49. Towards A Benefit-Based Market Neutral Formulary Apportionment System in the EU: Reflections for the BEFIT Proposal

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The European Union's latest tax reform project, 'Business in Europe: Framework for Income Taxation' (BEFIT), is a formulary apportionment regime. This article explains how the EU should design its formulary apportionment system that is fair for the EU Member States. This article argues that the normative framework should combine the benefit principle and the concept of Market Neutrality. This Benefit-Based Market Neutrality framework can cover multiple policies pursued by BEFIT and respect the diversity of different EU Member States. Moreover, by comparing the experiences in the US state taxation with the EU's preparation work on the Common Consolidated Corporate Tax Base (CCCTB), the article concludes that the EU should implement a formula consisting of three equally weighted factors, the sales factor, the asset factor and the labour factor. After clarifying prevalent myths, this article negates the single sales factor formula option and embraces Intellectual property rights in the asset factor.

1. Introduction

Formulary Apportionment (FA) is an approach to allocating cross-border taxing rights. A well-known metaphor describes cross-border business profits of multinational enterprises (MNEs) as a taxable pie[1], and FA is a knife to divide and share the pie. Until now, FA is only used at the sub-national level, such as in the US[2], Canada, Germany, and Switzerland.[3]

The EU legislators have discussed FA as a tax reform option, but there is still no consensus. After revoking the previous Common Consolidated Corporate Tax Base (CCCTB) Directive Proposal again, the Business in Europe: Framework for Income Taxation (BEFIT) Directive Proposal is expected to be released in the third quarter of 2023. This article also reflects on the recent public consultation[4] of the BEFIT Directive Proposal launched by the European Commission on 13 October 2022.

According to European Commission's public consultation announcement, BEFIT pursues multiple policy goals. In addition to reducing compliance costs and eliminating tax obstacles, BEFIT is complementary to the EU's current tax reform actions. More importantly, BEFIT is expected to be the foundation for the EU's own resources for the EU Budget in the future. Therefore, building a new normative framework for dividing taxing rights fairly is as important as dealing with the technicalities in the FA system.

This article demonstrates how the EU should design its FA system that is fair for the EU Member States.[5] By comparing the formulary apportionment experiences in the US state taxation (including recommendations from the intergovernmental organisation Multistate Tax Com-

1 This phrase is borrowed from the book by Maarten de Wilde, *Sharing the Pie: Taxing Multinationals in a Global Market*, IBFD 2017.

2 There are numerous books and articles on introducing US state taxation. For European readers, the works written specifically from the comparative perspective are easier to understand. See Walter Hellerstein, 'Tax Planning under the CCCTB's Formulary Apportionment Provisions: The Good, the Bad and the Ugly', *CCCTB: Selected Issues* (Kluwer Law International 2012); Walter Hellerstein, 'Formulary Apportionment in the EU and the US: A Comparative Perspective on the Sharing Mechanism of the Proposed CCCTB', *Movement of persons and tax mobility in the EU: changing winds,* IBFD 2013.

3 As to Germany and Switzerland, see Stefan Mayer, *Formulary Apportionment for the Internal Market*, IBFD 2009.

4 The official website for the public consultation of the BEFIT Directive Proposal: https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/13463-Business-in-Europe-Framework-for-Income-Taxation-BEFIT-_en (accessed on 23 October 2022)

5 This article is based on my PhD dissertation, successfully defended on 15 September 2022 at Erasmus University Rotterdam. The embargo version of my PhD dissertation can be downloaded from https://pure.eur.nl/en/publications/towards-a-neutral-formulary-apportionment-system-in-regional-inte.

mission, hereafter MTC,[6] in the US) with the European Commission's preparation work for CCCTB from 1999 to 2016, my conclusion is that the EU should implement a formula consisting of three equally weighted factors, the sales factor, the asset factor and the labour factor.

This equally weighted three-factor formula is consistent with Benefit-Based Market Neutrality (elaborated in Section 2 below). Benefit-Based Market Neutrality combines the concept of the benefit principle and Market Neutrality, so it is suitable for deciding taxing rights of cross-border activities in the European Union, including the proposed formulary apportionment regime at the EU level like BEFIT. Each weighting factor represents the corresponding public benefits involved: the customer's market, human resources in the labour market, and all the non-human resources provided.

