompass the needs for a global formulary apportionment?

Chapter 4: How could a system of global formulary apportionment be defined as and would that result in a more neutral and equitable international tax system?

1.3. Delineation of the research

First and foremost, this research will not delve too deep on the political aspects of these international tax systems. From a subjective perspective, the politics involved in solely Amount A is staggering and would most likely not be in favour of a full-fledged global formulary apportionment. This thesis will therefore mainly describe the technicalities and possibilities surrounding the topic, specifically on 'larger' MNEs (i.e., exceeding EUR 750 million consolidated turnover).

Secondly, this thesis will for the most part touch upon the topic of international taxation. As has been recently published, the European Commission has provided for a BEFIT-proposal which is a proposal building upon the failed C(C)CTB-proposals for a formulary apportionment within the EU.[13] [14] BEFIT is different since it will most likely be based on an optionality regime for applying transfer pricing rules.[15] However, there is a 5-year review clause whereby after 5 years there could still be a political decision for a formula-based allocation within the EU.[16] These proposals will only be described at a high level in chapter 4 to provide for alternatives and to research whether they provide important lessons.

Lastly, a slight emphasis will be placed on the usage of allocation keys. Allocation keys are central to the application of a formulary apportionment. As described before, within Amount A the allocation key used is one based on a sales allocation key. In the C(C)CTB-proposal, three allocation keys play a key part in deciding which country may tax over a certain amount of taxable profit. These are labour, assets and sales.[17] It is therefore interesting to focus which allocation keys are needed for there to be a usable

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[13] See for BEFIT: Proposal for a COUNCIL DIRECTIVE on Business in Europe: Framework for Income Taxation (BEFIT), European Commission, COM/2023/532 final: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52023PC0532&amp%3Bqid=1700565513879

[14] See for the CCCTB: Proposal for a COUNCIL DIRECTIVE on a Common Consolidated Corporate Tax Base (CCCTB), European Commission, COM/2016/0683 final – 2016/0336 (CNS): https://www.europarl.europa.eu/legislative-train/package-action-plan-on-corporate-taxation/file-common-consolidated-corporate-tax-base-(ccctb)

[15] Not yet clear as there are three options for BEFIT as can be read in chapter 1 of the proposal. Considering the political history of the C(C)CTB, there is an expectation that an EU formulary apportionment will not happen.

[16] See article 77 of the BEFIT-proposal.

[17] R. Offermans, S. Huibregtse, L. Verdoner, J. Michalak, *Bridging the CCCTB and the Arm's Length Principle – A Value Chain Analysis Approach,* European Taxation (November 2017), IBFD, paragraph 2.2.

allocation, and what the limit is for the allocation to be practical. Another point following this would be to investigate which allocation keys could furthermore mitigate tax avoidance or lessen complexity.

1.4 Main findings

This thesis provides an overview of both the arm's length principle and formulary apportionment. It is noted that the arm's length principle has some shortcomings that does not reflect the intended outcome of the arm's length principle in situations where there are group synergies, financial guarantees, captive insurance companies and intangibles. The concept of formulary apportionment could solve such issues plaguing the arm's length principle. A first movement towards a formulaic approach, the Multilateral Convention to implement Amount A of Pillar One, is currently being negotiated at the OECD which incorporates a sales-based allocation key and is effectively layered on top of the current international tax system. This process provides many lessons into the movement towards a global formulary apportionment, as it seems that an immediate movement towards such a system is impossible at this moment in time. Therefore, Amount A, or a similar approach, can be deemed as a first iteration transitional rule towards a global formulary apportionment, whereby multiple transitional rules are needed to incorporate additional components with the end goal being: a full-fledged global formulary apportionment.

2. Setting the normative framework for a global formulary apportionment

2.1 Introduction

In the past decade, the tax world has undergone a drastic change with the coming of the OECD's Base Erosion and Profit Shifting (BEPS-)project. Due to large scale tax avoidance schemes of multinational enterprises (MNE) all over the world, a need for a revamp of the international tax system was highly necessary. In this context, the OECD-secretariat and its subsidiary bodies received a G20 mandate, along with many other countries in what is now called the Inclusive Framework (IF), set out to work together to research and propose better policies to mitigate such tax avoidance.

One of those Action Reports included Amount A of Pillar One and the taxation of the digitalised economy, which is based on a sales-based formulary apportionment. Before we discuss Amount A, it is firstly of importance to deduce what exactly formulary apportionment entails. This chapter will describe the general acceptable definition of a formulary apportionment as well as its counterpart the arm's length principle. Furthermore, considerations between both systems and some case studies will be described, as it is a necessary exercise to correctly delineate what exactly a formulary apportionment for purposes of this thesis should be made out of.

2.2 Formulary apportionment versus the arm's length principle

2.2.1 History

The discussion whether the arm's length principle or a system using a formulary apportionment should be used for international tax purposes has originated around the 1920s when the League of Nations first started drafting the principles on which international taxing rights should be divided between jurisdictions to prevent double taxation.[18] Double taxation was seen as an impediment and therefore a couple economic scholars were appointed to draft several economic principles on which these rules should be based upon. Three base principles were created, as Graetz & O'Hear described, which were 1. "The classification and assignment of specific categories of income to source or residence should be determined by an objective test, economic allegiance." 2. "Tax practices across the globe tended to underestimate the contribution of residence and to reflect a misguided belief in the naturalness and rightness of source-based taxation." 3. "Progressivity in income taxes should be the prerogative of the residence jurisdiction."[19]

[18] E. Ash, O. Marian, *The making of International Tax Law: Empirical Evidence from Natural Language Processing*, NTA 2017-12, paragraph II. a.

[19] M. J. Graetz, M. M. O'Hear, *The "Original Intent" of U.S. International Taxation*, 46 *Duke Law Journal* 1021-1110 (1997), available at: https://scholarship.law.duke.edu/dlj/vol46/iss5/2S.

Using those principles as a starting point, a draft convention was created in 1935 and then revised in Mexico-City and London which essentially created the OECD and United Nations (UN) offshoots.[20] But even before the drafting of these model conventions, the discussion arose via which manner profits should be allocated, and conversely taxed, whenever companies operated internationally to potentially minimise shifting of profits as well as nullifying double taxation. Indeed, double taxation was seen as an extremely distortive economic inefficiency.[21] It was agreed then that national taxes should apply to the business profits of those parts of a firm operating in each jurisdiction, ensuring that each part of an international company was treated as a local business.[22] To accomplish this aim, the arm's length principle and consequent separate-entity, or separate accounting, approach was invented.[23] The different branches of companies were considered to be standalone and should be operating independently of the other parts, and should be considered standalone too for tax purposes.[24]

However, as formulated in the Carroll report, a consideration was made on the principle of unitary taxation even though the base principle still applied in current tax treaties is that of the arm's length principle.[25] Caroll mentioned in his report that by comparing tax systems globally, most jurisdictions already had a system similarly in place as the separate accounting method – even though it was not expressly codified in law – which considered corporations to be separate, and only in some select jurisdictions a fractional apportionment method was applied.[26] Furthermore, in a subsequent German report it was accepted that a fractional apportionment was superior in practice and would, in practice, be used in many situations where a separate assessment was not feasible, except this approach was practically impossible to adopt from a political perspective.[27]

2.2.2 The current principles applied in the allocation of international taxing rights: the arm's length principle as the chosen standard

The arm's length principle has become the accepted principle of allocating taxing rights over intercompany transactions done by multinational corporations (MNC) between jurisdictions. This paragraph won't go too much into residence and source taxation[28], however those principles are also

[20] UNCTAD Series on issues in international investment agreements, UNCTAD/ITE/IIT/16, United Nations, New York and Geneva, 2000, https://unctad.org/system/files/official-document/iteiit16_en.pdf

[21] J. Lammers, T. D. Magalhães, *Breaking the Double Tax Paradigm,* World Tax Journal, Vol. 16 no. 1 (2024), IBFD, paragraph 1.

[22] S. Picciotto, *Towards Unitary Taxation of Transnational Corporations,* Tax Justice Network 2012, paragraph I.I.

[23] Ibid.

[24] See also the Carroll Report 1933.

[25] L.C. Célestin, *The Formulary Approach to the Taxation of Transnational Corporations: A Realistic Alternative?,* Doctoral Thesis University of Sydney, October 2000, https://core.ac.uk/download/pdf/41229867.pdf

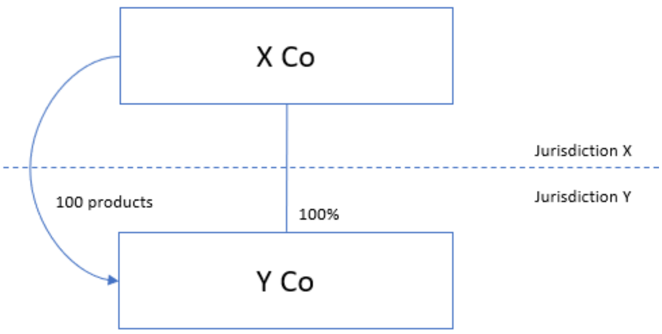
[26] Ibid, page 30. These were applied in the U.S.: Wisconsin, New York and Massachusetts, but also in Switzerland, Austria and some other jurisdictions.

[27] S. Picciotto, *Towards Unitary Taxation of Transnational Corporations,* Tax Justice Network 2012, paragraph I.4.

[28] R. Maheshwari, *Are the Revenue Sourcing Rules of the OECD's Pillar One Fulfilling the Objective of Taxing Value Creation,* Bulletin for International Taxation (July 2023), IBFD, paragraph 2.2.

leading into determining the taxing rights of jurisdictions.[29] This is with good reason considering in the 1920s and '30s business models were, compared to today's standards, relatively simple with mostly brick-and-mortar businesses. Thus, it was relatively easy to consider which entities or permanent establishments were within a jurisdiction, and therefore which jurisdiction was able to tax over their profits. Transfer pricing and the arm's length principle, with some additions and modifications over the years, had become a robust system and most importantly it was a system that was practical enough for tax administrations to apply.

The definition of the arm's length principle is described in the OECD's Transfer Pricing Guidelines, depicting an agreement made by jurisdictions as an international standard.[30] The arm's length principle finds its application through article 9 – Associated Enterprises – of the OECD model tax convention (MTC).[31] As transfer prices occur between associated enterprises, it is only natural that the arm's length principle is applied via article 9. Associated enterprises are inherently different compared to independent enterprises, as associated enterprises are not bound by third-party negotiations and their financial and commercial relations prevail over independent enterprises.[32] These intragroup transactions are thus named "controlled transactions". To combat the abusive practice of shifting profits or pricing intercompany transactions at lower prices, at which no well-thinking third-party would offer those services or products, transfer pricing and the arm's length principle have been the leading international standard to minimise distortion of market forces and tax avoidance schemes.[33]



So how does transfer pricing work in practice then? To best explain transfer pricing, it is convenient to visualise an opposite situation where the arm's length principle is not applied using an example shown on the right. Assume that X Co and Y Co are part of a multinational group that operate in jurisdictions X and Y. Y Co is a 100% subsidiary of X Co, and they both trade in wooden furniture. In this situation X Co has sold 100 units of wooden tables to Y Co which Y Co will subsequently sell to third-parties, both consumers and businesses. Let's further assume that the effective corporate tax rate

[29] Source countries retain the primary taxing right over active business income, while residence countries have the taxing right over primarily passive income flows. See R. de Mooij, L. Liu, D. Prihardini, *An Assessment of Global Formula Apportionment,* IMF Working Paper, WP/19/213, paragraph II.A.
[30] OECD (2022), OECD Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations 2022, OECD Publishing, Paris, https://doi.org/10.1787/0e655865-en.
[31] OECD (2017), Model Tax Convention on Income and on Capital: Condensed Version 2017, OECD Publishing. http://dx.doi.org/10.1787/mtc_cond-2017-en
[32] OECD TPG, paragraph 1.2.
[33] Noting that such transactions may not always have the intention to avoid taxes or to distort the market, more so that it might be a very complex operation to accurately delineate what exactly a correct or market pricing is.

in jurisdiction Y is 25% and in jurisdiction X it is 15%. To reiterate, the cases below do not yet take the arm's length principle into account.

Assumption 1: high intercompany price

If those 100 units were sold by Y Co at a price of 100 to third-parties and the intercompany price for those 100 units were also at 100, then that would result in most likely a loss at the level of Y Co as no costs have been calculated yet. On the pricing between Y Co and third-parties, nothing materially can be said in this context since this is effectively the market working. However, on the transaction between Y Co and X Co, the profits of the products are being shifted from jurisdiction Y to jurisdiction X. When looking at the overall picture, it would benefit the group as a whole since the effective corporate income tax rate in jurisdiction X is much lower than in jurisdiction Y. This is not a preferred outcome in the context of taxation.

Assumption 2: low intercompany price

If the same facts and circumstances apply, except for that the transaction between X Co and Y Co is now priced at a mere 10 instead of 100, that would imply that Y Co has the ability to sell those products at a much lower price than its competitors. Let's say those competitors usually sell at a price of 100, but Y Co then sells those products at a price of 50, that would completely distort the market in jurisdiction Y. The risk of such occurrences is that Y Co may, due to its low pricing, be able to push out the competitors and possibly monopolise the market. Therefore, this situation is not a preferred outcome in the context of economics.[34]

Applying the arm's length principle

Out of those two assumptions, the logical conclusion follows that such practices are not beneficial for the market and, by extension, not for taxation. So then, how does the arm's length principle apply and arrange for an equitable treatment between associated and independent enterprises? Indeed, the arm's length principle provides for a more equal treatment of independent and associated enterprises for tax purposes by treating those associated enterprises as if they are wholly independent.[35] The guidance the

[34] While there are most probably more than these two assumptions applicable in practice, these two show clearly the disadvantages of not having rules in place to regulate intragroup pricing. NB: this is also without taking into account any further nuances that might be needed to fully assess the outcomes.
[35] OECD TPG, paragraph 1.8.

OECD's TPG proposes to then accurately delineate the financial or commercial relations and to apply the arm's length thus as follows:[36]

Comparability analysis

The comparability analysis is based on a comparison of the conditions in a controlled transaction with the conditions that would have been made had the parties been independent and undertaking a comparable transaction under comparable circumstances.[37] The first step is to identify the commercial or financial relations between the associated enterprises as well as the conditions and economically relevant circumstances attaching to those relations so that the controlled transaction is accurately delineated. The second step is to compare the conditions and the economically relevant circumstances of the controlled transaction with comparable transactions between independent enterprises.[38] Steps to be taken that will result in a theoretically accurate delineation are:[39] [40]

- The contractual terms of the transaction. Contracts form the formal basis for a transaction that often show the responsibilities, obligations and rights, assumption of identified risks, and pricing arrangements of the associated parties.[41] This forms the starting point of the analysis.
- The functional analysis (or sometimes named the FAR-analysis). The functional analysis seeks to analyse what exactly the parties to the transaction do. The relevant aspects to this analysis are to "consider the economically significant activities and responsibilities undertaken, assets used or contributed, and risks assumed" by the associated parties.[42] In other words, the functions that are undertaken, such as those related to management or transport, the assets used in that transaction, which might be related to intangibles, and the risks involved in that transaction, such as transport risks, FX-risks and market risks, need to be analysed so that a detailed picture emerges where the economic distribution between parties is shown. By default, the analysis of risks involved is one that is highly important as an increase of risks borne by a party should also increase their profit return.[43]
- The characteristics of property transferred or services provided. In this step it is necessary to correctly analyse the differences in the specific characteristics of the property and services that are being transferred, since those differences often change the value of the property or services.[44]

[36] Ibid, paragraph 1.33.
[37] Ibid, paragraph 1.33.
[38] Ibid, paragraph 1.33.
[39] Ibid, paragraph 1.33.
[40] Ibid, paragraph 1.36.
[41] Ibid, paragraph 1.42.
[42] Ibid, paragraph 1.51.
[43] Ibid, paragraph 1.56. Note that the delineation of risks requires significant additional steps to be undertaken, which, for the sake of brevity, will not be discussed further.
[44] Ibid, paragraph 1.127.

The characteristics of the property or services that the OECD TPG provides as examples could be related to i.e., the physical features of the property, quality and reliability and in the case for services it could be related to protection of IP.[45]

- The economic circumstances of the parties and of the market in which the parties operate. This step relates to the market in which the parties operate in. Since arm's length prices often vary between different markets it is important to qualify the markets the parties are operating in, some examples that might have an impact are geographic location, size of the market and competition.[46]
- The business strategies pursued by the parties. Taking into account particular business strategies is an interesting topic since business strategies may impact pricing. One such example is the market penetration scheme which could temporarily reduce pricing.[47]

Transfer pricing method

The second phase is then considering which relevant factors are used in a transfer pricing analysis when making comparisons between the controlled transactions and uncontrolled transactions to determine the arm's length price for the controlled transaction.[48] The transfer pricing methods can be divided into two categories, the traditional transaction methods and transactional transfer pricing methods.[49]

The pricing methods prescribed in the OECD TPG, without going too much into detail, are:

- Controlled-uncontrolled price (CUP-)method – This method essentially compares controlled transactions with uncontrolled transactions, where possibly the price in the controlled transaction needs to be substituted with the uncontrolled transaction.[50]
- Resale price method – The resale price method takes the intercompany price as a starting point after which a gross margin is added into the price that would result in a satisfactory profit.[51]
- Cost-plus method – As the name already implies, this method takes the costs involved in a transaction after which a percentage is added onto those costs which would result in an appropriate profit.[52]

[45] Ibid, paragraph 1.127.
[46] Ibid, paragraph 1.130.
[47] Ibid, paragraph 1.135.
[48] Ibid, paragraph 1.39.
[49] Ibid, paragraph 2.1.
[50] Ibid, paragraph 2.14.
[51] Ibid, paragraph 2.27.
[52] Ibid, paragraph 2.45.

- Transactional net margin method (TNMM) – The TNMM provides a taxpayer with the possibility to calculate the net profit from a transaction after a functional analysis of both controlled and uncontrolled transactions.[53]
- Transactional profit split – The profit split aims to take a granular approach in splitting profits associated with a transaction especially when there are valuable and hard-to-value assets involved, aligning with economic reality.[54]

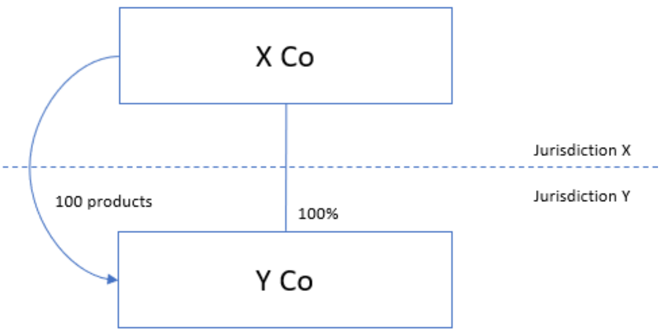
Outcome

The theoretical outcome for independent enterprises is that they will compare possible transactions with other transactions that are realistically available to them. They will only enter into a transaction if it benefits them the most, and it is not expected that they will be worse off than the next option.[55] Of course, this is slightly nuanced in practice in certain circumstances, but in general terms this is indeed how enterprises function in a capitalistic market.

The outcome of such a comprehensive analysis would then lead to a transaction between associated enterprises, which is compared to an uncontrolled transaction, and by the comparability analysis an uncontrolled transaction was found that is identical to the controlled transaction. Once that comparable has been found, the controlled transaction is then supposed to have the same remuneration applied as the uncontrolled transaction in broad terms.[56] Therefore, in a perfect world by following this principle, the controlled transaction would then be remunerated at the exact, or almost exact, same level as the uncontrolled transaction as if there were wholly independently operating enterprises in the market.

Practical application

So then, taking the same example as shown on the right with the same facts and circumstances described above, the following steps are to be undertaken for a correct transfer pricing analysis. Note that this analysis is extremely high level and in a practical setting there would be many nuances included.



[53] Ibid, paragraph 2.64.
[54] Ibid, paragraph 2.114.
[55] Ibid, paragraph 1.38.
[56] Or using certain pricing methods such as the TNMM, a margin for remuneration of profit can be chosen.

As noted above, the steps will be followed as described in the OECD TPG to delineate the controlled transaction in question without going too much into detail.

