

TOWARDS A NEUTRAL FORMULARY APPORTIONMENT SYSTEM IN REGIONAL INTEGRATION: A CRITICAL INQUIRY

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1. INTRODUCTION

The traditional international tax regime faces challenges in the digital economy and is criticised for not fairly allocating taxing rights over the profits of multinational enterprises (MNEs)' cross-border economic activities. Allocating taxing rights based on value creation is an urgent reform imperative. OECD's Base Erosion and Profit Shifting (BEPS) project in 2015 is a reform effort to address this problem.

Since 2021, OECD's Pillar One has established the "new" taxing rights of the market jurisdiction. OECD's Pillar One uses a formula approach to decide the profit allocation. Such development shows that "formulary apportionment" (FA) could be a feasible option for tax reform. However, the core question remains: How should a fair FA be designed to allocate taxing rights? The article especially discusses the FA system in the European Union (EU).¹ In my view, a fair FA should be part of the EU's recent taxation policy which aims at pursuing a fair tax framework.²

Section 2 elaborates on the normative framework combining the public benefit principle and market neutrality to design a transnational tax regime. Section 2 also discusses how the formulary apportionment should be designed for the EU to allocate taxing rights between EU Member States. Section 3 explains three critical reflections when seeking lessons from the US state taxation experiences. Section 4 concludes.

2. A FORMULARY APPORTIONMENT SYSTEM AS THE MARKET-NEUTRAL TAX REFORM OPTION

2.1 combining the benefit principle and market neutrality to represent "value creation."

We can observe the relationship between economic activities and taxation from two perspectives. On the one hand, levying tax inevitably causes economic deadweight loss. When the deadweight loss exceeds some extent, such tax discourages economic activities. On the other hand, taxation is essential for the public revenue that supports public infrastructures and maintains a healthy market. So public benefit is understood broadly as the precondition for conducting economic activities. The more economic activities take place, the more public benefits are utilised. The optimum is the balance between as minimum deadweight loss as possible and sufficient public revenue to maintain a well-functioning market for conducting economic activities.

These two perspectives also reflect the two taxation principles: efficiency and equity. Moreover, the first coincides with the famous economist Michael Devereux's market neutrality³; the second coincides with the classical theory to justify levying the tax, the benefit principle.⁴ When using the public benefit as the baseline to assess market neutrality, capital import neutrality (CIN) and capital export neutrality (CEN)⁵ can conceptually be achieved simultaneously. This combination is "benefit-based market neutrality".

Benefit-based market neutrality can also be a normative framework for creating a fair international tax regime. Double taxation should be eliminated to reduce deadweight loss to pursue tax neutrality. Taxing rights should be allocated to jurisdictions providing public benefits. Unfortunately, the traditional treaty-based international tax regime focuses too much on eliminating double taxation with an all-or-nothing rationale, adopts a residence-source dichotomy. This ultimately results in BEPS problems.

Instead, when including the benefit principle into the normative framework,

allocating taxing rights should differ from the all-or-nothing rationale like the traditional international tax regime. All the involved jurisdictions which provide different types of public benefits to MNE taxpayers contribute to the value creation chain. Consequently, all of them should be entitled to taxing rights on MNE taxpayers' cross-border profits. I consider this status to be fair, because taxing rights are in line with the corresponding public benefits provided in these jurisdictions. In other words, benefit-based market neutrality is consistent with the goal of OECD's BEPS project: aligning taxation with value creation.

2.2 The three-factor formula is benefit-based market neutral

An FA system functions like a knife and divides the cross-border taxable pie of MNE taxpayers. A benefit-based market neutral formula should include the sales factor, the asset factor and the labour factor, being weighted equally. The sales factor represents the public benefits of maintaining the customers' market; the labour factor represents the public benefits of maintaining the labour market; the asset factor represents the



public benefits of providing local non-human resources. Such a formula can represent equally different aspects of MNEs' economic activities and utilised public benefits.

2.3 EU's effort to formulary apportionment regime proposals: from CCCTB to BEFIT

In 2001, the European Commission started to draft a group-based FA system with the working title "Common Consolidated Corporate Tax Base" (CCCTB). If adopted, CCCTB could reduce compliance costs and replace bilateral tax treaties between EU Member States. While preparing the CCCTB Directive Proposal draft, the European Commission consulted experts from the US to seek the best practice.