This article focuses on several well-known myths about formulary apportionment in the literature and policy discussions. This article only discusses the design of the standard formula, not industry-based formulas. As I stated elsewhere, the basic three-factor structure also applies to special industry formulas, such as financial institutions, because these three factors can comprehensively represent the input side and output side of any MNE taxpayer's economic activities. Specific modifications for different industries should be made in each factor.[7]

This article's structure is as follows: Section 2 elaborates on the normative framework that combines the benefit principle and tax neutrality. Section 3 clarifies myths about the sales factor. Section 4 discusses the asset factor and focuses on intangibles. Section 5 discusses myths about the labour factor. Section 6 summarises the suggestions for the EU's BEFIT Directive Proposal.

2. The Reformed Normative Framework: Benefit-Based Market Neutrality

2.1 Reconciling Diverse Tax Neutrality Principles: How?

There are many normative principles in the international tax law literature proposed by economic scholars. Tax Neutrality is an important and attractive principle since the tax neutrality concept indicates the ideal situation in which taxation intervenes taxpayers' economic activities as minimally as possible.

In the economic literature, tax neutrality can indicate Capital Import Neutrality (CIN), Capital Export Neutrality (CEN)[8], Capital Ownership Neutrality (CON)[9], Market Neutrality (MN), and VAT fiscal neutrality[10] etc. Each tax neutrality principle only represents a single aspect of the international tax policy.[11] It is 'a never ending fight of neutralities'.[12] There is no hierarchy between these different tax neutrality principles either.

Moreover, the meaning of tax neutrality is quite vague. Vogel has criticised that neutrality is a non-concept[13] as a reference baseline or ground is always needed to decide tax neutrality. According to Vogel, tax neutrality under the EU seems to mean 'cross-border neutrality', which is a concept which does not have concrete conditions.

The concept of tax neutrality in the EU law refers to different things in different contexts. For example, in EU primary law, the neutrality principle is closer to the broader idea of 'an ideal system': neutrality is understood as efficiency.[14]

In earlier EU policy documents and secondary law, tax neutrality refers to 'eliminating double taxation" or 'non-discrimination'. For example, in the Ruding report (1992)

6 For European readers, it is easier to understand the MTC as a type of intergovernmental organization like the Organization for Economic Co-operation and Development (OECD). It not a supranational organization like the European Union. Just like the OECD, the MTC has great de facto influence in US states. See the official website of the Multistate Tax Commission: http://www.mtc.gov. Not only public servants, but also practitioners from the American Bar Association (ABA), actively engage in the Multistate Tax Commission's work, see Philip M Tatarowicz, 'A History of the State and Local Taxes Committee and Its Most Recent Quarter Century of Work', 68 *Tax Lawyer*, 595 (2014).

7 Regarding the special formulas for financial institutions, the international transportation industry and the oil and gas industry, please refer to my early publications: Shu-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; Shu-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; Shu-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-DRITT Journal*.

8 Richard Musgrave, 'Criteria for Foreign Tax Credit', in: R. Baker, *Taxation and Operations Abroad*, Princeton: Tax Institute, 1960, p. 83-93. Peggy Musgrave also further writes about the distinction between CEN and CIN. See Peggy R. Musgrave, *Taxation of Foreign Investment Income, An Economic Analysis*, Johns Hopkins Press, 1963, reprinted in P.R. Musgrave, *Tax Policy in the Global Economy: Selected Essays of Peggy R Musgrave*, Cheltenham: Edward Elgar, 2002.

9 Mihir A. Desai and James R. Hines Jr, 'Evaluating International Tax Reform', 56 *National Tax Journal* 487 (2003).

10 Charlène Adline Herbain, VAT Neutrality (Promoculture-Larcier 2015), at Part 2. Rita de la Feria, *EU VAT principles as Interpretative Aids to EU VAT Rules: the Inherent Paradox,* Oxford University Centre for Business Taxation (2016); Emma Linklater, 'Neutrality of VAT rates under European Law: All books are created equal, but some are more equal than others?', 30 *Publishing Research Quarterly* (2014), 300-312.

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

12 Peter Hongler, *Justice in International Tax Law: A Normative Review of the International Tax Regime*, IBFD 2019, p. 418.

13 Klaus Vogel & Johan Brands, *Taxation of Cross-Border Income, Harmonization, and Tax Neutrality under European Community Law: An Institutional Approach*, Kluwer Law International 1994.