1. Determine the contractual terms of the transaction;
2. Do the functional analysis;
3. Determine the characteristics of property transferred or services provided;
4. Determine the economic circumstances of the parties and of the market in which the parties operate; and
5. Determine the business strategies pursued by the parties.

Then, once the transaction has been delineated, a transfer pricing method can be applied. In practice the TNMM is applied relatively often. Some of the other methods are rarely used due to their strict requirements for application while the TNMM is the most pragmatic approach.

A benchmark analysis provides the margins to be applied to that transaction with Y Co being the tested party. An assumed conclusion is then that a certain net profit margin may be allocated to Y Co, usually around 4-6% in Europe notwithstanding the specific circumstances that might apply. This effectively makes it that the arm's length principle allocates taxing rights over jurisdictions, with jurisdiction Y being allowed to tax over that net amount left in Y Co related to the transaction. The rest of the supposed profit related to that transaction is then taxable in jurisdiction X.

However, while it theoretically might seem quite comprehensive, the arm's length principle has its shortcomings which the OECD also acknowledge in the TPG.[57]

2.2.3 Is the arm's length principle still fit for purpose? An assessment of situations where the arm's length principle does not sufficiently capture the intended outcome

There are situations where the arm's length principle, and by extension transfer pricing, arguably does not work as intended. Four situations that will be highlighted here are the transfer pricing considerations surrounding group synergies, financial guarantees, captive insurance companies and intangibles.

One issue MNEs make use of that the OECD does not always sufficiently provide guidance for is the extent of group synergies benefitting the group. Group synergies in short are benefits that the group receives due to, for example, its size. Internally, many processes can be streamlined which provides more efficiency. Efficiency then translates into better margins compared to having to negotiate with third-parties. Indeed, due to group synergies, it can occur that a distribution entity would have received a much higher remuneration, but due to a comparability with an independent entity that would not enjoy

[57] Such as in paragraph 1.10 of the OECD TPG.

such benefits, the remuneration is set at a lower value by disregarding the benefits of group synergies.[58] This implies that more residual profits are pooled at the entities that are more often than not situated in more developed countries. Another related issue would then be that multinational corporations abuse the system by using transfer mispricing schemes to shift losses to profit making entities.[59] This can be considered as an 'unfair' allocation.

Financial guarantees is the next transfer pricing issue that is considered to be 'contentious and difficult' when applying the arm's length principle.[60] Financial guarantees are part of chapter X of the OECD TPG on financial transactions.[61] The TPG defines financial guarantees as such: "In general, a financial guarantee provides for the guarantor to meet specified financial obligations in the event of a failure to do so by the guaranteed party."[62] Indeed, in short a financial guarantee is effectively the shifting of risks between associated parties when in certain situations the associated party is not able to fulfil its obligations to a(n external) loan.[63] The concept of implicit support is thereby an important factor in deciding the arm's length price associated to the financial guarantee.[64] However, to quantify the 'implicit support' and the corresponding guarantee fee that is to be calculated from the uplift of credit rating that is related to the guarantee is a highly complex process, consisting of two approaches: the group rating approach, or the stand-alone rating approach.[65] It seems that by using this approach, the question arises whether the TPG contradicts itself when implicit support should be taken into account when calculating a group member's credit rating, as that would deviate from the separate entity approach.[66] Indeed, the concept of financial guarantees might be an issue that is not fully captured by the arm's length principle.

Captive insurance companies are also part of chapter X of the OECD TPG.[67] The TPG defines captive insurance as such: "In this guidance, the term captive insurance is intended to refer to an insurance undertaking or entity substantially all of whose insurance business is to provide insurance policies for risks of entities of the MNE group to which it belongs."[68] Essentially, the MNE group has a designated entity that 'captures' the risks of all group members in return for an insurance (and in some cases a reinsurance) premium. An MNE group might have several reasons to set up such an entity, including lowering administrative costs as compared to insuring with a third-party, reducing vulnerability to

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[58] R. Bernstein, Y. Hervé, *On the Elusive Implications of Group Synergies for Transfer Pricing: The Elephant in the Room,* International Transfer Pricing Journal, Vol. 31 no. 1 (2024), IBFD, paragraph 4.2.
[59] K. Yoshimura, *Summary and conclusions,* in: *Sharing and shifting of corporate losses – The new profit shifting,* IFA Cahiers de Droit fiscal international, Vol. 107A (2023), IFA, paragraph 2.2.
[60] A. Hickman, M. H. B. Moura, *Transfer Pricing of Financial Guarantees: The Limits of Arm's Length and a Practical Solution,* INTERTAX, Vol. 51 issue 1 (2023), Kluwer Law International, paragraph 1.1.
[61] OECD TPG, paragraph 10.154 et seq.
[62] OECD TPG, paragraph 10.155.
[63] A. Hickman, M. H. B. Moura, *Transfer Pricing of Financial Guarantees: The Limits of Arm's Length and a Practical Solution,* INTERTAX, Vol. 51 issue 1 (2023), Kluwer Law International, paragraph 2.3.
[64] A. Sulejman, *Pricing Intercompany Financial Transactions: Loans, Guarantees and Cash-Pooling Arrangements,* International Transfer Pricing Journal, Vol. 26 no. 6 (2019), IBFD, paragraph 3.2.3.
[65] Ibid, paragraph 3.2.4.
[66] Ibid, paragraph 3.2.3.
[67] OECD TPG, paragraph 10.189 et seq.
[68] OECD TPG, paragraph 10.190.

market fluctuations, using it as a leverage against excessively high external insurance premiums and lastly, providing a method for insuring against risks that cannot be insured by a third-party.[69] Especially the last one shows the complexity of calculating a risk premium for a transaction that would de facto not happen with a third-party, as the risks involved would be deemed as too high for that third-party. Furthermore, captives are also known to be used improperly as they are often set in jurisdictions with flexible regulations on income received from such premiums and investment income.[70] For the concept of captive insurance companies, it might seem that the arm's length principle does not fully capture the proper application of intra-group pricing of risk premiums related to those captive insurances.

The fourth issue relates to the pricing of transactions that include intangibles. Intangibles and intellectual property have become an increasingly important part of the business of an MNE, as the value of those MNEs and transactions are attributable to the intangibles such as patents, trademarks and brands.[71] The TPG had already been updated to include a DEMPE-analysis approach, which aims to correctly align the usage of intangibles with value creation, i.e., providing a correct remuneration to the group entity that actually carries the intangibles instead of shell entities.[72] Although the guidance is quite extensive, actually applying a DEMPE-analysis seems to be quite a challenge in practice as the DEMPE functions are oftentimes carried by multiple entities within the group.[73] This fact makes it that a fully separate entity approach towards calculating the correct remuneration for a transaction a very complex matter. This situation shows that, while guidance might be extensive, actually applying it in practice illustrates that the arm's length principle might not fully capture the proper pricing.

The four situations described all have in common that they can be considered as not fully working as intended when applying the arm's length principle. So, then the question is, is there a solution that can be used in contrast to the arm's length outcomes? The concept of formulary apportionment might be able to solve such issues.

2.3 Global formulary apportionment as a concept

The previous paragraphs have outlined how the current system of the arm's length principle and transfer pricing are the leading system for allocating taxable profits between jurisdictions in an intragroup fashion. However, in certain situations it seems that the arm's length principle has shortcomings. The concept of formulary apportionment (FA) might be a solution to those shortcomings.

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[69] V. Chand, *Transfer pricing aspects of captive insurance arrangements: Recommendations to the OECD,* Praxis-Forum, IFF Forum für Steuerrecht (2017), IFF-HSG, paragraph 3.1.
[70] Ibid, paragraph 3.3.
[71] V. Chand, G. Lembo, *Intangible-Related Profit Allocation within MNEs based on Key DEMPE Functions: Selected Issues and Interaction with Pillar One and Pillar Two of the Digital Debate,* International Tax Studies (6-2020), IBFD, paragraph 1.
[72] Ibid. DEMPE refers to Development, Enhancement, Maintenance, Protection, Exploitation.
[73] Ibid, paragraph 5.1.1.

As noted in 2.2, at some point in history the decision was made not to align with the principle of unitary taxation and fractional apportionment. In this section the formulary apportionment will be described, firstly by defining what exactly a formulary apportionment is with a historical context. Then, some of the key considerations discussed in literature are described that needs to be addressed when designing a formulary system. Those considerations will be taken into account for the benchmark formula for purposes of this thesis.

2.3.1 Defining a formulary apportionment

Firstly, before further discussion, it is imperative to define what exactly a global formulary apportionment means. Paragraph 1.17 of the OECD TPG, for example, defines what the concept of a global formulary apportionment entails:

"Global formulary apportionment would allocate the global profits of an MNE group on a consolidated basis among the associated enterprises in different jurisdictions on the basis of a predetermined and mechanistic formula. There would be three essential components to applying global formulary apportionment: determining the unit to be taxed, i.e. which of the subsidiaries and branches of an MNE group should comprise the global taxable entity; accurately determining the global profits; and establishing the formula to be used to allocate the global profits of the unit. The formula would most likely be based on some combination of costs, assets, payroll and sales."[74]

Indeed, several important points are immediately raised in this citation. The global FA would allocate profits on a consolidated basis instead of through the separate accounting method. And instead of a case-by-case facts and circumstances analysis, a predetermined and mechanistic formula is applied. Then, three important components are listed. First is the scope of which entities and branches fall within the application of the formula, second is a consolidated accounting practice (that then translates into a consolidated corporate tax base) that should be (in theory) identical all over the world[75], and finally deciding on the formula with the relevant allocation keys.[76]

While this might seem slightly esoteric from the outset, it might be of relevance to go both back in time and to analyse past and present national tax systems that are based on a formulary apportionment.

[74] OECD TPG, paragraph 1.17.
[75] See for example the Proposal for a COUNCIL DIRECTIVE on a Common Consolidated Corporate Tax Base (CCCTB), European Commission, COM/2016/0683 final – 2016/0336 (CNS): https://www.europarl.europa.eu/legislative-train/package-action-plan-on-corporate-taxation/file-common-consolidated-corporate-tax-base-(ccctb)
[76] R. de Mooij, L. Liu, D. Prihardini, *An Assessment of Global Formula Apportionment,* IMF Working Paper, WP/19/213, paragraph II.A.

2.3.2 A comparative and historical assessment of formulary apportionment

While a global FA does not exist, there are several subnational systems of FA currently in existence (and have previously been in existence).[77] To name a few, the US, Canada, Japan, Germany, Switzerland, Australia and France in the 19th century.[78] For this thesis, it seems most relevant to highlight the US, Canada and Germany in a comparative setting and analyse how their subnational FA has been designed at a high level.

The United States

Historically the US, and more specifically its States, have used formulary apportionment to distribute taxable income of companies operating in multiple States among each other since the early twentieth century.[79] Indeed, Wisconsin was the first State in 1911 to adopt a corporate income tax (CIT) that applied a formulary apportionment using a formula including shares of property, cost of manufacturing and sales.[80] Since then almost all US States have a form of formulary apportionment implemented.[81] The reason is that within the US CIT is levied at federal and at State level so a taxpayer that operates between States is bound to be subject to several States' tax law.[82] By moving towards FA, the risk of double taxation is therefore reduced.

At some point, US States apportioned taxable income on the basis of the Massachusetts three-factor formula that gives equal weight to the allocation keys of property, payroll and destination-based sales between States.[83] In other words, the allocation keys are based on certain labour figures, the number of assets involved in a State and finally some form of metric where sales are taken into account.[84] However, currently the US States have changed the weight when calculating the allocation with some States even applying a 100% weight only for the sales-based allocation key.[85] With this came the principal idea that the business is considered to be fully consolidated for the allocation of the taxable base, or in other words a 'unitary business'.[86] What did change in the current subnational systems is the way the weighting has been redistributed.

[77] Ibid, paragraph I.
[78] Ibid, paragraph I. See also S. Chen, *Towards a Neutral Formulary Apportionment System in Regional Integration,* EUCOTAX Series on European Taxation 71 (2023), paragraph 1.1.2.
[79] T. Matheson, S. Beer, M. Coelho, L. Liu, O. Luca, *Formulary Apportionment in Theory and Practice,* International Monetary Fund, 26 February 2021, DOI: https://doi.org/10.5089/9781513511771.071, p. 292.
[80] European Commission, Directorate-General for Taxation and Customs Union, Weiner, J., *Formulary apportionment and group taxation in the European Union – Insights from the United States and Canada*, Publications Office, 2005, paragraph 2.1.2.
[81] Ibid.
[82] S. Chen, *Towards a Neutral Formulary Apportionment System in Regional Integration,* EUCOTAX Series on European Taxation 71 (2023), paragraph 3.2.3.1.
[83] T. Matheson et al, IMF, p. 293.
[84] See also UDITPA and the MTC for a more in-depth history of the harmonisation of formulary apportionment in the US.
[85] Ibid.
[86] S. Chen, *Towards a Neutral Formulary Apportionment System in Regional Integration,* EUCOTAX Series on European Taxation 71 (2023), paragraph 3.2.3.3.

Canada

The Canadian apportionment differs from the US FA as it's firstly an elective system that only applies to corporations that have permanent establishments in more than one Canadian province on the basis of a formula that equally shares payroll and destination-based sales.[87] The reason why it's an elective system is due to the fact that Canadian law does not allow for consolidation of groups, making a formulary apportionment impossible between incorporated entities, and only leaves room open for FA between branches and other unincorporated entities.[88] In essence, branches and other unincorporated entities in other provinces may then be qualified as consolidated with an incorporated entity in a province that allows for FA.[89] This differs significantly with the US and is relatively speaking a small-scale FA system due to its limited scope, albeit one that is considered successful.

Germany

Germany is made up of sixteen federal states and allows for the apportionment of trade tax and corporate income tax.[90] An interesting comparison shows that in contrast to the US and Canadian FA, the German apportionment of trade and corporate tax is based on only a single factor related to the splitting of wage costs incurred.[91] For the trade tax, the apportionment is based solely on the ratio of wage totals without prejudice of other factors that might be involved, with the objective to share the burden that trade might create between municipalities.[92] For the apportionment of corporate tax, some steps are to be taken into account. Firstly, there are four stages related to the sharing corporate income tax between both the states and the federal government. The first stage is dividing the corporate income tax by half, equally shared by the federal states and the federal government.[93] The second stage is then apportioning that half to the other relevant federal states. While initially there are no clear rules on how it should be apportioned, it seems that for purposes of practicability the total wage costs are used for the sharing of corporate income tax as it was considered to be justified for reasons of 'since and to the extent that the wage- and revenue-related keys approximately express the national tax power of the respective operating unit'.[94] Therefore, while the subnational apportionment in Germany is dissimilar to the previous two systems, there is one overlapping aspect which is the recognition of 'labour' as an important allocation key within FA.

[87] T. Matheson et al, IMF, p. 294. See also: R. de Mooij, L. Liu, D. Prihardini, *An Assessment of Global Formula Apportionment,* IMF Working Paper, WP/19/213, Table I.
[88] Ibid.
[89] Only eight out of 10 Canadian provinces allow for FA.
[90] S. Müller-Thomczik, L. Reiter, *Splitting of Corporate Taxes in Germany and Formulaic Distribution of a CCCTB – Critical Comparison*, Central European Economic Journal (2022), 9(56), p. 269-290.
[91] Ibid.
[92] Ibid.
[93] Ibid.
[94] Ibid.

A short summary of the above can be described in a table below:

	Allocation factors		
Jurisdictions	*Sales*	*Labour*	*Assets*
US	X	X	X
Canada	X	X	
Germany		X	

2.3.3 Conceptual and technical aspects surrounding the formulary apportionment in relation to a fairer allocation of tax jurisdiction

With a better view of how certain jurisdictions have set up their subnational FA, it is further necessary to delineate the key technical aspects that surround the principle of apportionment. As has been described before, there are three key components to create such an apportionment system.[95] It needs to be decided which of the subsidiaries and branches of an MNE should be included in the scoping of a global consolidated group. Secondly, a consolidated tax base needs to be calculated on an equal basis, and finally the establishing of the formula.

However, before the technical aspects are decided upon, it is necessary to describe some economic and legal principles, since the design of such rules should follow those principles. Those principles are in my view related to a fair allocation of taxing rights. Fairness is a subjective concept. In my view, fairness consists therefore of the principles set out below.

2.3.3.1 Principled approach

For the principled approach in my view the theoretical framework set out by dr. Chen, who also references Musgrave, is a comprehensive approach. The principles laid out in her doctoral thesis align with many of my own opinions on this topic, so therefore those will be described at a high level. These principles are the benefit principle and the principle of market neutrality.[96] Additionally, in my view the principle of value creation and inter-nation equity should also be taken into account when opting for allocation keys based where more weight is given as to where i.e., products or services originate from. The reason for this addition is that dr. Chen does not directly touch upon the principle of inter-nation equity due to her reasoning that the EU-market functions differently as compared to fully sovereign

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[95] G. Cottani, *Formulary Apportionment: A Revamp in the Post-Base Erosion and Profit Shifting Era?,* INTERTAX Vol. 44 issue 10 (2016), Kluwer Law International, paragraph 1.

[96] S. Chen, *Towards a Neutral Formulary Apportionment System in Regional Integration,* EUCOTAX Series on European Taxation 71 (2023), paragraph 2.1.1.

jurisdictions.[97] In an international context, the assumption is therefore that fiscal autonomy is not always hindered by the internal market.

Benefit principle and the ability-to-pay principle

Taxation inherently distorts the economic optimal outcome. Tax is deadweight loss and therefore disrupts the optimal outcome – Pareto-efficient – from an economic perspective (i.e., an example could be that when taking a supply and demand curve the perfect economic outcome would naturally occur in a world without distortions such as additional tax costs).[98] However, taxes are providing two benefits for taxpayers and companies. On one hand, companies may use the legal system of a jurisdiction as well as the protection that jurisdiction provides it for doing business. On the other hand, that tax revenue will also go into public spending, providing improved infrastructure, education and more fundamentally the preservation of said jurisdiction via national defence.

Therefore, even though taxation is inherently a disruptive measure, as dr. Chen has written it, citing: "'benefits' should not be understood as specific benefits offered or received but should be understood as 'all relevant public goods maintaining a market' as taxpayers are presumed to be using those public services."[99] Conversely, taxation is justified by this benefit principle, however it does not immediately mean that all forms of taxation are inherently good forms of taxation. Taxation that exceeds the optimal level of taxation that would be justified by the public benefits received by taxpayers, implies an inefficient form of taxation.[100] Based on this idea, when designing tax policy using FA, it has to be designed in such a way that would benefit public spending, but also not exceed the necessary amount to be taxed for an optimal economic outcome.[101] This idea will be further cemented by the neutrality principle.