In 2011 and 2016, the European Commission released CCCTB Directive proposal(s) respectively⁶, but the Council never agreed upon both proposals. The European Commission is scheduled to release a renewed formulary apportionment proposal, the "Business in Europe: Framework for Income Taxation" (BEFIT)⁷, in 2023. The EU's FA regime, BEFIT, is expected to reduce BEPS problems too so it has multiple policy goals simultaneously, which makes the reform effort more challenging.

Therefore, the BEFIT proposal should carefully reconsider the options in the existing CCCTB Directive Proposals, because several options are not consistent with the benefit-based market neutrality. The sales factor in the CCCTB Directive Proposals does not consistently implement the sales by destination principle. Moreover, the asset factor in the CCCTB Directive Proposals does not include comprehensively all the

intangibles that contribute to innovation. Furthermore, EU policy discussions might wrongly be influenced by the trend from US state taxation, and result in lost-in-translation issues (discussed below).

3. METHODOLOGY CHALLENGES: SEEKING INSIGHTS FROM THE US

3.1 The First Reflection: the trend of the single sales factor formula is not suitable for the EU

The US states and Canada adopt a formulary apportionment system approach at the sub-national level.⁸ US states have especially extensive experience in adopting different formulas for levying state corporate taxation on cross-border activities.



The European Commission's working documents demonstrate that CCCTB is a legal transplantation attempt from the US to the EU. The 2011/2016 CCCTB Directive Proposals are similar to the recommendations from the Multistate Tax Commission (MTC, an intergovernmental organisation to streamline multistate tax, similar to OECD)⁹ in the US to adopt the three-factor formula.¹⁰

Despite MTC's recommendations, it is worth noticing that there has been a trend among the US states that the sales factor is heavily weighted or has become the only factor in the formula since mid-1980 until now, and some scholars claim the single sales factor formula will be the future of Europe.¹¹ OECD's Pillar One also emphasises the "new" taxing rights of the market jurisdiction.

However, the EU should in my view not follow the trend of the single sales factor formula in the US state taxation. As I stated elsewhere,¹² the two main reasons to support the single sales factor formula for a state are (1) to believe that the single sales factor has the build-in effect of encouraging MNE to invest more in labour; (2) to believe that the single sales factor formula is easier and simpler for tax administration.

Both reasons are myths and should be reconsidered. First, the empirical research published in 2001 that claims the employment-encouraging effect of adopting the single sales factor formula for US states, is negated by another empirical research in 2015 and different states' surveys.¹³ Second, the US state experiences show extreme complexity regarding designing the sales factor. In other words, the claimed advantages of adopting the single sales factor formula

are exaggerated. The EU policymakers should be cautious about this policy option.

3.2 The Second Reflection: Constitutionality is not Equal to Market-Neutral

US Supreme Court provides ample experience in assessing formulary apportionment in state taxation against the US constitution clauses. The Commerce Clause in the US constitution is comparable to the internal market provision of the Treaty on the Functioning of the European Union (TFEU).¹⁴ The key four-prong criterion of the Commerce Clause reflects the spirit of the benefit principle:

1. The tax must be applied to an activity that has a substantial nexus with the state;
2. The tax must be fairly apportioned to activities carried on by the taxpayer in the state;
3. The tax must not discriminate against interstate commerce; and
4. The tax must be fairly related to the services the state provides.¹⁵

For deciding "fair apportionment", US Supreme Court further developed the external consistency test and internal consistency test. The regime is unconstitutional when a formulary apportionment regime lacks external or internal consistency.

For European readers, the external consistency test can be understood as comparable to the territoriality principle. The external consistency test examines whether the state has taxed only the portion of the cross-border activities that reasonably reflects the intra-state

component. The internal consistency test first hypothesises that all 50 states adopt the discussed same formulary apportionment regime and then assesses if more than 100% of the tax base from cross-order activities is taxed. The second step of the internal consistency test is similar to a hybrid of the non-discrimination test and the market restriction test developed by CJEU.¹⁶

The Commerce Clause case-law is not quite strict for US states. With the same case fact, being constitutional in the US is not necessarily EU law compliant.¹⁷ For example, the US Supreme Court affirms that the single sales factor formula adopted by Iowa is constitutional and presumably valid. A three-factor formula is not a condition of constitutionality in the US.¹⁸

Suppose the Council unanimously adopted the single sales formula as the EU formulary apportionment regime in the BEFIT Directive Proposal (although it might feel impossible politically). In my view, such an FA regime is contrary to the solidarity principle¹⁹ because it would exclusively allocate taxing rights to the Member States with the customer market but ignores the contribution from the Member States with the labour market.