14 Wolfgang Schön, 'Neutrality and Territoriality – Competing or Converging Concepts in European Tax Law', 69 *Bulletin for International Taxation*, (IBFD Bulletin) 271 (2015).

and the preamble of Parent Subsidiary Directive, tax neutrality refers to 'non-discrimination between the choice of a branch or a subsidiary.' Moreover, VAT fiscal neutrality refers to two elements: (1) VAT should be neutral for competition of similar goods and services; (2) VAT levied upon similar goods, and similar services should not be different whatever the length of the production and distribution chain.[15] VAT fiscal neutrality also focuses on ensuring non-discrimination between similar goods and services to achieve the status of neutrality in competition.

Although it is not yet clear whether CIN or CEN is preferred by the Court of Justice of the European Union (CJEU)[16], achieving both CEN and CIN at the same time seems necessary. As Panayi correctly described, freedom of establishment has both inbound and outbound dimensions. Therefore, CEN and CIN are both relevant and must be achieved simultaneously in the EU context.[17]

Despite of diverse formulations of the concept of tax neutrality above, two common patterns can be found[18]: the concept of tax neutrality can either be interpreted as the non-discrimination principle based on a specific ground (such as export or import or ownership transfer or market competition or the choice between legal forms), or tax neutrality can be interpreted in the broad sense that represents an overall ideal status of a tax system. In my view, for an internal market like the European Union, tax neutrality should be interpreted as the broad sense to cover different policy goals that need to be achieved simultaneously.[19]

2.2 Resetting the Baseline for Market Neutrality

Michael Devereux's Market Neutrality (MN)[20] is broad enough to cover different tax policy goals for the European Union. In my view, the CJEU's case law that uses 'market restrictions' to assess infringement of free movement rights,[21] has developed in the direction of the broader concept of market neutrality.

However, to achieve the goal of covering all the different tax policy goals, it is necessary to reset the baseline of assessing Market Neutrality. This reformed baseline is the public benefits involved that correspond to taxpayers' economic activities. Public benefits should also be understood as broadly[22]: Maintaining a well-functioning customer market and a healthy labour market are both public benefits that an MNE taxpayer can enjoy from a jurisdiction.

In other words, when levying tax according to taxpayers' economic activities, such status is Market Neutrality because these economic activities represent the public benefits enjoyed.

The benefit principle is widely used in various tax-related contexts. The benefit principle (or 'economic alliance'[23] or 'exchange theory'[24]) is mentioned in the traditional international tax regime, including expanding the permanent establishment concept[25] or supporting the passive and active income dichotomy[26] and justifying the residence versus source dichotomy.[27] The origin of the arm's length principle in the transfer pricing regime is believed to be also consistent with the benefit principle.[28] Even the concept of 'value creation' proposed in the OECD's BEPS tax reform project for the digital economy implies (re-)application of the benefit principle.[29] In short, the benefit principle not only has its root in the traditional international tax regime but also persists as a normative mandate in the international tax reform project.

15 The preamble of the Sixth VAT Directive Council Directive 2006/112/EC of 28 November 2006, Recital 7. See Article 2 and Article 4 of First VAT Directive. For discussions of two dimensions of VAT fiscal neutrality, see Alexandre Saydé, *Abuse of EU Law and Regulation of the Internal Market*, Bloomsbury Publishing, 2014, at p. 187-188.

16 Analysis, Maarten de Wilde, *Sharing the Pie: Taxing Multinationals in a Global Market*, IBFD 2017, at Chapter 2.

17 Christiana Panayi, *European Union Corporate Tax Law*, Cambridge University Press 2013, p. 175.

18 Judith Freedman and Graeme Macdonald, 'The Tax Base for CCCTB: The Role of Principles' [2008] Centre for Business Taxation Working Paper 08/07. Similar remarks, Douglas A Kahn, 'The Two Faces of Tax Neutrality: Do They Interact or Are They Mutually Exclusive' (1990) 18 N. Ky. L. Rev. 1.

19 In my previous publication, I argued that inter-nation equity would coincide with the concept of tax neutrality in the broad sense, Shu-Chien Chen, 'Neutrality as Tax Justice: The Case of Common Consolidated Corporate Tax Base under the EU Law', (2018) 5 *European Studies-the Review of European Law, Economics and Politics* 33.