Additionally, the ability-to-pay principle is also related to this benefit principle. The ability-to-pay principle prescribes that individuals pay tax on their income whether it is derived domestically or abroad.[102] In principle, it is argued that parent companies are taxed on their worldwide income when it is entirely owned by domestic shareholders, and the idea that the local taxation of foreign subsidiaries should be given a tax credit by the parent jurisdiction.[103] However, when that parent company is owned partly by foreign shareholders, this principle does not hold ground entirely, which would make countries

[97] Ibid.
[98] Ibid, paragraph 2.1.2.
[99] Ibid.
[100] Ibid.
[101] Ibid.
[102] M. P. Devereux, J. Vella, *Value creation as the Fundamental Principle of the International Tax System,* European Tax Policy Forum Policy Paper (2018), SSRN, paragraph 3.
[103] Ibid.

require that domestic companies that are owned by foreign shareholders not be taxed vis-à-vis foreign companies that are (partly) owned by domestic shareholders.[104]

Market neutrality

The second principle is related to market neutrality. Market neutrality is linked to several key principles. These are the tax neutrality principle, capital import neutrality, capital export neutrality and capital ownership neutrality which are mostly economic principles.[105] These principles and concepts take into account economic production efficiency, i.e., the more efficient a company is the better its production output and therefore it has an increased competitive power in the market.[106]

The concept of market neutrality provides that the tax laws should not favour one company over another competing company, as it might result in a less efficient company having a competitive advantage over a more efficient company.[107] The concept of capital ownership neutrality then assumes that there are differences in efficiency between companies, which is why that for such differences the more efficient company should not be restricted in buying an asset from a less efficient company.[108]

Capital export neutrality notes that any investment done by any company must bear a similar effective tax rate in any location of investment, as in a situation where there is no capital export neutrality the company may be coaxed to create products in a less efficient location due to tax considerations.[109] Capital import neutrality on the other hand implies that – in a situation where there is no international trade – the condition for the absence of any distortion in the market is equivalent to capital import neutrality: that all firms operating in a given jurisdiction should bear the same effective tax rate. However, in a situation where there is international trade, companies will compete against each other in different jurisdictions. Therefore, in such a situation, any company competing in any of the different markets must face the same effective tax rate which then results in a market neutrality.[110]

Finally, tax neutrality is in my view arguably the most important aspect of designing international tax policy. It does not mean that the other concepts are less, since each concept and principle is built on each other. The concept of tax neutrality implies that tax considerations should not drive the economic decisions of, i.e., business engaged, or potentially engaged, in a cross-border activity.[111] One great example showing vis-à-vis tax non-neutrality would be the case of tax avoidance using the “double Irish

[104] Ibid.
[105] M. P. Devereux, S. Loretz, *Evaluating Neutrality Properties of Corporate Tax Reforms,* Oxford University Centre for Business Taxation, WP 10/07 (2014), paragraph 1.
[106] Ibid, paragraph 2.1.
[107] Ibid.
[108] Ibid.
[109] Ibid.
[110] Ibid.
[111] D. Hasen, *Tax Neutrality and Tax Amenities,* Florida Tax Review: Vol. 12, Article 2 (2023), paragraph 1.

with a Dutch Sandwich" structures, where multinationals such as Google were able to drastically lower their effective tax rate.[112] In very high level terms, this structure uses a mismatch of rules between the US, Ireland and the Netherlands to abuse both tax treaty provisions and national rules via royalty payments with the sole intent to minimise the effective tax rate and to shift profits.[113] The tax rules in place have in this case effectively generated tax non-neutrality since companies were actively searching, using and abusing tax rules in place to increase profits, therefore the economic decisions of businesses were driven by tax reasons. For true tax neutrality to be in place, the tax rules should feel as if they are invisible to business operating cross-border and are to be accepted as being there at all times. Whenever an option would arise to abuse certain structures, there should be an immediate backstop or anti-avoidance measure in place that blocks such activities. This is a lofty aspiration to pursue, but is quite difficult in practice to achieve in my opinion, since certain businesses will always find a way to exploit loopholes.[114]

Value creation

As described in economic literature, taxation has three functions, which are: "macro-economy stabilisation, redistribution, and resource allocation."[115] To achieve a status-quo, the principles described above are of key importance. However, to fully grasp the equilibrium between jurisdictions' taxing power, the idea of where value should be taxed is formed. Furthermore, not only the dividing of value needs to be assessed, but also how a fair taxing right over cross-border investments should be visualised via the inter-nation equity principle.

Value creation is a term that gained traction following the BEPS-project. When analysing OECD publications, notably Action Reports 8-10 on Aligning Transfer Pricing Outcomes with Value Creation, the foreword describes value creation as, citing: "Weaknesses in the current rules create opportunities for base erosion and profit shifting, requiring bold moves by policy makers to restore confidence in the system and ensure that profits are taxed where economic activities take place and value is created".[116] Value creation refers thus to where economic activities take place, which is then the base for taxation. The way the OECD applies this concept is for example via the revision of the OECD TPG on using

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[112] E. Burkadze, *Interaction of Transfer Pricing Rules and CFC Provisions,* International Transfer Pricing Journal, Volume 23 no. 5 (2016), IBFD, paragraph 2.2.
[113] M. Brittingham, M. Butler, *OECD Report on Base Erosion and Profit Shifting: Search for a New Paradigm or Is the Proposed Tax Order a Distant Galaxy Many Light Years Away?,* International Transfer Pricing Journal, Volume 20 no. 4 (2013), IBFD, paragraph 6.
[114] Although this statement in my opinion also correlates with the idea of tax morality. See for an explanation of tax morality this article: N. Memon, *How to Tax Small Businesses in the Informal Economy: A Comparative Analysis of Presumptive Income Tax Designs,* Bulletin for International Taxation, Vol. 64 no. 5 (2010), paragraph 2.3.3.
[115] S. Chen, *Towards a Neutral Formulary Apportionment System in Regional Integration,* EUCOTAX Series on European Taxation 71 (2023), paragraph 2.2.3.
[116] OECD (2015), Aligning Transfer Pricing Outcomes with Value Creation, Actions 8-10 - 2015 Final Reports, OECD/G20 Base Erosion and Profit Shifting Project, OECD Publishing, Paris. http://dx.doi.org/10.1787/9789264241244-en

Development, Enhancement, Maintenance, Protection and Exploitation (DEMPE-)functionalities to delineate where intangibles are situated.[117] This then theoretically reveals who the owner of said intangible is for purposes of deciding whether royalty-payments are accurately depicting the economic reality within transfer pricing arrangements. Conversely, this then shifts those royalty-revenues to the jurisdiction where the intangible is realistically located. By aligning to the economic reality, it will generate tax revenue which is in line with value creation. In other words, value creation can be defined as a source principle.[118]

But what does value creation actually mean in conceptual terms? From a conceptual point of view, before the BEPS-project was started, the argument was that profit was not taxed where value was created.[119] According to Devereux, there are four options available for taxing multinational enterprises, these are: the residence of the ultimate shareholder, the residence of the ultimate parent company, the location of subsidiaries and permanent establishments of the multinational enterprise, and the residence of its customers.[120] With the advent of the BEPS-project, the first three options are accounted for in terms of aligning with economic reality. However, in the current tax system, no taxing right is given to market jurisdictions, as it is argued that no value is being created by the mere presence of a consumer. On the other hand, it is thus noted that under the existing taxing right the taxing rights are allocated to jurisdictions where the supply side takes place but not the demand side.[121] Indeed, taking the example of Actions 8-10, a weight has been placed into correctly valuing the first three options described by Devereux, but no weight has been placed on the location of the consumers.[122] This seems like an outcome that is not aligning with economic reality, since consumers are an important factor for doing business. Indeed, as it will be described under chapter 3 on Amount A, there has been some significant progress made to align this idea with using a destination-based allocation of taxing rights.

Inter-nation equity

The final crucial piece of the principle puzzle is related to the concept of inter-nation equity as described by Peggy Musgrave.[123] The concept of inter-nation equity as a metric determines how the rights to tax should be distributed among jurisdictions.[124] This concept was later revised to include arguments for allocating the international tax base in a way that acknowledges the entitlement of countries to tax

[117] Ibid, paragraph 6.32.
[118] J. Hey, *"Taxation Where Value is Created" and the OECD/G20 Base Erosion and Profit Shifting Initiative,* Bulletin for International Taxation (April/May 2018), IBFD, paragraph 2.3.
[119] J. Li, N. J. Bao, H. C. Li, *Value Creation: A Constant Principle in a Changing World of International Taxation,* Canadian Tax Journal (2019) 67:4, 1107-34.
[120] M. P. Devereux, J. Vella, *Value creation as the Fundamental Principle of the International Tax System,* European Tax Policy Forum Policy Paper (2018), SSRN, paragraph 3.
[121] Ibid, paragraph 4.1.
[122] Ibid, paragraph 4.2.1.
[123] P. B. Richman, *Taxation of Foreign Investment Income: An Economic Analysis,* The Johns Hopkins Press (1963).
[124] I. Ozai, *Inter-Nation Equity Revisited,* Columbia Journal of Tax Law (2020), Vol. 12:58, paragraph I.

domestic income while accounting for some level of international redistribution.[125] Therefore, inter-nation equity concerns the question of how to divide the international taxing rights among jurisdictions when a business residing in one country earns income in another country.[126] An important note to be made here is that inter-nation equity deals more specifically with the allocation of national gain and loss, and less the allocation of tax revenue.[127]

In the view of the Musgraves, inter-nation equity is "exclusively determined by how much tax jurisdiction is allocated to the source country".[128] There are four alternatives that justify taxation in the source state, these are: "benefit taxation, source taxation, national rental charges and redistribution".[129] The tax rate applied in the source country will determine how much international gain is transferred from the residence country to the source country and thus illustrate how taxing rights are divided between the residence country and the source country.[130] Some principles that could aid in determining the tax rate in the source country are the principle of non-discrimination, national rental and the distributional approach.[131] However, I would tend to argue that this is less relevant for this thesis, since the thesis is not explicitly trying to analyse the different tax rates between jurisdictions. In my opinion, the tax rates are part of the fiscal sovereignty of a nation, and therefore it is not necessary to go in-depth into that topic for the sake of brevity. Moreover, the GloBE-rules already aim to implement a global minimum tax rate of 15%.

However, two components that are of importance to inter-nation equity and to this thesis are then the entitlement component and the differential component. Firstly, the entitlement aspect of inter-nation equity is based on the concept of sovereignty and is reflected in the benefit principle, which dictates that the right to tax should be proportional to the benefits received from each country's provision of public goods and services.[132] Secondly, the differential component is an idea that international taxation should be informed by a moral requirement of redistribution from high- to low-income countries as it is argued that along with this idea, a differentiated tax rate should be applicable based on a country's level per capita income.[133] However, the redistribution aspect of the Musgraves' work is still secondary to the entitlement component, running as a crucial aspect in the allocation of taxing rights. Though one prominent example that I agree with on differential treatment is the fact that obligations are differentiated on a country's situation. Assume a country has a much more robust tax administration, and is not

[125] Ibid.
[126] I. Ozai, *Inter-Nation Equity Revisited,* Columbia Journal of Tax Law (2020), Vol. 12:58, paragraph II.C.
[127] K. Brooks, *Inter-Nation Equity: The Development of an Important but Underappreciated International Tax Value,* SSRN (2013), paragraph 2.
[128] P. B. Musgrave, R. A. Musgrave, *Inter-Nation Equity*, in *Modern Fiscal Issues: Essays in Honor of Carl S. Shoup,* Toronto: University of Toronto Press, 1972.
[129] I. J. J. Burgers, *Value Creation and Inter-Nation Equity* in W. Haslehner, M. Lamensch, *Taxation and Value Creation,* EATLP International Tax Series Vol 19 (2021), IBFD, p. 171-183.
[130] I. Ozai, *Inter-Nation Equity Revisited,* Columbia Journal of Tax Law (2020), Vol. 12:58, paragraph II.C.
[131] Ibid.
[132] Ibid, paragraph III.A.
[133] Ibid.

considered low capacity, that country would be much better suitable to resolve tax disputes or take up administrative work related to tax returns whereas a low-capacity jurisdiction would feel pressure when additional administrative work would pile up.[134] Indeed, in such cases it would be much more logical to allocate those burdens, when it is necessary and objectively justified, to countries that have the capacity and expertise.[135] Conclusively, the component of entitlement and the differential component provide clear economic grounds for which taxing rights may be allocated between jurisdictions, and argue why those taxing rights may be allocated as such.

The principles and concepts underlying an envisaged future international tax system

As described in the previous paragraph, inter-nation equity is in my view an extremely helpful economic concept to argue for certain international tax policy. However, in its purest form it prescribes what countries should implement for its national fiscal rules based on economic principles. My view is that while indeed it benefits the narrative to align with economic principles, and therefore creates for a more equitable distribution of tax revenue, it is also necessary to keep in mind that tax policy is inherently a political issue. In that sense, the political aspect means that it is something that is democratically implemented, directly or indirectly. The fiscal rules are as such based on a democratic legitimacy. It is almost impossible to expect from countries to implement rules that perfectly aligns with economic reality, as it encompasses so much more than just economics, which is why the current international tax system is so fragmented. However, that does not remove the fact that it is beneficial, when designing theoretical rules, to see an economic background and consider the aspects of those rules to align with certain economic principles.

The most important economic concepts and principles that should be considered when designing such rules are therefore in my view the following, summarised based on the analysis above.

- The benefit principle and the ability-to-pay principle;
- Market (and by extension tax) neutrality;
- Value creation; and
- Inter-nation equity.

2.3.3.2 The apportionment system

The preceding section provided a description of the principles and concepts that would theoretically serve as a foundation of a robust apportionment system, this section will try and describe several of the

[134] This will be further discussed in chapter 3 under the administrative requirements for Amount A.
[135] Alluding to Amount A.

key aspects that would make up the apportionment system itself. While the previous section relied mostly on economic concepts, this section will touch more on the regulatory aspects of the apportionment. At the very least, the topics that are relevant to analyse for this thesis are the scoping of the rules, the consolidated tax base and the allocation factors to be applied in the formula.

The scoping of the rules

An important step in applying the rules would be in deciding how the rules are supposed to be implemented. It could either be via a political agreement that translates itself into domestic rules as it was done for the OECD's GloBE-Model rules. These rules are then enforced using bilateral agreements and a central review system so that rules (theoretically) do not deviate from each other.[136] Another option would be to implement the rules via a multilateral agreement as is proposed via the OECD's Multilateral Convention to Implement Amount A of Pillar One.[137] One issue that should be highlighted is related to the fiscal sovereignty of a state. Indeed, strictly a state has the power to self-determinate their own (fiscal) rules according to a democratic legitimacy.[138] Once that power for self-determination is removed, such as possibly with the global minimum tax rules that could force states to amend their tax incentive system, it can mean that the democratic legitimacy is annulled.[139] On the other hand, the global minimum tax has been agreed upon by those countries using the OECD as a forum, even then it requires careful consideration whether ceding tax sovereignty is worth the benefits received from a certain agreement. And by extension, when a state agrees to a treaty, it is different than indirectly being forced to implement certain rules as one might risk losing out.

In my view, implementation via a multilateral agreement provides several benefits, inter alia, certainty that the rules that will be applied are identical everywhere. There is furthermore tax certainty, both for the taxpayers and tax administrations. However, political pressure to agree via consensus to the rules makes amending such rules extremely sluggish. This is different via the GloBE-rules since commentary is being published very often that fill in the gaps. This is very different compared to a multilateral agreement, since usually a Conference of the Parties decide on amending the rules.[140] Even then, the benefits of using a multilateral treaty would outweigh the drawbacks.

[136] OECD (2021), Tax Challenges Arising from the Digitalisation of the Economy – Global Anti-Base Erosion Model Rules (Pillar Two): Inclusive Framework on BEPS, OECD Publishing, Paris, https://doi.org/10.1787/782bac33-en.
[137] OECD (2023), Tax Challenges Arising from the Digitalisation of the Economy – The Multilateral Convention to Implement Amount A of Pillar One text: Inclusive Framework on BEPS.
[138] T. Dagan, *Klaus Vogel Lecture 2021: Unbundled Tax Sovereignty – Refining the Challenges,* Bulletin for International Taxation, Vol. 76 no. 7 (2022), IBFD, paragraph 2.
[139] See for further details on tax incentives and GloBE: N. Bammens, D. Bettens, *The Potential Impact of Pillar Two on Tax Incentives,* INTERTAX, Vol. 51 issue 2 (2023), Kluwer Law International.
[140] An example can be found in Article 7 of the United Nations Framework Convention on Climate Change (UNFCCC), FCC/INFORMAL/84/Rev.1 – GE.14-20481 (E), United Nations (1992), that stipulates that the Conference of the Parties is considered the "supreme body of this Convention".

Then, the question arises on which companies should be in scope? For this thesis, it would be extremely hard to go through all the different types of corporate legal entities from the world so it would not be necessary to discuss that. However, it is more of an issue related to for example a revenue threshold. The GloBE-rules have a consolidated revenue threshold of 750 million euros before the rules kick in.[141] For Amount A, this revenue threshold is set at 20 billion euros with an additional profit margin of 10%.[142] In my view, it would be beneficial to align with a scope that is already set to prevent additional complexities in place. In my view, the scope of 750 million euros seems like a scope that would encompass the companies that have the necessary administrative capabilities, and are also the companies that enjoy the most cross-border activities as compared to small- and middle-sized companies.[143]

Finally, should there be a nexus threshold for which taxable profit will be apportioned to a jurisdiction. Amount A provides market jurisdictions a share of the Amount A profit whenever a nexus of sourced revenue is reached in that jurisdiction exceeding 1 million euro, and for economies that are below the 40-billion-euro GDP threshold that nexus is lowered to 250,000 euro.[144] Indeed, this is a difficult question, since the question here is whether the amount apportioned should be fully aligning with where the profits are really made according to the allocation keys, or whether that would seem too complex and weigh heavily on the administrative capabilities of both tax administrations and taxpayers. The lower the nexus, the heavier the compliance would be especially when you take into account how granular one has to be in deciding which parts of the profit are originating from which jurisdiction. In my view, one needs to find a balance where the additional compliance costs related to that nexus should not exceed what is necessary. However, to find this exact nexus might be an extremely arduous process.

Consolidated accounting and tax base

The next important issue that needs to be tackled is related to the consolidated account and tax base. One reoccurring theme in the idea of a formulary apportionment is the unitary business. The unitary business is an idea that business activities operate as a whole or have substantial mutual interdependence.[145] Instead of the idea of separate accounting, where each business is supposed to be operating completely independent from each other, the unitary business is essentially the opposite. Characteristics that are therefore related to such a unitary business is ‘functional integration’, ‘centralisation of management’, and ‘economies of scale’.[146] This would align perfectly with the idea that usually bigger businesses have group synergies and enjoy benefits that smaller businesses do not

[141] Article 1.1 of the GloBE-Model rules.
[142] Article 3 of the MLC to implement Amount A.
[143] In other words, they benefit the most from the cross-border public goods and services as noted under the benefit principle.
[144] Article 8 of the MLC to implement Amount A.
[145] S. Chen, *Towards a Neutral Formulary Apportionment System in Regional Integration,* EUCOTAX Series on European Taxation 71 (2023), paragraph 3.2.3.3.
[146] Ibid.

have, and therefore do not operate completely independent from each other.[147] The way dr. Chen describes a unitary business fits in my opinion perfectly, citing: “A unitary business is a single economic enterprise that is made up of either of separate business parts of a single business entity or of a commonly controlled group of business entities that sufficiently interdependent, integrated and interrelated through their activities so as to provide a synergy and mutual benefit that produces a sharing or exchange of value amount them and a significant flow of value to the separate parts”.[148] However, it is clear there are multiple ways to consolidate. [149]

Indeed, such a business would fit best within the concept of formulary apportionment. However, for such a business to exist a consolidated accounting and/or tax base has to be formed. Once again, my view is that out of pragmatism it may be useful to look at the systems already in place currently in the form of the tax accounting rules related to GloBE, and possibly Amount A. This will be further discussed in the next chapter.

Deliberations on deciding the allocation factors in the formula

The final part relates to the allocation factors to be used in the formula. As noted above, popular factors already used in subnational FA are usually linked to some form of labour factor, assets factor and destination-based sales factor, either using all three or a combination of those factors. When using a weighted three factor formula using those allocation keys, that formula is otherwise named as the Massachusetts formula. This had been used in the US previously, with currently some States deviating from the weighted three factor formula and applying apportionment with a focus on the destination-based sales factor.

Therefore, for the purpose of this thesis it would seem most appropriate to focus on the three allocation keys of sales, assets[150] and labour as those allocation keys would properly take into account both the in- and output of a business.[151] Indeed, in my view and from a policy perspective the allocation based on those three factors is pragmatic, but also sufficiently fulfils the need to allocate based on the preceding principles described. The issue of adding more allocation keys is that it becomes an administrative slog of applying those factors per company. Furthermore, the idea of a three-factor formulary apportionment

[147] See OECD TPG, paragraph 1.10 for example.
[148] S. Chen, *Towards a Neutral Formulary Apportionment System in Regional Integration,* EUCOTAX Series on European Taxation 71 (2023), paragraph 3.2.3.3.
[149] J. C. Fleming Jr., R. J. Peroni, S. E. Shay, *Formulary Apportionment in the U.S. International Income Tax System: Putting Lipstick on a Pig?*, 36 Mich. J. Int'l L. 1 (2015), paragraph III.E.
[150] S. Picciotto, *Towards Unitary Taxation of Transnational Corporations,* Tax Justice Network 2012, paragraph 2.
[151] S. Chen, *Towards a Neutral Formulary Apportionment System in Regional Integration,* EUCOTAX Series on European Taxation 71 (2023), paragraph 3.4.5.

has already been discussed in the form of the CCCTB which further cements the idea that a three-factor apportionment is an appropriate benchmark for this thesis.[152]

2.4 Considerations on using the arm's length principle over formulary apportionment and vice versa: towards a formulaic approach in the international tax system

The OECD TPG prescribes a statement that the international consensus between jurisdictions remains the arm's length principle and it also mandates to reject non-arm's length methods.[153] Therefore, the main approach is by following the fact that businesses are to be considered as separate from each other as compared to having a single globally consolidated business.[154] This brings on one hand benefits with it, such as that considering businesses are assumed to be independent, it aligns more with how an open market functions since dependent and independent businesses are put on a more equal footing.[155] Furthermore, the arm's length principle is a relatively pragmatic solution especially for what is considered relatively simple transactions such as a buy-sell transaction of certain commodities where the market, or even the group internally, has many comparable transactions available.[156]

However, some authors have also noted that the arm's length principle is clearly unworkable in the current day and age.[157] Indeed, the allocation of profits between jurisdictions is an extremely complex puzzle and with factors such as the digitalisation of the economy it has become much more difficult to allocate taxing rights.[158] The OECD acknowledges that there are situations where the arm's length principle might be considered as difficult to apply in practice. Some examples described are highly integrated business models, businesses dealing with very unique intangibles that are very hard to value, and in the provision of highly specialised services.[159] Furthermore, section 2.2.3 of this thesis delved deeper into group synergies, financial guarantees, captive insurance companies and intangibles. These issues show the clear shortcomings of the arm's length principle.