Still, the most valuable lessons from the US case-law are reaffirming the benefit principle and recognising the diversity of each state's economic and social conditions. Moreover, the internal consistency test demonstrates the possibility of combining the non-discrimination test and the market restriction test. The US case-law could be useful for CJEU to adjudicate future disputes from the EU's FA regime.

3.3 The Third Reflection: lost in translation?

As indicated above, US States have wide policy discretion in deciding their formulas. Diverse formulas in the US sometimes create more puzzles than insights for EU policymakers. When drafting CCCTB Directive Proposal(s), the European Commission sometimes misunderstood and over-implemented the US experts' opinion. For example, the European Commission mistakenly copied California's formula specific for a mixed group for a purely financial institution group.²⁰ The European Commission invented the "sales by origin" rule for the





oil and gas industry but ignored the core logic of the sales factor.²¹ Moreover, the European Commission neglected all the US formulas for transportation industries and referred to the OECD model without any reasoning.²² These lost-in-translation issues are not easily identified immediately.

I believe the diversity of formulas in US state taxation is a valuable database. The European Commission could have made good use of the creativity of US state taxation and designed the most suitable system for the EU internal market. When drafting CCCTB Directive Proposal(s), the European Commission picked options from the US and the international tax regime (such as using a permanent establishment as the taxable nexus). Still, such a random mixture resulted in complexity in CCCTB Directive Proposal(s). When drafting BEFIT Directive Proposal, the European Commission should take the chance to make a better selection.

4. CONCLUSION: TOWARDS A PRACTICAL BUT CRITICAL APPROACH

Selecting the US state taxation as the reference is the right direction. However, EU policymakers should ask more “why” questions than “what” questions while seeking lessons. Not only are solutions being searched, but also the potential problems from the US state taxation. The contexts and original rationales for adopting a specific formula are as important as the technical contents of legislation and case-law results. The EU must be critical and open-minded to its legal transplantation effort. Balancing different aspects of the value creation chain is crucial in search for a fair system.

The normative framework of benefit-based market neutrality is thus suitable for the EU’s FA regime because such a framework aligns with taxation and economic activities. It is consistent with the concept of value creation. The formula’s equally weighted sales, asset, and labour factors represent different phases of the value creation chain, including the labour market and the customer market. A benefit-based market-neutral FA regime accepts that all

jurisdictions involved could be a source jurisdiction and abandons the all-or-nothing rationale of allocating taxing rights in the traditional international tax regime. In other words, a fair FA will include three equally weighted factors from both the market (output) side and the production (input) side, to represent the different public benefits to support different stages of economic activities

For smaller jurisdictions within the EU, such as Caribbean islands or Malta or Cyprus, a three-factor formula is fairer than a single sales factor formula. Although the sales factor might be smaller for these jurisdictions, these jurisdictions still have the asset factor, including the intangibles, so they could have a portion of taxing rights on MNEs. Moreover, digital nomads who stay in

these islands and work remotely could be attributed to the labour factor of these islands too. In my view, a three-factor formula is fair because it is diverse sufficiently to reflect the diverse features of different tax jurisdictions.



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¹This article is based on the PhD dissertation successfully defended on 15 September 2022 at Erasmus University Rotterdam. The embargo version can be accessed at the university library website <https://pure.eur.nl/en/publications/towards-a-neutral-formulary-apportionment-system-in-regional-inte>

²Communication From The Commission To The European Parliament And The Council

Business Taxation for the 21st Century at https://taxation-customs.ec.europa.eu/news/future-proof-taxation-commission-proposes-new-ambitious-business-tax-agenda-2021-05-18_en, p.5.

³Michael Devereux, 'Taxation of Outbound Direct Investment: Economic Principles and Tax Policy Considerations' (2008) 24 *Oxford Review of Economic Policy* 698.

⁴There are numerous publications on the benefit principle. For recent publications on reforming the benefit principle for international tax reform, see Eva Escribano, *Jurisdiction to Tax Corporate Income Pursuant to the Presumptive Benefit Principle* (Kluwer Law International 2019). Peter Hongler, *Justice in International Tax Law: A Normative Review of the International Tax Regime* (IBFD 2019).