The author would then like to add an additional issue that the author has come across while working on the Amount B project, and that is that some jurisdictions define certain transfer pricing methods and applications differently than other jurisdictions. Indeed, while the TPG is considered soft law and

[152] Proposal for a COUNCIL DIRECTIVE on a Common Consolidated Corporate Tax Base (CCCTB), European Commission, COM/2016/0683 final – 2016/0336 (CNS): https://www.europarl.europa.eu/legislative-train/package-action-plan-on-corporate-taxation/file-common-consolidated-corporate-tax-base-(ccctb)
[153] OECD TPG, paragraph 1.14 and 1.32.
[154] Ibid, paragraph 1.6.
[155] Ibid, paragraph 1.8.
[156] Ibid.
[157] K. Brooks, *Inter-Nation Equity: The Development of an Important but Underappreciated International Tax Value,* SSRN (2013), paragraph 2.
[158] Ibid.
[159] OECD TPG, paragraph 1.9.

provides for a lot of flexibility in procedural terms for jurisdictions applying the TPG, there is a risk that jurisdictions interpret the TPG differently than other jurisdictions.[160] This difference in interpretation potentially creates an increased risk of double taxation and MAP-cases which goes against the idea of transfer pricing being a workable and pragmatic solution.

On the other hand, would implementing a formulary apportionment be a solution to the issues under the arm's length principle? The IMF states that it is not necessarily the case. Indeed, while tax avoidance schemes continue to persist under the arm's length principle, this would not necessarily be eliminated when using a formulary apportionment.[161] Instead, taxpayers would move away from the current schemes and apply different ones that would work under the apportionment system.[162] Such avoidance schemes could involve the distortion of the factors used in the system, although it could be minimised by placing more weight on using a sales factor.[163] On the other hand, the avoidance schemes that are used today would most likely be impossible due to using a different system.[164]

The question is whether the benefits outweigh the drawbacks. Some benefits would include the fact that the apportionment system fits the economic reality of (especially bigger) multinational corporations as those corporations operate using group synergies and therefore cannot be separated as independent enterprises.[165] Another benefit would be the potential idea that a formulary apportionment is easier to apply in practice and provides for much needed simplicity in an ever changing international tax environment and ever increasing administrative burdens.[166] Additionally, aligning with the distributive component described in the previous section, an implementation of formulary apportionment would most likely provide for a more equitable sharing of tax revenues between developed and developing countries because it is expected that more tax revenues will go to market jurisdictions.[167]

However, is it necessary to choose one or the other? As it is noted in literature, it can be seen that the arm's length principle has shifted somewhat towards a more formulaic approach with some of the recent action reports as well as the new guidance on the transactional profit split method.[168] The revised guidance provides for example that in case there is no comparability available, the allocation of the profits related to the controlled transaction may be based on the relative contributions of the associated

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[160] Noting that some of the interpretative differences are potentially structural in nature.
[161] I. Ozai, *Inter-Nation Equity Revisited,* Columbia Journal of Tax Law (2020), Vol. 12:58, paragraph IV.C.2.
[162] R. de Mooij, L. Liu, D. Prihardini, *An Assessment of Global Formula Apportionment,* IMF Working Paper, WP/19/213, paragraph IV.
[163] T. Matheson, S. Beer, M. Coelho, L. Liu, O. Luca, *Formulary Apportionment in Theory and Practice,* International Monetary Fund, 26 February 2021, DOI: https://doi.org/10.5089/9781513511771.071, p. 304-305.
[164] Ibid.
[165] S. Picciotto, *Towards Unitary Taxation of Transnational Corporations,* Tax Justice Network 2012, p. 3.
[166] T. Matheson, S. Beer, M. Coelho, L. Liu, O. Luca, *Formulary Apportionment in Theory and Practice,* International Monetary Fund, 26 February 2021, DOI: https://doi.org/10.5089/9781513511771.071, p. 304-305.
[167] Ibid.
[168] G. Cottani, *Formulary Apportionment: A Revamp in the Post-Base Erosion and Profit Shifting Era?,* INTERTAX, Vol. 44 issue 10 (2016), Kluwer Law International, paragraph 2.

parties.[169] Indeed, it might not be feasible to completely abandon the arm's length principle and instead look towards a combination of both systems. As the world moves towards globalism and possible indirect monopolies, what could happen in situations where no comparables are available at all?[170] While this might seem dystopian, it is a possibility that needs to be kept in mind.

But then an argument that might prove that the concept of formulary apportionment might indeed be superior to the arm's length principle is related to MAP-cases occurring in recent years. According to OECD statistics, there seems to be a trend that the number of MAP cases have been increasing in recent years.[171] Based on these numbers, it can only be deduced that this number will most likely increase the coming years. This will only become a bigger burden for tax administrations going into the future especially for jurisdictions that do not have the sufficient tax administration capacity. A mechanical approach that would allocate tax burdens would completely mitigate this issue and lower the administrative burdens placed on tax administrations. Therefore, the position taken for this thesis is that a formulaic approach might be a solution to the problems currently plaguing the international tax system. This will further be discussed in the next chapter on Amount A that is aiming to incorporate a formulaic approach.

2.5 Conclusion

This chapter has described in high level terms the current apportioning of international tax revenues between jurisdictions using the arm's length principle. A short historical paragraph has been described in which the establishment of this principle has been decided. Furthermore, the practical application of this principle has been illustrated. Then, the counterpart in the form of a global formulary apportionment has been defined with several economic concepts and principles underlining such a system. Then a high-level overview of the steps and aspects for the establishment of such a system has been described with a final view on the benefits and drawbacks of both systems compared with each other. The conclusion of the analysis in chapter 2 is that the arm's length principle has some serious shortcomings. These illustrate situations where applying the arm's length principle does not necessarily provide for the intended outcome. The situations depicted relate to group synergies, financial guarantees, captive insurance companies and intangibles. The conclusion follows that formulary apportionment would most likely provide for a more equitable sharing of tax revenues globally. Furthermore, the concept of a formulary apportionment might be able to solve the issues that are plaguing the arm's length principle.

[169] S. Zucchetti, C. Piva, *Revised Guidance on the Application of the Transactional Profit Split Method: Evolution or Revolution?,* International Transfer Pricing Journal (March/April 2019), IBFD, paragraph 4.3.

[170] The OECD TPG provides for some guidance for situations where there are no or poor comparables available: R. Robillard, *BEPS: Is the OECD Now at the Gates of Global Formulary Apportionment?,* INTERTAX, Vol. 43 issue 6 & 7 (2015), Kluwer Law International, paragraph 2.

[171] OECD, Mutual Agreement Procedure Statistics 2022 per jurisdiction – Inventory, as per: https://www.oecd.org/tax/dispute/mutual-agreement-procedure-statistics-2022-per-jurisdiction-inventory.htm

3. Formulary apportionment in the form of the Multilateral Convention to implement Amount A of Pillar One

3.1 Introduction

The OECD has been at the forefront of an overhaul of the international tax rules for the past decade. The overhaul named the BEPS-project aimed to tackle issues that prevailed in the international tax system by creating policy recommendations for jurisdictions to implement. One of these action reports is Action Report 1: Tax Challenges Arising from Digitalisation.[172] Action Report 1 consists of multiple recommendations, such as the Two Pillars, that are further divided in four parts. Pillar One consists of Amount A and Amount B, Pillar Two consists of the Global Anti-Base Erosion (GloBE-)rules and the Subject-To-Tax-Rules (STTR).[173] While all of the projects are certainly highly interesting topics by themselves, this thesis will focus on predominantly Amount A of Pillar One. This chapter will address the objective of Amount A and its relation with a formulary reallocation to market jurisdictions as well as the benefits it intends to bring to the international tax system. Then, the system of Amount A will be tested against the normative framework set out in chapter 2.

3.2 An attempt at a formulaic reallocation of taxing rights: The Multilateral Convention to implement Amount A of Pillar One

In short, Pillars One and Two try to achieve very different objectives. Pillar Two's GloBE is an attempt at setting up a global minimum tax of 15%, implemented via domestic rules. The STTR is a framework where source states are allowed to tax back to a maximum of 9% withholding tax on payments between associated companies if no tax is paid in the residence country.[174] Then, Pillar One's Amount B attempts to simplify and streamline transfer pricing transactions that are considered to be baseline marketing and distribution activities especially for low-capacity jurisdictions to alleviate administrative resources.[175] Finally, the topic that will be discussed closely is the Multilateral Convention to implement Amount A of Pillar One which aims to reallocate excess profits of highly profitable businesses to market jurisdictions.[176]

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172 OECD, https://www.oecd.org/tax/beps/beps-actions/action1/

173 OECD-brochure (2021), https://www.oecd.org/tax/beps/brochure-two-pillar-solution-to-address-the-tax-challenges-arising-from-the-digitalisation-of-the-economy-october-2021.pdf

174 OECD (2023), Tax Challenges Arising from the Digitalisation of the Economy – Subject to Tax Rule (Pillar Two): Inclusive Framework on BEPS, OECD/G20 Base Erosion and Profit Shifting Project, OECD Publishing, Paris, https://doi.org/10.1787/9afd6856-en.

175 OECD (2024), Pillar One - Amount B: Inclusive Framework on BEPS, OECD/G20 Base Erosion and Profit Shifting Project, OECD Publishing, Paris, https://doi.org/10.1787/21ea168b-en.

176 OECD (2023), Tax Challenges Arising from the Digitalisation of the Economy – The Multilateral Convention to Implement Amount A of Pillar One text: Inclusive Framework on BEPS.

3.2.1 Objective of Amount A

Amount A arguably has three main components in its application. The first component relates to the reallocation mechanism itself, which consists of the scope, revenue sourcing, the marketing and distribution profits safe harbour, elimination of double taxation and administrative aspects.[177] The second component relates to the tax certainty and tax certainty for issues related to Amount A which provides for a robust system to assist taxpayers in the administrative requirements for Amount A and any disputes arising from the application of Amount A.[178] Finally, the last component is the standstill and removal of digital service taxes, as well as the final provisions. The proliferation of digital service taxes is seen as a great risk for the stability of the international tax system, since digital service taxes do not necessarily follow the international income tax system thereby creating possible harmful trade disputes.[179] [180]

The main objectives of Amount A are to stabilise the international tax system by removing such digital service taxes and relevant similar measures, and to provide an important role in ensuring fairness and equity in the international tax system.[181] These words imply that this new system is also theoretically capable of sufficiently accounting for highly digitalised businesses.[182] However, instead of a completely new system, Amount A will be implemented as a layer on top of the current tax system to reallocate those excess profits.[183] It therefore won't be disregarding the arm's length principle and the international tax rules already in place. By targeting excess profits and sharing the pie with market jurisdictions, the idea is that it will provide for a more equitable sharing of tax revenues globally, but it does not constitute expressly an increase of tax revenues (although reallocating tax revenues from low-tax investment hubs to higher tax market jurisdictions does generally result in higher tax revenues).

177 OECD (2023) – Outcome Statement on the Two-Pillar Solution to Address the Tax Challenges Arising from the Digitalisation of the Economy, 11 July 2023.
178 Ibid. Formerly also known as "Amount C".
179 OECD-brochure (2021), https://www.oecd.org/tax/beps/brochure-two-pillar-solution-to-address-the-tax-challenges-arising-from-the-digitalisation-of-the-economy-october-2021.pdf
180 R. Collier, M. P. Devereux, J. Vella, *Comparing Proposals to Tax Some Profit in the Market Country,* World Tax Journal (August 2021), IBFD, paragraph 2.1.4.
181 R. Szudoczky, *Principles Justifying the Reallocation of Taxing Rights to Market Jurisdictions: Do We Need Them?,* INTERTAX, Vol. 41 issue 12 (2023), Kluwer Law International, paragraph 2.
182 Noting that the expectation is that highly digitalised businesses have high excess profits. The scope rules of Amount A have been expanded to also include non-digitalised businesses and to account for general businesses.
183 V. Chand, C. Vilaseca, *Pillar I: The Marketing and Distribution Safe Harbour (MDSH) as Applicable to Licensed Manufacturers and Centralized Business Models: Does It Fulfil Its Policy Objective?,* INTERTAX, Vol. 51 issue 8 & 9 (2023), Kluwer Law International, paragraph 1.1.

3.2.2 Technical aspects of Amount A[184]

3.2.2.1 Reallocation to market jurisdictions

As set out above, the reallocation aspect of Amount A consists of five main components. These are the scoping mechanism[185], the identification of eligible market jurisdictions[186], the calculation and allocation of market jurisdictions[187], elimination of double taxation[188] and administrative aspects[189]. For this thesis, a particular focus will be placed on the allocation keys and formulaic approach used for Amount A, however a high-level overview of the other technical aspects, including that of the tax certainty process[190] and removal of digital service taxes[191], will also be provided as it is part of the overall package.

Scope

The current rules that have been published[192] account for the following scoping criteria: multinational corporations that have a consolidated revenue, calculated using the consolidated financial statements with some adjustments, exceeding 20 billion euro and a pre-tax profit margin of at least 10% will fall in scope of Amount A. Some specific rules apply for exceedingly profitable segments where those segments are taken separately from the group.[193] Additionally, some exclusions apply for regulated financial institutions, qualifying extractives, autonomous domestic businesses and defence groups.[194] While Amount A was initially directed at highly digitalised businesses such as Automated Digital Service and Consumer Facing Businesses, the scoping criteria has been made more general to account for all highly profitable businesses above a certain revenue threshold.[195]

Identification of eligible market jurisdictions

The next step is to identify which market jurisdictions may be eligible to receive a portion of Amount A. A sales-based allocation key is applied for the calculation of the revenues earned within a (market) jurisdiction which will then be aggregated to determine whether that jurisdiction has a nexus. This nexus

[184] A visual representation is provided in the factsheets of the OECD, https://www.oecd.org/tax/beps/multilateral-convention-amount-a-pillar-one-factsheets.pdf
[185] Articles 2 and 3 and Annexes B and C of the MLC.
[186] Articles 6, 7, 8 and Annex D of the MLC.
[187] Article 5 and Annex B Section 2 of the MLC.
[188] Articles 9 to 11, 13 and Annex B Sections 4 and 5 of the MLC.
[189] Articles 13 to 16 of the MLC.
[190] Articles 22 to 29, 33 to 36 and Annex G of the MLC.
[191] Articles 38 to 30 and Annexes A and H of the MLC.
[192] Note that the final version of the MLC has not yet been published.
[193] Article 3, paragraph 6 and Annex C Section 3 of the MLC.
[194] Article 3, paragraphs 4, 5, 7 and 8 of the MLC.
[195] OECD (2020), Tax Challenges Arising from Digitalisation – Report on Pillar One Blueprint: Inclusive Framework on BEPS, OECD/G20 Base Erosion and Profit Shifting Project, OECD Publishing, Paris, https://doi.org/10.1787/beba0634-en.

is based on the revenues earned from activities in a certain jurisdiction without the need for a physical presence. This is a step away from the current rules where a physical presence is necessary to gain taxing rights. However, it is not strictly a novel concept as this nexus principle is very similar to the permanent establishment based on a significant economic presence that has been implemented nationally by countries.[196] [197] However, it is a novel concept in the way it is being operated in the form of a multilateral agreement. The nexus is then set at one million euro, with a lower nexus for jurisdictions that have less than 40-billion-euro GDP.

To determine this nexus, first it is necessary to categorise the relevant sources of revenue according to article 7 of the Convention. For the sake of simplicity, a table is provided below to show the different categories of revenue with the appropriate sourcing principle used to allocate those revenues.

Category of revenue[198]		**Sourcing principle**[199]
Finished goods		Place of delivery to the final customer.
Digital content		Place of usage of the service.
Components		Place where the finished goods containing the components are delivered to the final customer.
Services	Location-specific services related to tangible property	Jurisdiction in which the property is located.
	Other location-specific services	Jurisdiction in which the service is performed.
	Online advertising services	Jurisdiction of the viewer of the advertisement.
	Other online advertising services	Jurisdiction where the advertisement is displayed or received.
	Online intermediation services that facilitate the sale or purchase of tangible goods, digital content or services other than location-specific services	50 per cent is allocated to the jurisdiction in which the purchaser is located, and 50 per cent is allocated to the jurisdiction in which the seller is located.
	Online intermediation services that facilitate the sale or purchase of location-specific services	50 per cent to the purchasers' jurisdiction, and 50 per cent to the jurisdiction in which the services are performed.
	Passenger transport services (including transactions, other than	Transport by air: place where passengers disembark.

[196] A. B. Moreno, Y. Brauner, *Pillar One and Alchemy: What Can We Learn from Past Mistakes,* INTERTAX, Vol. 51 issue 12 (2023), Kluwer Law International, paragraph 2.1.

[197] See for an example the Nigerian SEP rule: C. Echendu, *Nigeria's Significant Economic Presence Income Tax on Digital Economic Activities: Challenges and Opportunities,* Bulletin for International Taxation, Vol. 74 No. 9 (2020), IBFD.

[198] Article 7 of the MLC provides the rules for revenue sourcing.

[199] Note that some of the sourcing principles divide the allocation to two jurisdictions such as with loading and unloading of cargo, and not solely to a single jurisdiction.

	customer reward programs, that are ancillary to the transport services)	Other than air: place where passengers disembark the vehicle or vessel other than at a transit stop for less than 24 hours.
	Cargo transport services and ancillary services	By air: 50 per cent allocated to the place where the cargo is unloaded, and 50 per cent to the place where the cargo is loaded.
		Transport other than by air: 50 per cent allocated to the place where the cargo is unloaded, and 50 per cent to the place where the cargo is loaded excluding intermediate transit stops.
	Revenues generated in connection with the operation of a customer reward program (other than revenues generated from the redemption of awarded units for goods and services)	Allocated pro rata to the jurisdictions where the members have redeemed such rewards.
	Any service that is not described in the above.	For other situations it is allocated to the jurisdiction in which the service is used.
Licensing, sale or other alienation of intangible property		Related to finished goods or components: place of delivery to the final customer.
		Related to IP that supports a service or digital content: place of usage of the service or digital content.
		All other cases: place where the intangible property is used.
Licensing, sale or other alienation of user data		Jurisdiction in which the user associated with the data is located.
Sale, lease or other alienation of immovable property		Jurisdiction in which the immovable property is located.
Revenues derived from grants, subsidies and refundable credits made or funded by governments or international organisations		Jurisdiction in which the grant is provided, or shared between multiple jurisdictions according to the jurisdictions providing such grants.
Revenues not derived from third-party customers of the group and not covered by the previous allocation keys		Proportionally applied as via the previous sourcing rules.

Once the consolidated revenue has been classified according to the table above, article 6 and Annex D of the Convention prescribe then to use a reliable method to apply the sourcing rule. The reliable method consists of both reliable indicators, which is linked to the information available to the MNE, and allocation keys, which is based on certain proxies.[200] If a business has multiple categories of a transaction, then the rules would apply according to the relevant transaction.[201] Theoretically after these steps have been undertaken, the MNE will then be able to analyse geographically in which jurisdictions certain types of revenue have been generated. Then, the jurisdictions that exceed the nexus may be eligible to receive Amount A according to the sourcing rules.

Calculation and allocation of profit[202]

The following step is related to the calculation and reallocation of the excess profit to the jurisdictions exceeding the nexus threshold. First, take the group profit from the consolidated financial statements. Then, make book-to-tax adjustments according to Annex B Section 2 of the Convention where necessary and take prior losses into consideration.[203] Then, subtract from that group profit 10% of the group revenues[204] and multiply it by 25% which will then be reallocated to jurisdictions with nexus in proportion to their aggregate sourced revenues. This step essentially 'carves out' the routine profit after which 25% of the excess profits may then be reallocated. Finally, the marketing and distributions profit safe harbour (MDSH) acts as a carve out for possible taxes already accounted for in national rules such as withholding taxes and applicable transfer pricing rules.[205] This carve out is as such applied to mitigate double counting issues related to parts of the residual profit that might have already been taxed.[206]

As the rules already portray it, the MDSH is a highly complex carve out rule. The reason for this is due to the highly political sensitivity surrounding it. Withholding taxes are an important aspect of the MDSH, since withholding taxes possibly constitute double counting therefore these are included in the metric. However, low-capacity jurisdictions rely heavily on withholding taxes due to their relative administrative simplicity, so by taking withholding taxes into account low-capacity jurisdictions lose out on Amount A allocations.[207] However, the principal purpose of the MDSH is one that is quite important as it aims to remove double counting issues. In light of neutrality, it is therefore crucial to

[200] For further details, Annex D of the MLC provides specific rules related to a reliable method.
[201] R. Maheshwari, *Are the Revenue Sourcing Rules of the OECD's Pillar One Fulfilling the Objective of Taxing Value Creation,* Bulletin for International Taxation (July 2023), IBFD, paragraph 3.2.
[202] A. Fedan, *Case Study Analysis of the OECD Pillar One and Pillar Two Allocations to Developing Countries: What Has Changed Since the 2020 Blueprints?,* Bulletin for International Taxation (January 2023), IBFD, paragraph 2.2.
[203] Note that the book-to-tax adjustments are not necessarily similar to the book-to-tax adjustments from the GloBE-rules.
[204] Article 2(d) of the Convention.
[205] V. Chand, C. Vilaseca, *Pillar I: The Marketing and Distribution Safe Harbour (MDSH) as Applicable to Licensed Manufacturers and Centralized Business Models: Does It Fulfil Its Policy Objective?,* INTERTAX, Vol. 51 issue 8 & 9 (2023), Kluwer Law International, paragraph 2.1.
[206] Ibid.
[207] Based on the authors observations during negotiations on Amount A.

have such a rule included, however some authors have noted that it might not always account for all double counting related to some business models such as centralised business models.[208] Indeed, would it not be a better solution to find a more structural reform that is not layered on top of the current tax system?

Elimination of double taxation

After the allocation of excess profit has been made, the fourth step is to account for the elimination of double taxation or otherwise allocating relief obligations to jurisdictions with excess profit. Firstly, Annex B Sections 4 and 5 of the Convention prescribe that a jurisdictional return on depreciation and payroll needs to be calculated. This is done by aggregating the accounting profit per jurisdiction, with the necessary adjustments, and aggregating the accounting depreciation and payroll per jurisdiction, while matching the adjustments done for the jurisdictional profit. Then, a de minimis excludes jurisdictions with less than 50-million-euro profit or are considered to be in the smallest 5% of relief obligations.[209]

There are essentially four tiers in which obligations occur which is based on the jurisdictional return on depreciation and payroll metric.[210] Tier 1 kicks in whenever the jurisdictional return on depreciation and payroll is greater than 1,500% of the group return on depreciation and payroll ánd 40% of the jurisdictional return on depreciation and payroll[211], so for cases where there is an extremely high excess profit in a jurisdiction this Tier 1 waterfall approach starts to be applied. The waterfall approach in short means that the jurisdiction with the return on depreciation and payroll will relieve first in Tier 1 until it matches a second jurisdiction in Tier 1, then both those jurisdictions will relieve until a third jurisdiction matches the relieving obligation. This continues until either 1,500% is met or if all Amount A relief obligations is fulfilled. Then, Tiers 2, 3A and 3B allocate using a pro rata approach, with Tier 2 kicking in between the 1,500% and 150% group return on depreciation and Tier 3A using that same metric.

The elimination on double taxation component is a complex maze of relieving obligations. Indeed, as Amount A is layered on top of the current international tax system, it needs to account for current metrics for relieving obligations. While the excess profits are taken into account in some jurisdictions, the MNEs that are in those jurisdictions will need to reallocate their excess profits to market jurisdictions whereby the relevant jurisdiction will then provide relief of double taxation using the aforementioned metric. On the other hand, this metric can be made fully automated making it very administrable.

[208] V. Chand, C. Vilaseca, *Pillar I: The Marketing and Distribution Safe Harbour (MDSH) as Applicable to Licensed Manufacturers and Centralized Business Models: Does It Fulfil Its Policy Objective?,* INTERTAX, Vol. 51 issue 8 & 9 (2023), Kluwer Law International, paragraph 7.
[209] Article 10 of the MLC.
[210] Article 11 of the MLC.
[211] The 40% acts as a form of backstop.

Filing obligations, payment and claiming relief

The final step related to the reallocation is the administrative component of Amount A. An interesting aspect is that for reasons of simplicity, an entity will be designated as the payment entity.[212] This designated payment entity will submit an Amount A tax return to the lead tax administration and pay the Amount A obligations to each market jurisdiction. The payment to the market jurisdictions is funded by other group entities as they must pay that designated payment entity their share. So instead of each entity paying directly to market jurisdictions, the administrative burden has been centred in one jurisdiction, and by extension one tax administration, to provide for ease of payment.[213] Then, Articles 12 and 13 provide that double tax relief may be provided via one of four methods, which are the direct payment, refundable tax credit, non-refundable tax credit and deduction of profit amount.

Once all of the aforementioned steps have been done, the reallocation using Amount A has been achieved.

3.2.2.2 Tax Certainty

Tax certainty framework for Amount A

The second block of Amount A relates to providing tax certainty to taxpayers within the Amount A framework. To achieve tax certainty, there are three tracks with a specific outcome. These are the scope certainty, advance certainty and comprehensive certainty.[214] If an outcome cannot be decided, then a determination panel will decide the outcome of each process.[215] Article 26 of the Convention provides for the process relating to the reviews and their desired outcome. Scope certainty relates to whether the MNE that submitted a request for certainty is an in-scope MNE for a certain period.[216] Advance certainty provides taxpayers, both in- and out-of-scope taxpayers, with a possibility to request an advance certainty for their methodology in applying the Amount A rules.[217] These include inter alia whether the scope exclusions and revenue sourcing rules have been applied properly. The comprehensive certainty then fills in the gap related to the calculation of excess profit, jurisdictional return on depreciation and payroll and other such metrics to confirm whether Amount A has been allocated properly according to the Convention.[218] If in one case no satisfiable outcome has been achieved for any of the processes, a

[212] Articles 13 and 16 of the MLC.
[213] The idea is that usually the designated payment entity is situated in a developed jurisdiction with a high-capacity tax administration able to administer the Amount A return obligation. However, some exceptions may apply in case the designated payment entity is not able to pay the Amount A tax to a market jurisdiction so a secondary liability obligation will kick in.
[214] Articles 22 and 23 of the MLC.
[215] Article 27 of the MLC.
[216] In scope for the application of Amount A according to Article 3 of the MLC.
[217] Article 26 of the MLC.
[218] Ibid.

determination panel comprised of independent experts, government officials and a chair, will decide upon an alternative outcome.[219]

The certainty rules certainly provide for a robust framework to assist taxpayers in their Amount A obligations. Included in these rules are strict timeframes that both tax administrations and taxpayers need to respect. This decreases the risk that the reviews will take longer than needed.[220]

Tax certainty for issues related to Amount A

The second component of tax certainty is for issues related to Amount A. Firstly, a related issue means a transfer pricing, business profit or withholding tax characterisation dispute that either impact the relieving obligation under the elimination of double taxation framework, or impact the calculation of the jurisdictional profit materially (e.g., more than 1.5 million euro in a single year or 3 million euro after an initial 3 year period).[221] These disputes may be resolved using a specific mutual agreement procedure according to article 33 of the Convention, and in cases where the procedure has not been resolved within 2 years, a mandatory binding dispute resolution procedure may be used with strict time-limits.[222] Furthermore, qualifying developing countries may apply for the elective binding dispute resolution process with one metric being that they have not been involved in many mutual agreement procedure cases.[223] This procedure is significantly less stringent to account for the specific situation of developing countries.

3.2.2.3 Removal and standstill of Digital Services Tax and relevant similar measures

The final block of Amount A prescribes the removal and standstill of digital services taxes and relevant similar measures. The proliferation of digital service taxes and relevant similar measures are described as being a risk to the equilibrium of the international tax system due to their divergent nature. Indeed, some criticism has come from an economic perspective which describe digital service taxes as 'bad policy' in light of double counting, impact of investment, innovation, and many more issues.[224] These types of measures are defined for purposes of Amount A as follows:[225]

- The measure has market-based criteria, such as a taxing right according to the location of the user.

[219] Article 27 and 28 of the MLC. Annex F then provides further detailed rules on the specific provisions.
[220] See for a visual representation page 13 of the OECD factsheets, https://www.oecd.org/tax/beps/multilateral-convention-amount-a-pillar-one-factsheets.pdf
[221] Article 34 of the MLC.
[222] Article 35 of the MLC.
[223] Article 36 of the MLC.
[224] G. Kofler, *The Future of Digital Services Taxes,* EC Tax Review (2021-2), Kluwer Law International, p. 2.
[225] Article 39 of the MLC.

- The measure is ring-fenced to foreign taxpayers, either a de jure ring-fencing or a de facto ring-fencing. The de facto ring-fencing would need to be tested by searching for proxies, such as applying revenue thresholds and exemptions which de facto exclude domestic taxpayers from the tax.
- The measure is considered out-of-scope of tax treaties, implying that a taxpayer would not be able to, for example, apply for a credit related to that measure.

Furthermore, Annex A of the Convention provides for a list of existing measures that are subject to removal.

The removal of these measures is an important political asset in the negotiations as some jurisdictions are heavily in favour of removing such measures. While it might not seem like a massive part of the Convention, it must be understood that this block is highly political in nature which is also why the US are committed to continue negotiations.[226]

3.2.3 Amount A and its policy objective in light of the normative framework

The aforementioned section has provided a high-level overview of the technical aspects of Amount A in the context of the reallocation, tax certainty and the removal of digital service taxes.[227] A first observation shows that these are highly complex rules especially since it is layered on top of the current international tax system. What makes it even more complex is that the rules are not strictly related to formulary apportionment, but encompass many other (usually political) aspects too. However, the fact that these rules are close to being finalised implies that members of the Inclusive Framework are open to multilateralism and are keen to solve these international tax issues with each other. It shows an openness to solving problems on an international scale which can be considered a feat by itself. The question remains if Amount A will actually achieve its policy objectives, and whether these rules align with economic principles.

Principles underlining Amount A

Action Report 1 was initially designed with the Ottawa principles in mind, whereby a tax system should be designed with the following five principles in mind: neutrality, efficiency, certainty and simplicity, effectiveness and fairness, flexibility.[228] Therefore, it can be considered that these principles extend to

[226] See for an example this KPMG report, p. 65, https://kpmg.com/kpmg-us/content/dam/kpmg/pdf/2023/digitalized-economy-taxation-developments-summary.pdf that states that 'the US Treasury is continuing negotiations on the definition of DSTs'.
[227] The rules related to implementation and final provisions are explicitly not included as they are less relevant to this thesis.
[228] R. Maheshwari, *Are the Revenue Sourcing Rules of the OECD's Pillar One Fulfilling the Objective of Taxing Value Creation,* Bulletin for International Taxation (July 2023), IBFD, paragraph 3.3. See also

Amount A as part of Action Report 1. The five principles imply the following based on 2015 Action Report:[229]

- Neutrality: a neutral tax implies that the supply and demand within a market won't be distorted with the introduction, or removal, of a tax. The neutrality aims to be neutral and equitable while contributing to efficiency. Neutrality also implies that no discriminatory rules apply in relation to certain economic choices and that principles should therefore apply to all forms of business.[230]
- Efficiency: efficiency implies a low cost of compliance for both business and government.[231]
- Certainty and simplicity: certainty relates to the fact that taxpayers know their tax related obligations and entitlements that do not often fluctuate. Simplicity is a way to achieve this, as easier tax rules are better understandable and therefore promote better certainty.[232]
- Effectiveness and fairness: the tax should be effective, in other words enforceable and also producing the right amount of tax, while avoiding both double taxation and double non-taxation.[233]
- Flexibility: tax rules and systems should be able to keep up with technological and commercial developments.[234]

Additionally, horizontal, vertical and inter-nation equity are also mentioned as important cornerstones within a tax policy framework by the OECD.[235]

Indeed, while examining these principles in light of Amount A, some of them are reflected in Amount A such as the principle for neutrality, certainty, effectiveness and fairness and efficiency. However, due to the scale of Amount A and the scope of taxpayers it aims to target, it definitely cannot be considered a simple tax measure. Objectively speaking however, considering that the in-scope taxpayers are to be the 100 biggest companies of the whole world, it might seem to be needed that the rules have to be as robust as possible in case loopholes continue to persist even after implementation and to provide legal certainty. Furthermore, provisions such as the MDSH and the elimination on double taxation seek to remove issues related to double taxation. The question remains whether that policy objective will be achieved.

In terms of efficiency, the compliance cost is placed in the jurisdiction where the designated payment entity is located, which is expected to be a developed country. Therefore, considering that that jurisdiction is assumed to have a higher tax administration capacity, it almost seems natural for that

[229] OECD (2015), Addressing the Tax Challenges of the Digital Economy, Action 1 - 2015 Final Report, OECD/G20 Base Erosion and Profit Shifting Project, OECD Publishing, Paris. http://dx.doi.org/10.1787/9789264241046-en
[230] Ibid, paragraph 10.
[231] Ibid.
[232] Ibid.
[233] Ibid.
[234] Ibid.
[235] Ibid, paragraph 11. Horizontal equity implies that taxpayers in similar conditions should pay relatively the same taxes. Vertical equity implies that taxpayers in better circumstances should bear a higher burden as compared to taxpayers in less favoured conditions.

jurisdiction to bear the burden instead of sharing it with low-capacity jurisdictions. This then correlates with certainty, since the higher capacity jurisdiction is assumed to be able to enforce those compliance obligations better than low-capacity jurisdictions.

However, the rules are most definitely not considered simple just by looking at the almost 1,000 pages of published text, and the fact that it is translated into a Convention does not make it flexible either. A Conference of the Parties will be designated once the rules enter into force, and decisions made through such an organ are on a pure consensus basis which in turn makes making amendments to the Convention a slow process.[236] Indeed, based on the Ottawa principles, Amount A would satisfy several of them, but would also not be considered a perfect example for tax policy. The policy objective of reallocation, removal of digital service taxes and providing tax certainty also seem to be met, though it is hard to anticipate whether the rules would work as intended in practice.

Amount A in light of the normative framework

The normative framework described in chapter 2 has many similarities with the Ottawa principles. To recap, the normative framework consists of:

- The benefit principle and the ability-to-pay principle;
- Market (and by extension tax) neutrality;
- Value creation; and
- Inter-nation equity.

Amount A reallocates tax revenues to market jurisdictions that would have otherwise, for example, been taxed (or not) in investment hubs. This implies that a factor in deciding which jurisdictions receive that additional revenue is linked to the consumers of a certain company in jurisdictions where there might not necessarily be a physical presence. This aligns with the benefit principle, as the benefit principle relates to the benefit a company receives by using the benefits a jurisdiction provides for that company to trade in that jurisdiction. Furthermore, benefits also arise from the ability to trade with the consumers in that jurisdiction. The additional tax that may be imposed by such market jurisdictions would be deemed proportional to what the company receives from that jurisdiction as the domestic tax rate would apply. Furthermore, Amount A is administered via a lead tax administration and a designated payment entity (which most often is the parent company), and then takes into account the aggregate of domestic and foreign profit. Taxpayers are then taxed at the level of that designated payment entity after which it is redistributed to local jurisdictions, accounting for tax relief, that in turn seems to align with the ability-to-pay principle.

[236] See Article 47 of the Convention.

Market neutrality encompasses several principles, such as tax neutrality, capital import neutrality, capital export neutrality and capital ownership neutrality. At the baseline, tax systems should not make a distinction between certain companies and follows that companies that are more efficient should have more competitive power over less efficient companies. Furthermore, tax should not be a distortion to the market, i.e., taxpayers should not make decisions that are based on achieving tax benefits. The question is whether Amount A fulfils this principle of market neutrality. Indeed, in my view the fact that market jurisdictions are taken into account makes it much harder to shift profits to low tax jurisdictions, since those jurisdictions are expected to lose under the application of Amount A.[237] However, there is a risk of double taxation due to the fact that Amount A is layered on top of the current international tax rules which could mean that some forms of double counting are not taken into account properly. This would imply that Amount A would not be fully neutral in practice and would actually make the international tax framework more complex, possibly resulting in additional disputes between taxpayers and tax administrations.[238] On the other hand, the removal of digital service taxes would make other aspects of the international tax system more neutral.

On value creation, where value is created and economic activities take place, in that place a part of the value should be taxed. Referring back to Devereux's four options of taxation that aligns where value is created, which are: the residence of the ultimate shareholder, the residence of the ultimate parent company, the location of subsidiaries and permanent establishments of the multinational enterprise, and the residence of its customers.[239] Indeed, when looking at the current international tax system the one option that is explicitly not taken into account yet, is the residence of the customer of the company.[240] Amount A adds to the international tax rules a taxing right to the market jurisdiction using the sales allocation key, and therefore Amount A would in my view better align the international tax rules with value creation.

Inter-nation equity is determined by how much tax is allocated to the source country. Indeed, developing countries are set to benefit from the rules as they are predominantly market jurisdictions. A reallocation will take place whereby low-income jurisdictions are expected to gain the most.[241] Although this usually does not fit with the entitlement component of inter-nation equity since low-capacity jurisdictions provide comparatively less benefits in terms of public goods and services as compared to high income jurisdictions. But on the other hand, inter-nation equity describes that a part of that equity is also in the sharing of tax revenues with developing countries. Since the expectation is that Amount A will provide

[237] S. Delpeuch et al, *Update to the Economic Impact Assessment of Pillar One,* OECD Taxation Working Papers series no. 66, OECD (2023), paragraph 99.
[238] The disputes would arise from the interplay of transfer pricing rules and Amount A, although the tax certainty for issues related to Amount A tries to address that problem.
[239] M. P. Devereux, J. Vella, *Value creation as the Fundamental Principle of the International Tax System,* European Tax Policy Forum Policy Paper (2018), SSRN, paragraph 3.
[240] Ibid.
[241] S. Delpeuch et al, *Update to the Economic Impact Assessment of Pillar One,* OECD Taxation Working Papers series no. 66, OECD (2023), paragraph 99.

tax revenue benefits for developing countries and a more equitable sharing global tax revenues, it seems that at least for the differential component Amount A will benefit the inter-nation equity.

3.3 Will Amount A be able fulfil its purpose in the context of a global formulary apportionment?

Discussion in literature

Several authors have commented on both the conceptual and technical aspects of Amount A, some of these comments will be further highlighted below.