⁵David A Weisbach, 'The Use of Neutralities in International Tax Policy' (2015) 68 *National Tax Journal* 635.

⁶See the European Commission website archives https://taxation-customs.ec.europa.eu/common-consolidated-corporate-tax-base-ccctb_en

⁷See the European Commission website https://taxation-customs.ec.europa.eu/news/commission-launches-public-consultation-befit-new-framework-eu-corporate-taxation-2022-10-17_en

⁸Recent publications about formulary apportionment experience in the US and Canada, see Shirley Sicilian and Joe Huddleston, 'The US States' Experience with Formulary Apportionment', *The Allocation of Multinational Business Income: Reassessing the Formulary Apportionment Option* (Kluwer Law International 2020). Michael Smart and François Vaillancourt, 'Formulary Apportionment in Canada and Taxation of Corporate Income in 2019: Current Practice, Origins and Evaluation', *The Allocation of Multinational Business Income: Reassessing the Formulary Apportionment Option* (Kluwer Law International 2020).

⁹The official website: <https://www.mtc.gov/>

¹⁰It is traditionally called "Massachusetts formula". It should be noted that Massachusetts now has adopted the single sales factor formula since 2001 <https://www.mass.gov/service-details/single-sales-factor>

¹¹Maarten de Wilde, 'Om de Toekomst van de Belastingheffing van Ondernemingswinsten in Europa (Oratie)' (2019) 13 *TPE Digitaal* 60.

¹²Shu-Chien Chen, 'Towards A Benefit-Based Market Neutral Formulary Apportionment System in the EU: Reflections for the BEFIT Proposal' (2022) *Maandblad Belastingbeschouwingen*.

¹³David Merriman, 'A Replication of "Coveting Thy Neighbor's Manufacturing: The Dilemma of State Income Apportionment"' (*Journal of Public Economics* 2000)' (2015) 43 *Public Finance Review* 185.

¹⁴Ruth Mason, 'Made in America for European Tax: The Internal Consistency Test' (2008) 49 *BCL Rev.* 1277; For the different opinion, Werner Haslechner, 'Consistency' and Fundamental Freedoms: The Case of Direct Taxation, 50 *Common Market Law Review* 737 (2013).

¹⁵For comments about Complete Auto Transit, see J Hellerstein, W. Hellerstein, and J. Swain, *State Taxation*, (3rd edition, Thomson Reuters/Tax & Accounting 2015), at 4.12.

¹⁶Regarding the CJEU's two types of approach applied in the freedom of establishment to the tax law cases, see Adam Zalasinski, '35 Years of ECJ Direct Tax Case Law: An Historical Overview on the Occasion of the 60th Anniversary of European Taxation' (2021) 61 *European Taxation*. Scholars observe these two approaches shift back and forth, Marcel Guido Herwig Schaper, *The Structure and Organization of EU Law in the Field of Direct Taxes* (IBFD 2013), at 3.6.2.2.

¹⁷Mason (2008), supra n. 10.

¹⁸*Moorman Manufacturing Co. v. Bair*, 437 U.S. 267 (1978). See Michael Mazerov, *The "Single Sales Factor" Formula for State Corporate Taxes* (Washington, DC: Center on Budget and Policy Priorities 2005).

¹⁹Graham Butler, 'Solidarity and Its Limits for Economic Integration in the European Union's Internal Market' (2018) 25 *Maastricht Journal of European and Comparative Law* 310.

²⁰Shu-Chien Chen, 'Tracing Capital: Toward a Neutral Specialized Formula for Financial Institutions under Common Consolidated Corporate Tax Base (CCCTB)' (2018) 12 *Bocconi Legal Papers* 71.

²¹Shu-Chien Chen, 'Lost in Translation?: Rethinking the Oil and Gas Industry Formula under the Common Consolidated Corporate Tax Base Directive Proposal' (2019) 7 *Societas et iurisprudentia* 108.

²²Shu-Chien Chen, 'Toward a Neutral Corporate Tax for the Transportation Industry – Rethinking the Transportation Industry Formula of the Common Consolidated Corporate Tax Base Directive Proposal under EU Law' (2020) 30 *ID-DRIT Journal*.