One of the main points of criticism is the fact that the Amount A rules are extremely complex, while ironically complexity leads to tax planning and tax avoidance schemes. [242] Furthermore, another issue is related to the fact that the amount that may be reallocated is one that seems relatively small considering the scope and complexity of the rules.[243] Then, countries may choose their tax rate that effectively provides for arbitrage and tax competition, which in my view is not completely correct, since these companies are already in scope of the GloBE minimum tax so therefore, the tax rate is already set at a minimum of 15%.[244] However, the application of international accounting standards as a starting point proving to be an administrative issue, as well as the fact that the US do not work with book-to-tax adjustments is a strong argument since Amount A will rely heavily on the Internal Revenue Service being the lead tax administration.[245] This argument is less applicable for the GloBE-rules, since that stems from a jurisdictional Acceptable Financial Accounting Standard, and also because the US will not even apply the GloBE-rules as agreed at the OECD.[246] Then, some may question the concept of only taxing or targeting 'residual profits', as those residual profits are essentially remunerations for risk, investment and/or innovation.[247]

Then there are criticisms on certainly the technical aspects and metrics of Amount A, such as the jurisdictional return on depreciation and payroll. [248] It is argued that there is no rationale provided for the usage of such a metric, and could lead to convoluted results when companies derive profits from certain intangibles.[249] Furthermore, the addition of a physical presence for payrolling would affect this metric in case there are many remote-working employees.[250] Another technical point is the application

[242] A. B. Moreno, Y. Brauner, *Pillar One and Alchemy: What Can We Learn from Past Mistakes,* INTERTAX, Vol. 51 issue 12 (2023), Kluwer Law International.
[243] Ibid, paragraph 2.4.
[244] Ibid, paragraph 2.5.
[245] Ibid.
[246] Article 3.1 of the GloBE-model rules.
[247] S. E. Shay, *The Deceptive Allure of Taxing "Residual Profits",* 75 Bulletin International Taxation, 11/12 (2021), IBFD. Paragraph 3.2.
[248] M. H. B. Moura, A. Padwalkar, *Amount A and Its Design So Far: Feasibility in Sight?,* International Transfer Pricing Journal (March/April 2023), IBFD, paragraph 5.3.
[249] Ibid.
[250] Ibid.

of the marketing and distribution profit safe harbour. The initial objective of this carve out is to prevent double counting for profits already taken into account domestically. However, the conclusion some authors provide is that this policy objective might not be achieved due to the existence of withholding taxes and transfer pricing adjustments.[251] Then again, some might argue that the solution Amount A provides does not correctly address the issue as the current system is outdated and to solve it a systemic solution has to be agreed on.[252]

Some authors have then provided alternatives, or at least provided manners in which to simplify the rules related to the original policy objective of Amount A in targeting highly digitalised businesses. One of those options relates to a withholding tax solution, whereby a new withholding tax would be imposed on any base-erosion payments which are not already subject to domestic taxation or treaty limitation of such taxation.[253] This would then eliminate the need for a physical presence to tax, so it might be very similar to a withholding tax on digital services such as the one noted under Article 12B of the UN model tax treaty.[254] Such a solution would considerably decrease the administrative burden arising from taxing the digitalised economy. Some authors have proposed an additional factor related to the level of development of a country, although this would increase the complexity.[255]

Another solution that might result in a simplified approach has been described in a paper by South Centre which takes Amount A as a starting point with some policy changes that could result in simplification such as the fact that the tax base is only partly apportioned using the sales allocation key while the other parts are then be determined using the current tax rules.[256] Instead, a formulary apportionment over the total profits would be much more appropriate and simple due to the possible group synergies that multinational corporations enjoy.[257] An issue here that comes to mind however, is the political impossibility to agree to such rules in the current time period. Then, some authors note the increasing complexity due to the interplay between the arm’s length principle and Amount A, questioning whether Amount A departs from the idea of taxing profits in jurisdictions where value is created although in my view Amount A would actually align more with value creation.[258]

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[251] V. Chand, C. Vilaseca, *Pillar I: The Marketing and Distribution Safe Harbour (MDSH) as Applicable to Licensed Manufacturers and Centralized Business Models: Does It Fulfil Its Policy Objective?,* INTERTAX, Vol. 51 issue 8 & 9 (2023), Kluwer Law International, paragraph 7.
[252] M.F. de Wilde, *On the OECD's 'Unified Approach' as Frankenstein's Monster and a Dented Shape Sorter,* INTERTAX, Vol. 48 issue 1 (2020), Kluwer Law International, paragraph 3.
[253] A. B. Moreno, Y. Brauner, *Pillar One and Alchemy: What Can We Learn from Past Mistakes,* INTERTAX, Vol. 51 issue 12 (2023), Kluwer Law International, paragraph 3.1 & 3.3.
[254] Ibid.
[255] M. Kane, A. Kern, *Progressive Formulary Apportionment: The Case for 'Amount D',* Tax Notes International, vol. 102 (June 14 2021), paragraph II.A.
[256] S. Picciotto, M. A. Ahmed, A. Cobham, R. R. Das, E. Eze, B. Michel, *Beyond the Two Pillar Proposals – A Simplified Approach for Taxing Multinationals,* Tax Cooperation Policy Brief no. 36 (26 October 2023), South Centre, p.5. For further details on Article 12B of the UN Model, see: R. Collier, M. P. Devereux, J. Vella, *Comparing Proposals to Tax Some Profit in the Market Country,* World Tax Journal (August 2021), IBFD, paragraph 2.1.2.
[257] Ibid.
[258] R. Petruzzi, A. Padwalkar, *Pillar One, Pillar Two, Transfer Pricing and the Arm's Length Principle: A Tangled Web of New and Old Taxing Rules,* Bulletin for International Taxation, 2023 (Volume 77), No.10, IBFD, paragraph 2.2.3.

On the other hand, some authors argue that the world is still not ready for a global formulary apportionment and also point out the issues arising from using a sales based allocation key.[259] One such structure is given as an example whereby independent distributors could be used to shift sales amount countries and could result in factor distortion.[260] In my view this seems like a far-fetched situation which could definitely happen in practice, but is not impossible to resolve using anti-abuse rules. However, a strong argument is given on why Amount A most likely does not include a labour and asset allocation key, as agreeing to such a formula will make it much more enticing for corporations to move their jobs and factories to lower-tax countries.[261] On the other hand, moving those factors needs to account for the type of job and factories, since lower-tax jurisdictions might not always have the necessary skilled workforce, infrastructure or legal protection that high-tax countries could provide.[262]

Lastly, one article has critically described the economic benefits of Amount A in comparison to Article 12B of the UN Model for developing countries.[263] In short, Article 12B provides the source country an additional treaty based taxing right on the provision of digital services by multinational corporations.[264] One argument given against 12B is that it is dependent on the amendment of tax treaties or on the signing of tax treaties.[265] However, the effect is limited due to the limited treaties signed on average by low- and middle-income countries.[266] Furthermore, the taxing right is linked to capturing the cash flows of taxpayers which is relatively easy to avoid.[267] If it does correctly capture those cash-flows, and is based on a gross revenue tax, then it would most likely generate significant tax revenues.[268] On the other hand, Amount A seems to better address the needs for developing countries, notwithstanding the complexities involved, and most likely will also provide more tax revenues for such countries thereby providing for more tax equity.[269]

Is the world ready yet for Amount A?

In the context of a global formulary apportionment, the three topics discussed in chapter 2 should be taken into account. These are the scope of the rules, the consolidated accounting and tax base and the allocation factors. In terms of the scope of the rules, Amount A only applies to the 100 biggest companies

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[259] A. Pepper, J. Coleman, T. D. Bettge, *Why It's Still Not Time for Global Formulary Apportionment,* Tax Notes International, Volume 107 (22 August 2022). NB: A. Pepper was once an OECD advisor working on Amount A.
[260] Ibid, p. 916.
[261] Ibid, p. 920.
[262] S. Picciotto, M. A. Ahmed, A. Cobham, R. R. Das, E. Eze, B. Michel, *Beyond the Two Pillar Proposals – A Simplified Approach for Taxing Multinationals,* Tax Cooperation Policy Brief no. 36 (26 October 2023), South Centre, p.3.
[263] J. Heckemeyer, I. Schulz, C. Spengel, S. Winter, *The Digital Economy, Global Tax Reforms and Developing Countries – An Evaluation of Pillar I and Art. 12B UN Model,* SSRN (March 2024), available at: https://ssrn.com/abstract=4776415
[264] Ibid, paragraph 3.2.
[265] Ibid, paragraph 6.
[266] Ibid.
[267] Ibid.
[268] Ibid.
[269] Ibid.

of the world, with an additional scoping rule that excludes companies with less than 10% pre-tax profit margin. The scope is slated to be lowered to a revenue threshold of 10 billion euro after 7 years.[270] In my view, both of these scopes are still too narrow for the application of a full-fledged formulary apportionment. However, due to administrative reasons and the fact that this rule deviates from the current international standard, my opinion is that it can be deemed to be sufficient as a transitional rule.

One aspect that in my view is done well, is the fact that Amount A starts with the consolidated financial statements of the group, implying that international accounting standards are respected. Then, to account for certain tax related issues as well as to create a global tax base that accounts for each country's specific rules, book-to-tax adjustments are needed to prepare a consolidated tax base. This tax base removes any differences that might apply due to domestic rules.[271] This is needed for Amount A to be applied identically all over the world, removing any distortions using the tax base. On the other hand, the consolidation of the tax base does not explicitly turn the multinational corporation into a unitary business since transfer pricing is still being accounted for.[272] Even if this tax base would not be considered perfect in the context of a global formulary apportionment, it is certainly a necessary start to draft a robust apportionment system.

Amount A is strictly only using a sales-based allocation key. It does however take into account payroll and depreciation (relating to assets) via different means, but it does not constitute a three-factor formulary apportionment. It therefore can be considered a single factor global formulary apportionment that is built on top of the current international tax system. For the purpose of a global formulary apportionment, using single factor allocation key might not be sufficient to account for assets or labour. However, those allocation keys are taken into account in a situation where the formulary apportionment is drafted without the current international tax rules in place which Amount A does. The question then is, does it really need the asset and labour allocation key since the current international tax rules are already sufficiently taking those asset and labour allocation keys into consideration? I would argue that indeed, only taking into account a sales-based allocation key is sufficient for the policy objective of Amount A, but to create a robust formulary apportionment that completely departs from the current international tax rules, it is clearly not sufficient.

3.4 Conclusion

This chapter described the Multilateral Convention to implement Amount A of Pillar One. Both the conceptual aspects as well as technical aspects have been highlighted, albeit at a high level for the sake

[270] See Article 3(9) of the MLC.
[271] A similar approach is used for the tax base under the GloBE-rules.
[272] V. Chand, C. Vilaseca, *Pillar I: The Marketing and Distribution Safe Harbour (MDSH) as Applicable to Licensed Manufacturers and Centralized Business Models: Does It Fulfil Its Policy Objective?,* INTERTAX, Vol. 51 issue 8 & 9 (2023), Kluwer Law International, paragraph 7.

of readability. The objective of Amount A has been put in light against its own conceptual framework as well as the normative framework set out in chapter 2. Additionally, some criticism from authors have been outlined such as the level of complexity involved in the rules as well as the application of only a single factor allocation key combined with the arm's length principle. The latter implying that Amount A would not really fulfil the needs that a fully-fledged global formulary apportionment would need. Furthermore, the revenue sourcing rules are considered to be quite granular so there might be question on how those rules relate to the compliance needed to properly function them. However, considering this is a first step towards a formulaic allocation of taxing rights it is quite satisfactory.

Conclusively, in light of its own policy objective, Amount A sufficiently would fulfil that need. However, in the context of a global formulary apportionment it would most likely fall short. The next chapter will provide policy recommendations in this regard.

4. A global formulary apportionment: fit for the future?

4.1 Introduction

Firstly, based on my own observations at the OECD, I can safely mention that a full-fledged global formulary apportionment would not be possible to get politically agreed upon in the wider Inclusive Framework at this stage (and probably for the next ten years). Each jurisdiction has their own position and negotiation stance, so the fact that the Amount A rules are almost finalised is a wonder by itself. By moving those negotiations to the UN, I doubt anything would really change since each jurisdiction would most likely maintain their position even at the UN which implies a similar outcome. Something that might change that political outcome would be if the UN and OECD would work together and become the secretariat of an organisation similar to the World Trade Organisation, however in my view the world is not ready yet to move to such an organisation that would govern international tax rules more directly since that would mean a loss of sovereignty to some extent.[273] Disregarding the political impossibility of agreeing to a global formulary apportionment, in my view Amount A does bring some highly interesting and robust blocks of provisions that could be used as a future reference. If Amount A does get agreed upon (and I have faith it will get agreed upon at the Inclusive Framework level[274]), that multilateral agreement could even function as the basis for a further forum to negotiate a global formulary apportionment. This chapter will discuss some policy options and recommendations that might be of interest to design further rules for the future.

4.2 Designing the approach

Before an approach towards a global formulary apportionment will be described, it is a fruitful endeavour to learn from the European approach. In the European Union there have been some proposals for a regional formulary apportionment in the form of the Common Consolidated Corporate Tax Base (CCCTB) and the Common Corporate Tax Base (CCTB).[275] However, these have failed due to political disagreements. To revitalise that proposal, a new directive has been announced called the Business in Europe: Framework for Income Taxation (BEFIT) that is expected to largely follow the same ideas set forth in the CCCTB with some proposed amendments.[276] It would be helpful to analyse the approach used for a formulary apportionment in these proposals, and learn why no agreement was concluded.

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[273] L.C. Célestin, *The Formulary Approach to the Taxation of Transnational Corporations: A Realistic Alternative?,* Doctoral Thesis University of Sydney, October 2000, chapter 6, section I, https://core.ac.uk/download/pdf/41229867.pdf

[274] The following statement by the IF shows that the Pillar One package nears completion: https://www.oecd.org/tax/beps/statement-by-the-co-chairs-of-the-oecd-g20-inclusive-framework-on-beps-30-may-2024.htm

[275] Proposal for a COUNCIL DIRECTIVE on a Common Consolidated Corporate Tax Base (CCCTB), European Commission, COM/2016/0683 final – 2016/0336 (CNS).

[276] Proposal for a COUNCIL DIRECTIVE on Business in Europe: Framework for Income Taxation (BEFIT), European Commission, COM/2023/532 final.

4.2.1 Lessons to be learned from the European approach

CCCTB

In short, the proposal was originally published in 2011, and consequently re-launched in 2016. This chapter will only be focusing on the re-launched version, which includes a two-step implementation. First the Common Corporate Tax Base (CCTB) needed to be agreed before the Common Consolidated Corporate Tax Base (CCCTB) could be implemented.[277] The Directive proposal would be mandatory for large groups, and described provisions with a strong incentive for research and development (R&D) as compared to the 2011 version.[278] The proposal brought two objectives to the table: "to improve the Internal Market for businesses by supporting growth, jobs and investment in the EU, and to combat tax avoidance".[279]

The scope for which the rules would start applying is when groups have a consolidated global revenue of EUR 750 million, with an optionality regime for groups just below that size. The Common Corporate Tax Base provides for the calculation of a European corporate tax base; however, it is much less comprehensive compared to the tax base calculation used for the GloBE-rules.[280] Also, due to unitary business principle applied, no withholding or source taxes may be imposed on intra-group transactions.[281]

The formula applied for the apportionment consists of three equally weighted factors of labour, assets and sales by destination. Labour is allocated to the Member State where the labour is performed, assets are allocated to the Member State where the asset is located, and sales are then allocated to Member State of destination.[282] The labour factor consists of payroll and number of employees, each item counting for half. The asset factor should include all tangible assets, but should exclude intangible and financial assets due to their mobile nature. Then, a safeguard clause could provide for an alternative method of income allocation.[283]

The formula would look like this, assuming A is a member of the group:

$$Share\ A = \left(\frac{1}{3} \times \frac{Sales^{A}}{Sales^{Group}} + \frac{1}{3}\left(\frac{1}{2} \times \frac{Payroll^{A}}{Payroll^{Group}} + \frac{1}{2} \times \frac{No\ of\ employees^{A}}{No\ of\ employees^{Group}}\right) + \frac{1}{3} \times \frac{Assets^{A}}{Assets^{Group}}\right) \times C.Tax\ Base$$

Source: CCCTB

[277] N. Casey, J. Voje, *EU report Subject 1*, in *Group approach and separate entity approach in domestic and international tax law,* Cahiers de droit fiscal international, volume 106A (2022), international fiscal association, p.68-70. The CCTB prescribes how the tax base in the Internal Market should be calculated.
[278] Ibid.
[279] Ibid.
[280] Proposal for a COUNCIL DIRECTIVE on a Common Corporate Tax Base (CCTB), European Commission, COM/2016/0685 final – 2016/0337 (CNS).
[281] Proposal for a COUNCIL DIRECTIVE on a Common Consolidated Corporate Tax Base (CCCTB), European Commission, COM/2016/0683 final – 2016/0336 (CNS), article 10.
[282] N. Casey, J. Voje, *EU report Subject 1*, in *Group approach and separate entity approach in domestic and international tax law,* Cahiers de droit fiscal international, volume 106A (2022), international fiscal association, p.68-70.
[283] Preamble and article 29 of the CCCTB.

Lastly, the administrative and compliance aspects will go through a single tax administration in the jurisdiction where the parent company is situated, or in the jurisdiction where a designated filing entity is a resident when the parent company is situated outside of the EU.[284]

Due to political disagreements between Member States, the CCCTB and CCTB did not find a common ground.

BEFIT

Since the CCCTB has been revoked, a new proposal has taken its place named BEFIT. Noteworthy is that a slightly differing approach is taken with regards to its application. Indeed, while BEFIT aims to establish an EU-wide single set of corporate tax rules, it does not advocate for a complete replacement (yet) of the existing domestic tax systems in place.[285] Furthermore, it aims to incorporate the design already used for the Pillar 2 Directive which Member States have to transpose in their domestic rules at the moment.[286] Indeed, considering there are already quite robust tax accounting rules included in the GloBE-rules on a jurisdictional level, it seems only logical to follow that approach and build further on it. BEFIT will also follow the 750 million euro consolidated revenue scope, with an additional optionality regime for small and medium-sized businesses.

The BEFIT proposal describes three versions that could be implemented based on political support, it's therefore not clear yet which version will be final. However, only the comprehensive version includes a formulary apportionment that also includes intangibles. The idea is that the tax base of the in-scope groups would be aggregated and then allocated to each group member using a formulary approach.[287] The other two versions provided use a transitional solution that is based on a transitional allocation rule which seems to use Country-by-Country (CbC-)data over an average of the previous three years, i.e., a transfer pricing basis.[288] Then, an option is given between a limited set of tax adjustments versus a comprehensive set of tax adjustment rules for computing the tax base, although it seems that aligning strictly with the Pillar 2 Directive tax base seems pragmatic. However, the European Commission previously has made comments that they would prefer abandoning the transfer pricing rules entirely

[284] N. Casey, J. Voje, *EU report Subject 1*, in *Group approach and separate entity approach in domestic and international tax law,* Cahiers de droit fiscal international, volume 106A (2022), international fiscal association, p.68-70.
[285] J. Provencher, A. M. Dange, S. Kuijper, *The BEFIT Directive: A Game Changer for Transfer Pricing or an Irrelevant Buzz?,* International Transfer Pricing Journal (January/February 2024), IBFD, paragraph 3.
[286] N. Casey, J. Voje, *EU report Subject 1*, in *Group approach and separate entity approach in domestic and international tax law,* Cahiers de droit fiscal international, volume 106A (2022), international fiscal association, p.68-70.
[287] J. Provencher, A. M. Dange, S. Kuijper, *The BEFIT Directive: A Game Changer for Transfer Pricing or an Irrelevant Buzz?,* International Transfer Pricing Journal (January/February 2024), IBFD, paragraph 3.
[288] Ibid.

within the Internal Market and to apply formulary apportionment.[289] Considering the above, when group entities do have intercompany transactions with other group entities that are situated outside of the European Internal Market, then regular transfer pricing rules will still apply except for what is considered low risk activities.[290]

It seems that while the European Commission is still pushing for an EU-wide formulary apportionment, there is also some recognition that it is impossible to achieve in a single day. BEFIT then applies both a formulary and a transfer pricing approach as sort of a transitional rule, although it can be speculated that the end goal would result in an EU-wide formulary apportionment system. Indeed, it seems that applying a transitional rule towards a full-fledged regional formulary apportionment might be the solution to bridge the political gap.

4.2.2 Designing the conceptual system

This thesis has illustrated several approaches and proposals to implement a tax system that departs from the current tax system by using a formulary apportionment. Amount A can be considered a single factor formulary apportionment using sales as its main allocation key, and is layered on top of the current tax system. The CCCTB and BEFIT are regional proposals that aim to integrate a regional formulary apportionment. Then, the US and several other jurisdictions have subnational formulary apportionment applicable as well, with the US having the most experience in it using the Massachusetts formula. Indeed, it would be most pragmatic to build on rules that have already been applied or have seen some success. Another issue would relate to the legitimacy of such rules, though the legitimacy underlining such rules and new principles could be achieved if there is a political consensus by 145 or more countries that participate in international tax coordination.[291]

Scope and implementation

The first important point of discussion is regarding the scope of the system. Considering that at this moment the GloBE-rules are starting to be enforceable, it seems to be the most sensible to align with that scope threshold of 750 million euro consolidated turnover. This threshold sufficiently encapsulates the target multinational corporations in my view and seems to be a natural dividing line from what is considered small and medium-sized businesses. Furthermore, I see no need to add a profit margin provision, as the rules do not intend to primarily reallocate taxing rights such as in the Amount A

[289] B. Wingerter, *BEFIT – Is the Arm's Length Principle Still Fit for Purpose?*, International Transfer Pricing Journal (September/October 2021), IBFD, paragraph 5.
[290] J. Provencher, A. M. Dange, S. Kuijper, *The BEFIT Directive: A Game Changer for Transfer Pricing or an Irrelevant Buzz?,* International Transfer Pricing Journal (January/February 2024), IBFD, paragraph 3.
[291] R. Szudoczky, *Principles Justifying the Reallocation of Taxing Rights to Market Jurisdictions: Do We Need Them?,* INTERTAX, Vol. 41 issue 12 (2023), Kluwer Law International, paragraph 7.

proposal, but are considered to be a complete deviation from the current international tax system.[292] Then, notwithstanding corporate entities, certain partnerships and physical permanent establishments, the scope should be expanded to also account for 'non-physical permanent establishments'.[293]

The second aspect would be to consider in which manner the rules will be implemented. In my opinion using a multilateral tax treaty seems to be the most sensible option, as the benefits outweighs the drawbacks in designing rules that will stand the test of time.[294] Even though this option will certainly bring a lot of complexity, it will be highly difficult to conclude as already seen with Amount A and it does not always account for a specific country's individual circumstances.[295] Furthermore, considering multilateral treaties use a concept of the Conference of the Parties, making adjustments and amendments to such treaties will be time consuming and not always effective due to political disagreements, it would on the other hand bring some much needed certainty and safeguards against structural problems. One such structural problem noted in literature is the fact that there is a residence-country bias, implying that usually residence states (more often rich countries) are allowed to tax on the worldwide income.[296]

Another issue that might come with i.e., soft law such as the OECD TPG, is that even though it is extremely flexible and does not encroach on the tax sovereignty of jurisdictions, it can lead to different interpretations of definitions used for purposes of that TPG. Indeed, based on my own observations this has come up during negotiations of Amount B. This is a high risk as once those alternative interpretations are applied, it's very difficult to undo that movement. By signing a treaty, those interpretative differences are accounted for even if it is litigated domestically. Issue then is, who decides on an international level how the rules should be interpreted? Will the Conference of the Parties do that? If they have received a political mandate, an external organ could be designated for those issues that specifically answers interpretative questions related to the multilateral treaty. Furthermore, a multilateral treaty could precede bilateral treaties such as with Amount A, there is a legal ground that avoids treaty override which might be an issue in the context of, for example, the GloBE Undertaxed Payments Rule (UTPR).[297] Finally, a treaty could provide for much needed certainty, especially if the rules have a common interpretation and provides for additional taxpayer certainty procedures baked into the rules. These certainty rules should include strict penalties for both taxpayers ánd tax administrations to abide by such rules.

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[292] NB: indirectly this would be indeed considered a reallocation of taxing rights, however the system would in my view be similar to how the arm's length principle works in practice right now.
[293] A policy idea would be to create something that defines it as something along the lines of 'gives rise to significant economic activity', however the thesis will not further elaborate on this.
[294] P. Baker, *Multilateral Tax Treaties,* Bulletin for International Taxation, 2021 (Volume 75), No. 11/12, IBFD. See for all the benefits of a multilateral treaty paragraph 4.2.
[295] Ibid, paragraph 4.3.
[296] J. Lammers, T. D. Magalhães, *Breaking the Double Tax Paradigm,* World Tax Journal, Vol. 16 no. 1 (2024), IBFD, paragraph 2.3.
[297] This is potentially achieved by adding a 'No reservation' provision. See for further discussion on the UTPR this article: T. Masuda, *The Compatibility of the UTPR and Japan's Tax Treaties,* Tax Notes International, Volume 114 (May 20 2024).

Consolidated accounting and tax base

Before the consolidated tax base, there needs to be a starting point from which the consolidated tax base is determined by means of an appropriate accounting standard. Indeed, there seems to be a call for a global harmonised accounting standard.[298] The thesis will not discuss that issue for the sake of brevity, and the assumption will be that IFRS seems like a good starting point since it's mandatory, for example, in the EU for public companies.[299] Additionally it has precedence with Amount A and GloBE as an accepted accounting standard, but also aiming to strictly separate commercial and fiscal accounting. Certain fixed book-to-tax adjustments should be included in the rules, both optional and mandatory. Indeed, it is important that sufficient guidance is given so that a robust consolidated tax base may be calculated which also is identical globally. For this, inspiration could be taken from both GloBE and Amount A.[300] The objective in this step is to achieve the unitary business principle on a global scale and to disregard the separate entity approach completely. By disregarding the separate entity approach, taxation on transactions such as certain withholding taxes should be disregarded as well. This may be done in a similar fashion such as how Amount A removes digital service taxes.[301]

Allocation keys

The allocation keys are an essential part of the system, it should therefore appropriately include both the input and output side of a business.[302] In my view, there is therefore no need to deviate too much from the formula used for the CCCTB since an allocation using sales, assets and labour would appropriately take both the input and output of a business into account.[303] [304]

As stated before, there would be a need for a new rule which includes 'non-physical permanent establishments' or at least an indicator that would constitute a taxable allocation factor for jurisdictions (i.e., 'de facto nexus'). There is no question on whether there would be a de jure nexus. In that regard, having an additional sufficient economic nexus makes sense, then what should the threshold be? A pragmatic solution could be the following. Considering that Amount A has a scope of 20 billion euro

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298 L.C. Célestin, *The Formulary Approach to the Taxation of Transnational Corporations: A Realistic Alternative?,* Doctoral Thesis University of Sydney, October 2000, chapter 6, section II, https://core.ac.uk/download/pdf/41229867.pdf

299 However, a harmonised accounting standard that is applicable in all jurisdictions would be extremely helpful in realising a global formulary apportionment.

300 GloBE might be less appropriate due to the jurisdictional nature as well as the fixation on calculating of the effective tax rate of the measure.

301 Noting that this is not feasible from a political perspective.

302 S. Chen, *Towards a Neutral Formulary Apportionment System in Regional Integration,* EUCOTAX Series on European Taxation 71 (2023), paragraph 9.2.

303 European Commission, Directorate-General for Taxation and Customs Union, Weiner, J., *Formulary apportionment and group taxation in the European Union – Insights from the United States and Canada*, Publications Office, 2005, paragraph 2.2.

304 On the other hand, it would be beneficial to consider the sunk cost fallacy as something that has already been invented might not be the best solution even though it has been advocated for many years. A solution that would deviate from that formula would however be out of the scope of this thesis. See for a definition of the sunk cost fallacy here: https://www.investopedia.com/terms/s/sunkcost.asp

consolidated revenue with a jurisdictional nexus of 1 million, if the scope is lowered to 750 million euro consolidated turnover, that would result in a nexus of 37,500 euro.[305] However, as the Amount A nexus only took sales into consideration, it might be more sensible to set this nexus at 100,000 euro for purpose of simplicity and administrability. However, this nexus would only kick in when there is no direct physical presence in a jurisdiction. As such, theoretically this nexus would kick in when there are distance sales made with no physical presence, or when remote labour is used, i.e., a company in the UK hiring employees from Vietnam that work remotely on a permanent basis.

The first allocation key is the sales-based allocation key and is considered the output-side of the business. In my view, the sourcing provisions related to this allocation key described in Amount A are highly sufficient. For one, this aspect is something that is already politically agreed upon by the Inclusive Framework and is a stable part of Amount A. Additionally, it is quite robust in allocating the sales made using several factors and includes some backstop provisions in case the destination of those sales is undecipherable. It is also doubtful that, if the discussions would start all over again, whether a different outcome could be achieved at all. Therefore, following this 'blueprint', it seems a sensible solution to take the Amount A sourcing rules as a starting point for the sales-based allocation key. Then the labour factor is equally divided between the number of employees and payroll.[306] It is debatable whether to include intangibles, since those are easily moved for purposes of tax avoidance.[307] Others argue to include only certain intangibles that are linked to innovation or carry actual economic value, and not intangibles such as goodwill.[308]

Considering Amount A is already almost finalised, it implies that countries are at least agreeing on the scope of the rules and its application. Therefore, there are lessons to be learned from that approach, and possibly reconsidering it as a first step towards a full-fledged global formulary apportionment. Indeed, it is necessary to take small steps towards that goal, so instead of completely moving away in a single instant, it is much more agreeable to have transitional rules in place so that a smooth movement will take place. Ironically, while the arm's length principle has shortcomings, compared to completely moving away from it, it is considered relatively stable. This stability is something to be cherished. Indeed, it is necessary to take small steps so if Amount A does not work out, that framework should be remembered as it can be considered a transitional movement towards a formulary apportionment. The same seems to be happening on a regional scale with the EU proposing a transitional rule that would eventually result in a regional formulary apportionment.

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[305] (750,000,000 / 20,000,000,000) x 1,000,000 = 37,500

[306] S. Picciotto, M. A. Ahmed, A. Cobham, R. R. Das, E. Eze, B. Michel, *Beyond the Two Pillar Proposals – A Simplified Approach for Taxing Multinationals,* Tax Cooperation Policy Brief no. 36 (26 October 2023), South Centre, p.6.

[307] Ibid.

[308] S. Chen, *Towards a Neutral Formulary Apportionment System in Regional Integration,* EUCOTAX Series on European Taxation 71 (2023), paragraph 6.5.

Further inspiration can be taken from the regional approach as well. As the EU has been advocating for a regional formulary apportionment, it would be helpful to explore the area of combining regional formulary apportionment(s) with a global formulary apportionment. Assuming that BEFIT finds common ground and is transposed into domestic law, resulting in a situation where the EU is effectively administering a formulary apportionment. Then, considering that it might be an extremely arduous task to agree on a global formulary apportionment, it might be wise to build on what is currently Amount A. That would imply that the revenue sourcing applies globally using the sales allocation key while on a regional scale a further addition of granularity can be added in the forms of a labour and asset allocation key. The aggregate of these two previous allocation keys can be divided firstly between regions. The assumption would be to divide geographic regions based on their relative homogeneity of labour costs and asset depreciation. These regions could for example be what is currently already used for certain business models, which divides the globe in regions such as: North America, Latin America, Europe, Middle-East, Africa (which can be divided even further if needed), etc. Then, since there are several regional organisations such as the African Forum of Tax Administrations (ATAF) and the Asian Development Bank (ADB) that could functionally assist in setting up such a regional system of formulary apportionment that works harmoniously with Amount A (or a similar approach). This approach could be considered a next step in the proposed transitional rule.

This approach would be deemed as a 'layered global formulary apportionment', whereby a general allocation will take place at a global level with an increasing granularity at each level. At a regional level, the allocation keys of labour and assets would be added, and additional allocation provisions would be included at the domestic level specifically for labour and assets. The formula would as such be different from the CCCTB, and instead there would be multiple formulae. And, if necessary, at a domestic level an allocation might be helpful too especially for federal states with subnational measures. In those situations, the formula would remain identical, except it might include some further guidance on delineating the factors of the formula although that would remain the jurisdictions' competence to decide on. Indeed, it seems that adding further granularity and allocation keys seems to be sensible in a later stadium of the transitional rules.

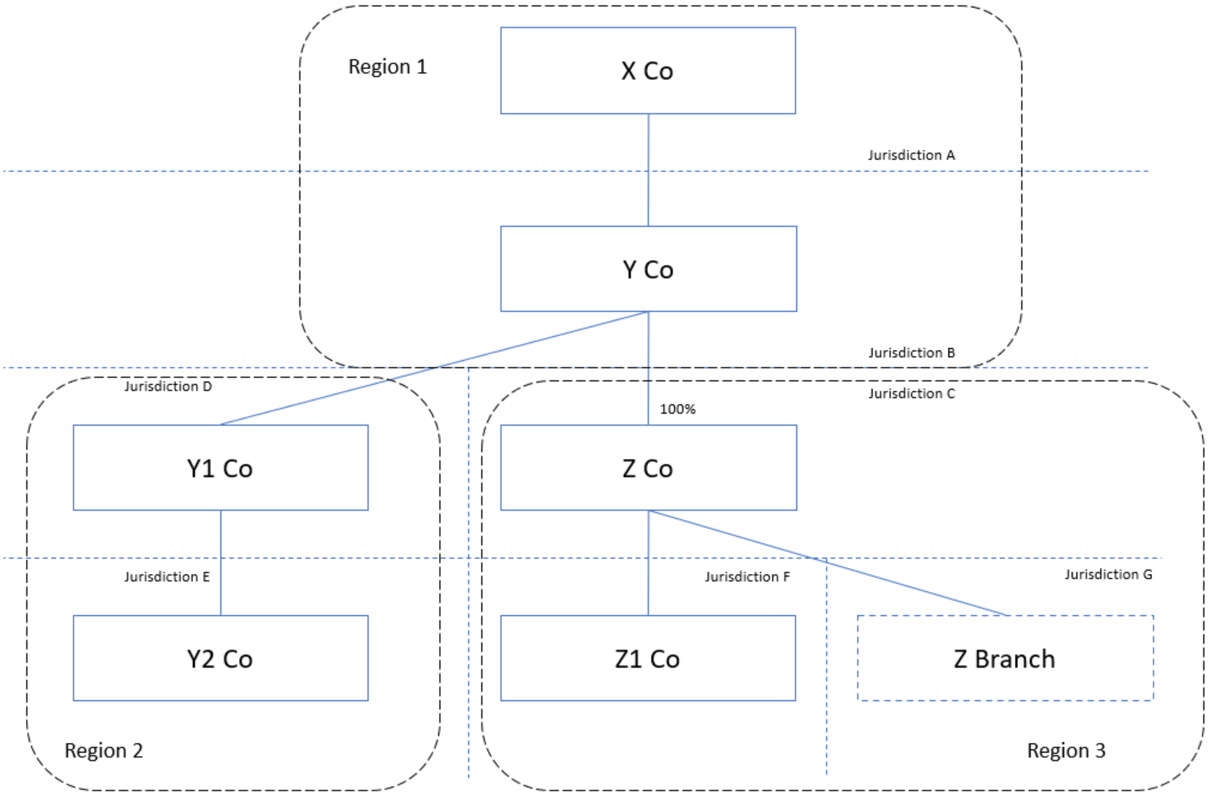
The issue however with implementing such rules is that it will probably lead to a highly detailed drafting of the rules as it had been done for Amount A. There, the revenue sourcing rules are described with minute details to provide for increased guidance. Would that be detrimental for the other allocation keys? Complexity leads avoidance, but then again without clear and precise rules it would create uncertainties and it would be hard to amend the rules once in place. However, in my view the allocation keys related to assets and labour are most likely less difficult to implement compared to a sales-allocation key, since labour and assets are easier to delineate on an entity or jurisdictional basis which would make the administration less complex.

Administration

Finally, the administration would follow what has been drafted in Amount A as that leads to simplicity and administrative ease. The parent entity or a designated filing entity would arrange all the compliance as well as any disputes with the lead tax administration. The lead tax administration would then work together with other tax administrations so that each associated administration receives their share and information.

4.3 Formulary apportionment: case study

To illustrate the systematic shown above, a high-level case study is provided below with the assumptions described underneath. This can be considered a next step in the transitional rule after Amount A or a similar rule has been implemented.



Assumptions

The illustration depicts a legal structure of X MNE that has its parent company, X Co, situated in Jurisdiction A. In Jurisdictions B to F there are subsidiaries of X Co with legal entities, while Z Branch is situated in Jurisdiction G and is related to the non-physical revenues earned in that jurisdiction. X MNE is specialised in manufacturing, trading and development of electric vehicles, with manufacturing plants situated in Y1 Co and Y2 Co and the development of intellectual property and strategic management at X Co and Y Co, although in all these jurisdictions the vehicles are being sold. On the other hand, Z Co and Z1 Co are specialised in the distribution of such vehicles, while the Z Branch is essentially Z Co and Z1 Co selling the vehicles via distance sales. All the subsidiaries are wholly owned by the group. This assumption is without prejudice of how a real vehicle production practice would function. Moreover, none of the jurisdictions apply a withholding tax and the arm's length principle.

The jurisdictions in question have been divided in three regions according to their relative economic homogeneity.

Consolidated financial statement and consolidated profit & loss

Assume a multilateral treaty has been signed between the jurisdictions such as described in the previous paragraph. X MNE will therefore be considered a unitary business. All entities are consolidated, which means that it is necessary to consolidate the financial statements, assume that they use IFRS. Do the same then for profit & loss with book-to-tax adjustment so that there is a clear delineation between commercial and fiscal numbers. According to this consolidation, the group revenue is at 3 billion euro.

Allocation on a global, regional and jurisdictional basis

The next step is to define the relevant allocation keys on a layered basis. Firstly, between each region the labour and asset allocation keys are aggregated using the consolidated financial statement. On the other hand, the sales allocation key is introduced at a jurisdictional level as the revenue sourcing rules source directly from the respective jurisdiction. At a jurisdictional level, the asset and labour factor are further subdivided using more granular allocation so that each jurisdiction gains a certain value allocated to them whereover that jurisdiction may tax. The same applies for the Jurisdiction G even though X MNE does not explicitly have a physical presence there. The jurisdictions may then decide the effective corporate income tax rate at which they levy, although considering the scope

Administrative aspect

The administrative aspect shall be fulfilled at either the ultimate parent entity or a designated entity. In this case, X Co as the ultimate parent entity files the tax return for the entire group in Jurisdiction A whereafter X Co distributes the tax amounts to each of the relevant jurisdictions.

4.4 The benefits of a transitional system

4.4.1 The global formulary system in light of the normative framework

To gauge the benefits of a new system, it is necessary to test it against the principles described in chapter 2. Furthermore, the apportionment should sufficiently cover the in- and output side of a business.

The benefit principle and the ability-to-pay principle

Taxes are distortive, so the perfect tax system would be designed in such a way that the distortion is justified. This justification is linked with the benefit a business has in relation to the distortion. Indeed, by designing a system that perfectly aligns with i.e., public goods, the justification arises for taxes to be distortive. Whenever a business operates in certain jurisdictions, either with or without a physical presence, a business will receive benefits by either revenues earned or by using the framework set in place to trade at all. When that is then linked with the economic factors of a business, such as labour, sales and assets, the justification is in my view more easily achieved since the business is taxed on their actual economic worth and it will be less about rubber-stamping. Moreover, on the ability-to-pay principle this system would make it so that credits given by the parent jurisdiction are not necessary per se since instead of giving out credits, the tax is redistributed to local jurisdictions.

Market (and by extension tax) neutrality

The design of the rules should align with all aspects of neutrality as much as possible. Since taxes are inherently distortive, it is not an easy task to align such rules with the principles of market neutrality, since jurisdictions inherently also favour certain companies over others. However, tax neutrality should be achievable. Indeed, a system of formulary apportionment should be designed in such a way that businesses should not make decisions based on solely tax considerations, both on the sides of minimising tax avoidance of i.e., treaty shopping, as well as the decision not to trade in a certain jurisdiction due to too stringent tax rules for cross-border operations. The design should therefore feel as if it invisible to the taxpayer. By implementing a multilateral treaty that favours economic factors, the issue of tax avoidance by treaty shopping should be nullified. It is a necessary goal to minimise tax avoidance. Tax avoidance brings down efficiency in the sense of resistance of manipulation, which is linked again to the ability-to-pay principle that implicitly mentions that equal treatment of taxpayers should be sought and by extension equal treatment requires resistance to manipulation.[309] Moreover, economic factors make it so that the tax is linked to business' operation and would feel more natural. On the other hand,

[309] S. Müller-Thomczik, L. Reiter, *Splitting of Corporate Taxes in Germany and Formulaic Distribution of a CCCTB – Critical Comparison*, Central European Economic Journal (2022), 9(56), p. 269-290. Paragraph 5.3.1.

it is hard to anticipate whether businesses will find other routes to abuse such a system via for example factor distortion.

Value creation

A system of formulary apportionment using the factors assets, labour and sales would in my view appropriately take value creation into account from both the in- and output side of a business. The output is related to the sales factor, which will be achieved by having robust revenue sourcing rules without a necessity for a physical presence. The input side is related to labour and assets which make up how businesses create value to a product or service. Based on Devereux' four options for taxing multinational enterprises, the one missing completely in our current tax system is the ability for jurisdictions to tax wherein the customers are resident. By including a sales factor, which is essentially what Amount A is already aiming to do, it would better align with value creation in general. Furthermore, on the input side of a business, labour and assets are being taken into account which effectively create value for a business.

Inter-nation equity

The inter-nation equity is related to how much tax jurisdiction the source country receives. The source country can be defined as the source of where value is created. This source can then be divided further in sales, assets and labour that all adds to how value is being created for a business. While initially it might be hard to assess how much the tax sovereignty allocated to the source country would be, in my view source countries would benefit from a system of formulary apportionment as a system of tax treaties makes it so that it can be hard for source countries to tax appropriately. Additionally, the differential component is grounded in the idea that redistribution should occur from high-income countries to low-income countries. Indeed, as seen with the economic benefits Amount A would provide developing countries and market jurisdictions, a complete system would benefit those jurisdictions even more and provide for a great push towards inter-nation equity.

4.4.2 Would a global formulary apportionment provide for a more neutral and equitable international tax system?

The question that then remains is whether a global formulary apportionment leads to a more neutral and equitable international tax system. An initial impression is that it is an option that could lead to both more equity and neutrality, however it is by no means a 'perfect system'. Nothing can be considered perfect and flawlessness could in theory also be imperfect. In that light, it is on the other hand beneficial to explore new avenues in international tax even though it might not be considered revolutionary. Indeed, with the dawn of the digitalised economy the current international tax system as it stands has been under a lot of pressure as it was designed in a different time. While the current tax system might stand as it is with a new band aid patch included every time a new advancement is made in both technological and economic models, the question is when would a new advancement would commence that will lead to a complete collapse of the system (i.e., artificial intelligence, virtual reality, or something completely different?). Therefore, this thesis aims to explore those avenues via the global formulary apportionment, assuming it departs completely from the current system, and whether they would align with economic principles. The main question to be answered for this thesis is whether such a system would provide for a more neutral and equitable international tax system.

Whether a global formulary apportionment would make the international tax system more neutral remains a theoretical discussion. Indeed, based on the findings in the thesis, it seems that a tax system which uses a formulaic approach can be considered more neutral as compared to the current tax system. Furthermore, neutrality can be achieved in reducing compliance for business and tax administrations. Indeed, basing on the models on Amount A, once certain data points are set in place to calculate the allocation factors, it is technically possible to create a fully automated business model where it would be straightforward to calculate the payable tax amounts per jurisdiction. Essentially the same can be done with a three-factor formulary apportionment. The beginning years of setting up such a framework is costly; however, it pays off in the long run with lower risk of tax controversy, such as MAP-cases, and less yearly compliance costs. Technology is therefore an enabler of a global formulary apportionment.[310]

Subsequently, a formulary apportionment would theoretically provide for a more equitable sharing of tax revenues globally. Statistics by IMF show that for example investment hubs are expected to lose out majorly, which shows the distortion with the profits being booked in such jurisdictions versus the actual economic factors arising from the same jurisdictions.[311] Assuming the three factor formula is applied, developing countries tend to gain significantly in tax revenues, making a formulaic approach generally more equitable globally.[312] A natural redistribution will take place that is aligned with the economic reality of such businesses. Once again, this is a theoretical assumption as it is hard to anticipate how businesses would react to such a major shift in international taxation.

A theoretical conclusion to the research question is therefore that a global formulary apportionment will most likely lead to a more neutral and equitable international tax system. However, to properly implement a fully-fledged global formulary apportionment, strict considerations must be taken <u>not</u> to

[310] S. Chen, *Towards a Neutral Formulary Apportionment System in Regional Integration,* EUCOTAX Series on European Taxation 71 (2023), paragraph 9.5.2.
[311] R. de Mooij, L. Liu, D. Prihardini, *An Assessment of Global Formula Apportionment,* IMF Working Paper, WP/19/213, paragraph III.D.
[312] Ibid, paragraph IV.

completely destabilise the international tax system. Therefore, it is necessary to deliberate on a transitional rule.

4.4.3 Implementation of a transitional system towards a global formulary apportionment: what can we learn from Amount A?

Indeed, the movement from a separate entity approach towards a group consolidation would be such a drastic change that might possibly destabilise the international tax system when it is implemented improperly. Ironically, the arm's length principle would be considered as stable in that environment. Therefore, it is necessary to find a middle-ground to ensure that a smooth transition will take place. One way or another, the movement towards a formulaic approach will occur in the future. The question is therefore not when this movement will take place, but how this movement will take place.

In this regard, the process surrounding Amount A provides many insights in how this movement will take place. Indeed, considering the rules are almost finalised at this point in time, it can be concluded that countries are at sufficiently agreeable to sign on the set of rules with some small exceptions. Most of those exceptions are related to the carve-out rule of the MDSH, the application of the rules on non-state jurisdictions and the removal of digital service taxes and relevant similar measures. In that case, considering these are relatively minor issues, countries can politically agree on a partially formulaic approach that benefits market jurisdictions.

Then, instead of immediately moving towards a fully-fledged global formulary apportionment, it would be much more prudent to find avenues for transitional rules that would eventually lead to a global formulary apportionment. As the rules for a sales-based formulary apportionment are almost finalised, it seems to be the most logical option to start with implementing this approach, as a destination-based allocation of taxing rights is underrepresented in the current tax system. This would benefit market jurisdictions, as well as developing countries as can be seen by the economic modelling provided for the application of Amount A.[313] The starting point for a transitional period should therefore be a single-factor allocation key that also takes into account some aspects of the arm's length principle.

Once the rules are in place, it would mark the start of the 'transitional period' towards a fully-fledged global formulary apportionment. That movement cannot be done in a short period of time. Indeed, it might need several transitional rules before the movement is completely finalised. Indeed, Amount A stipulates that after at least seven years a review will commence to determine whether the rules work as intended, as well as provides a window to lower the revenue threshold for the application of Amount A.

[313] See J. Heckemeyer, I. Schulz, C. Spengel, S. Winter, *The Digital Economy, Global Tax Reforms and Developing Countries – An Evaluation of Pillar I and Art. 12B UN Model,* SSRN (March 2024), available at: https://ssrn.com/abstract=4776415, and S. Delpeuch et al, *Update to the Economic Impact Assessment of Pillar One,* OECD Taxation Working Papers series no. 66, OECD (2023).

In my view, a longer review period would be needed to start the next phase of the transitional rule, however the initial scope seems to be sensible. The following transitional rules would bring with them additions to the functioning formulaic approach. For example, the second transitional rule would lower the threshold significantly while refining the sales allocation key. The third transitional rule would abandon the arm's length principle and in return additional allocation keys would be included in the formula such as assets and labour to fully take into account the input side of a business. This could even be subdivided into a regional and global approach towards formulary apportionment. The fourth transitional rule would lower the scope even more to 750 million euro with further refinement of the application of the rules. The next step would then result in a fully-fledged global formulary apportionment, but it would possibly take at a minimum 40 to 50 years in total before the movement is complete.

In essence, Amount A perfectly targets the intended scope for a first iteration of such rules. Considering the biggest 100 companies in the world that have significant excess profits are in scope, they are the best 'experimental' targets. Those companies have significant profits to fund a first advance into the technology needed to allocate taxable profits based on allocation keys. Once the knowledge is gained into how that is best applied, the pilot in my view is considered a success. This would then lead into further refinement of the rules based on the observations made during the first iterations of the rules. The gradual movement would start from the biggest companies to a broader scope until the threshold of 750 million euro is met, as in my view that threshold is a natural dividing line between small- and medium-sized enterprises and bigger companies. Indeed, in my view this gradual movement using several transitional rules seems to be the approach that would have the highest possibility of success towards a full-fledged global formulary apportionment.

4.5 Opinion: is the world ready yet for a global formulary apportionment?

The failure of Amount A would show that the world is not ready yet for any form of formulaic approach to tax business. In my view, Amount A is somewhat similar to a prisoner's dilemma.[314] If an agreement can be signed for Amount A, it would provide for benefits and also indeed some drawbacks. The overall picture, however, is that jurisdictions will generally benefit but it comes with a compromise too. Outside of the technical aspects, the fact is that the multilateral approach has been effective in drafting tax policy. By failing Amount A, trust in such an approach would dwindle and to motivate jurisdictions again with a multilateral approach will be much harder due to scepticism. Furthermore, by failing Amount A, most jurisdictions will remain worse off except possibly for investment hubs. Then a question arises, why are

[314] S. Kuhn, *Prisoner's Dilemma,* The Stanford Encyclopedia of Philosophy (Winter 2019 Edition).

investment hubs interested in Amount A? It is to stop the proliferation of digital service taxes and to stabilise the international tax system.[315]

Is a new system then more neutral? That is debatable for Amount A, since it is layered on top of the current tax system, so it could even prove to give rise to more tax disputes but then between the arm's length principle and the formulaic system. There are additional tax certainty measures included which might negate the issues, although it is hard to tell in the current stage. On the other hand, the removal of digital service taxes will definitely provide for more tax neutrality overall. For a global formulary apportionment, will it prove to be a shift towards a better system? On one hand, abuse of tax law and treaty shopping will be likely to be reduced to near zero, but then in place of that there could be new schemes popping up such as factor distortion schemes. However, it is less so in terms of tax rate, since the expectation is that the GloBE-rules will provide a minimum tax rate of 15% globally.

Outside of tax technicalities, if Amount A fails however, there is a high likelihood that digital service taxes will proliferate. The US in return will start trade wars and sanctions on jurisdictions that implement such rules. The European countries might not necessarily implement a true digital service tax (although the European Commission has alluded to it), but the Commission might still implement a rule that seems similar to a digital service tax. Other bigger market jurisdictions might not be afraid of those sanctions and implement their own rules. This outcome is bound to increase prices and let tensions between jurisdictions rise. Multilateral cooperation is an important asset especially in the tax area. Even though currently the world is in turmoil, the tax policy agenda is the one thing that seems to remain in a bubble, not affected by outside factors. It is an important forum for dialogue, and jurisdictions will remain even more isolated if that forum is abandoned.

Moreover, faith in the OECD as a forum will deteriorate. Then, tax policy and international cooperation might move to the United Nations. By itself that might not necessarily be a worse outcome, since the movement might give rise to new inspiration. Subsequently, regional organisations such as ATAF could be helpful in providing a forum for dialogue in international tax matters, but where would international cooperation and openness for multilateralism end if jurisdictions have seen how negotiations have already broken down once? Better yet, competing with each other will only result in worse outcomes, therefore I am of the opinion that international and regional organisations should work together to find common ground. This has already been achieved by the United Nations Development Programme and the OECD with the tax inspectors without borders program, so why not create something similar like a forum for international tax policy? Build further on foundations already created with the Inclusive Framework. But then the question remains, will a global formulary apportionment really work without the whole globe participating in it. The best way to achieve such an outcome is proceeding via an

[315] As per the speech of the Singaporean Minister of State for Law and Finance in 2017: https://www.iras.gov.sg/news-events/newsroom/smu-ta-centre-for-excellence-in-taxation-conference---speech-by-ms-indranee-rajah-senior-minister-of-state-for-law-and-finance-1

international cooperative organisation, something similar to the World Trade Organisation. However, are countries ready to cede a part of their tax jurisdiction to such an organisation? Some might be ready, but based on the current negotiations happening on Amount A most of the jurisdictions participating are not ready for such a task. The only option remaining is then negotiating via international bodies and regional organisations using cooperative multilateralism. Conversely, it is not only the taxpayer that could undermine such an endeavour, as jurisdictions are known to compete with each other as well.

At the very least, the current participants of the Inclusive Framework might be (almost) ready for Amount A, but it is surely not ready yet to immediately move towards a full-fledged global formulary apportionment in any way or form. Therefore, a transitional movement is necessary to facilitate a full-fledged global formulary apportionment whether that is via the signing of Amount A or a similar approach.

4.6 Conclusion

Chapter 4 has described a potential shift towards a global formulary apportionment. These included policy designs that need to be addressed such as the consolidated accounting and tax base and the allocation keys to be used within the formula. Additionally, an illustration of the application of the rules was also provided at a high level. This chapter has also touched on the economic principles that need to be respected when designing such rules and the question whether the proposed system would provide for a more neutral and equitable international tax system. The assumption is that indeed it would provide for a more neutral and equitable system, although it might be hard to anticipate whether the rules work as intended.

However, Amount A has provided important knowledge in the process towards a formulaic allocation of taxing rights. Indeed, it seems that countries are generally agreeable with the inclusion of a destination-based allocation key that would benefit market jurisdictions. So then, this could be used as a starting point towards a full-fledged global formulary apportionment whereby transitional rules facilitate a gradual movement with each step providing for more robust rules on that apportionment. While it seems that an immediate movement towards a global formulary apportionment might not be possible, a series of transitional rules might be able to facilitate that shift towards a full-fledged global formulary apportionment.

Chapter 5. Conclusion

5.1 Summary

In the past decade, the international tax world has seen many rapid changes following the advent of the BEPS-project. Once again, a century-old discussion has been highlighted on the usage of a formulary apportionment for the allocation of the tax base of multinational corporations. Indeed, this thesis has delved into the specifics surrounding the topic of a global formulary apportionment, the relation with the arm's length principle and the economic concepts that are relevant to implementing such rules. Chapter 2 firstly described some subnational apportionment systems from the US, Canada and Germany as a way to navigate into the principles and concepts that function as a basis. The concepts that were relevant for the research were the benefit principle, ability-to-pay principle, market neutrality, value creation and inter-nation equity. Subsequently, some technical aspects were laid out for the functioning of a formulary apportionment, such as the scoping, the tax base and allocation factors. Finally, considerations were laid out on the benefits and drawbacks of both systems, highlighting for example the fact that the arm's length principle might not always correctly account for group synergies as well as financial guarantees, captive insurance companies and intangibles. While the arm's length principle is pragmatic in application, a formulary apportionment might be able to resolve the issues plaguing the arm's length principle.

Chapter 3 provided an overview of the aspects of the Multilateral Convention to implement Amount A of Pillar One as an attempt to implement a formulaic reallocation of taxing rights to market jurisdictions. The components that were explicitly covered were the reallocation mechanism used in Amount A, the tax certainty aspects and finally the removal of digital service taxes and relevant similar measures. As can be seen from the working of Amount A, it is highly complex as well as relatively limited in scope due to only the biggest 100 companies of the world being possibly liable for this reallocation. These aspects were then tested against the principles acting as a foundation for Amount A in the form of the Ottawa principles, as well as against the principles laid out in chapter 2. Research shows that while Amount A is indeed highly complex in nature, it does seem to benefit developing countries and provides for a more equitable society. The question remains whether it would result in a more neutral international tax system due to it being layered on top of the current system and whether it would sufficiently address the concept of a global formulary apportionment.

Chapter 4 provided for policy recommendations for a global formulary apportionment. Firstly, some inspiration was found in regional proposals, more specifically the EU CCCTB and BEFIT proposals. Then, some recommendations and considerations were laid out in designing the rules such as which allocation keys should be used and the manner of implementation with a simple case study for illustrative purposes. Subsequently, the benefits of a global formulary apportionment were described in light of the principles laid out in chapter 2. While a global formulary apportionment would in theory provide for a more neutral and equitable solution, it is by no means a perfect solution. It is difficult to anticipate whether the rules would work as intended, but what is definitely clear is that developing countries tend to benefit from such rules. A conclusion following that assessment however is that an immediate movement towards a full-fledged global formulary apportionment might be politically impossible, on the other hand applying a series of transitional rules might be able to solve that political impasse. Indeed, a rule that would implement a partial formula with a series of additional transitional rules might at the end result in a full-fledged formulary apportionment. However, this process might take several decades to complete.

5.2 Conclusion

To provide a conclusion to the thesis, the research questions set out in chapter 1 will be answered below with a final conclusion given for the main research question of the thesis.

Chapter 2: What is a formulary apportionment and how does it compare to our current international tax system?

A formulary apportionment in short is a mechanical formula applied for the allocation of a multinational enterprise's tax base to jurisdictions where the enterprise operates in. The formula may use allocation keys that encompasses both the in- and output side of a business such as labour, assets and sales. It is much different compared to the current international tax system that predominantly relies on bilateral treaties and the arm's length principle, as that takes the stance that each entity from a group functions independently from each other. It is therefore the difference between either taking a separate entity-approach or a unitary business approach.

Chapter 3: How does the Multilateral Convention to implement Amount A of Pillar One function as a reallocation of taxing rights and does it sufficiently encompass the needs for a global formulary apportionment?

The Multilateral Convention to implement Amount A of Pillar One is a treaty-based approach on reallocation excess profits of the biggest multinational corporations in the world using a single factor sales-based formulary apportionment. It is a highly complex proposal, albeit one that would benefit market jurisdictions on one hand, and benefitting other jurisdictions that are proposing to remove the issue of digital service taxes. While it is definitely a robust proposal, it would not yet fit in the context of a full-fledged global formulary apportionment.

Chapter 4: How could a system of global formulary apportionment be defined as and would that result in a more neutral and equitable international tax system?

A system of global formulary apportionment would first of all deviate completely from the current international tax system as there are structural problems that need to be solved. By layering new rules on top of the current system, those issues will not necessarily be resolved so a structural resolution has to be found. By considering the consolidation, the formula itself and the manner it should be implemented, the route in which such rules need to be designed were discussed. By aiming for a structural solution, this would theoretically result in a more neutral and equitable international tax system. This structural solution could be found by implementing a series of transitional rules towards a system of global formulary apportionment.

Will the usage of a global formulary apportionment, and thereby following allocation keys, provide for a more neutral and equitable allocation of tax revenues?

The usage of a global formulary apportionment will most likely lead to a more neutral and equitable allocation of tax revenues. The neutrality part stems from the fact that the tax would theoretically lead to less distortions due to aligning with economic reality, as such where a business really operates in both the in- and output side receives the taxing rights. The equitable component stems from the fact that by allowing market jurisdictions, that are oftentimes developing countries, to tax over the sales in that jurisdiction provides for a more equitable global allocation. However, an immediate movement towards this system is politically not feasible, therefore solutions need to be found in the form of transitional rules over a longer period of time that will lead towards a more neutral and equitable full-fledged global formulary apportionment.

5.3 Recommendations and future research

This thesis has explored avenues in finding solutions for a global formulary apportionment system. The international tax system, even though it might seem otherwise from this thesis, is still relatively stable as it is. However, it does not hurt to find other avenues that might be considered for the future. The globalisation and digitalisation have put a lot of additional pressure in the system. To provide for a system that is better suited for such developments, and other future developments, it is necessary to remain on the lookout, and to possibly find other solutions that could make the international tax system future proof. It has become clear that the arm's length principle retains some shortcomings related to group synergies, financial guarantees, captive insurance companies and intangibles. However, an immediate movement towards a global formulary apportionment is not possible, so other avenues need to be found. One such route could be found in applying transitional rules that would lead towards a full-fledged global formulary apportionment. The lessons learned in the process surrounding Amount A provides a clear view on the first step of the transitional rule, which is giving market jurisdictions a right to tax. The following transitional rules could then possibly lower the threshold further while abandoning the arm's length principle fully as well as replace it with allocation keys that would sufficiently take into account the input side of a business. That gradual movement towards a global formulary apportionment is the only way to garner political support, as an immediate movement towards a global formulary apportionment will not be possible in the current time period.

Recommendations are therefore to research further whether the global formulary apportionment is a solution fit for the future. That global formulary apportionment would account for both the in- and output of a business, consisting of sales, labour and assets, with a possibility of implementing regional or layered aspects. Those allocation factors would need to be refined and delineated so that it is clear in how the formula would apply in practice, more granularity means more complexity while more open-ended might result in interpretative troubles. Furthermore, it is necessary to research the different transitional rules that would be needed before that global formulary apportionment can actually be implemented. It is necessary to research the timeframes for each transitional rule, as well as the possible implications that each transitional rule would bring towards a global formulary apportionment. Each iteration would provide an additional layer and make the rules more robust with the end goal being: a full-fledged global formulary apportionment.

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