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

21 The trend of CJEU case law, 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*.

22 The same idea, Maarten de Wilde, 'Sharing the Pie: Taxing Multinationals in a Global Market' (2015) 43 *Intertax* 438.

23 Cees Peters, *On the Legitimacy of International Tax Law*, IBFD 2014, at 4.4.2.

24 OECD (2014), Addressing the Tax Challenges of the Digital Economy, OECD/G20 Base Erosion and Profit Shifting Project, OECD Publishing. http://dx.doi.org/10.1787/9789264218789-en

25 Eva Escribano, *Jurisdiction to Tax Corporate Income Pursuant to the Presumptive Benefit Principle: A Critical Analysis of Structural Paradigms Underlying Corporate Income Taxation and Proposals for Reform*, Kluwer Law International 2019.

26 Reuven S. Avi-Yonah & Haiyan Xu, 'Evaluating BEPS: A Reconsideration of the Benefits Principle and Proposal for UN Oversight' (2016) 6 *Harv. Bus. L. Rev*. 185.

27 Klaus Vogel, 'Worldwide vs Source Taxation of Income-A Review and Re-Evaluation of Arguments (Part II)' (1988) 16 *Intertax* 310.

28 Marta Pankiv, *Contemporary Application of the Arm's Length Principle in Transfer Pricing*, IBFD 2017. According to Vann, the benefit principle is an independent principle than the arm's length principle but closely related. Richard J. Vann, 'Reflections on Business Profits and the Arm's-Length Principle', *The taxation of business profits under tax treaties* (2003).

29 V Koukoulioti, 'User Contribution to Value Creation: The Benefit Principle in the Spotlight', *Taxing the Digital Economy: The EU Proposals and Other Insights*, IBFD 2019; Wolfgang Schön, *Value Creation, the Benefit Principle and Efficiency-Related Allocation of Taxing Rights*, EATLP International Tax Series (2021).

When Market Neutrality is combined with the benefit principle, this framework becomes a more practical paradigm to explain the relationship between the EU and Member States' fiscal autonomy as well as the relationship between the Member States with one another. As Hongler observes[30], the benefit principle is not only legitimising taxing rights but also 'limiting' taxing rights. In my view, 'Market Neutrality' is the conceptual point where a state's taxing right is optimally limited, so levying tax does not cause distortions to the market while contributing to maintaining the well-functioning of the market.

To sum up, combing the public benefit principle and Market Neutrality (re-named as Benefit-Based Market Neutrality) is the suitable normative framework for dividing taxing rights at the EU level. These two elements are both necessary.

2.3 Selecting Weighting factors consistent with Benefit-Based Market Neutrality

For the EU's FA system, pursuing Benefit-Based Market Neutrality requires selecting weighting factors that can represent all the relevant public benefits involved. Therefore, the sales factor will represent the public benefits of the customers' market; the labour factor will represent the public benefits of maintaining the human resources of the labour market; the asset factor represents the public benefits of providing legal systems and institutions to utilise material resources in the jurisdiction.

In a diverse internal market like the EU, Member States have different types of resources and capacities to provide public benefits. Some Member States provide an environment for innovation; some Member States provide human resources in a labour market; some Member States provide customers' markets. Adopting a three-factor formula will respect diversity between each EU Member State.

As a side note, when analysing the examples from the US state taxation, it should be noted that in the US, each state has quite wide discretion according to the current US constitutional (case) law[31] to adopt its state taxation formula. Any formula adopted by a state in the US is like a unilateral claw. Therefore a constitutional state formula in the US is not necessarily a market-neutral policy option for the EU. For example, in Section 3, I will elaborate on why the single sales factor formula is inconsistent with Benefit-Based Market Neutrality, even though this formula is widely used in different US states.

30 Peter Hongler, *Justice in International Tax Law: A Normative Review of the International Tax Regime*, IBFD 2019, p. 486.

31 The concise overview of the US supreme court's constitutional case law about state taxation, Holderness, Hayes,' Individual Home-Work Assignments for State Taxes' (January 14, 2022). *Washington Law Review*, Forthcoming, Available at SSRN: https://ssrn.com/abstract=4009277 or http://dx.doi.org/10.2139/ssrn.4009277.

3. Myths of Adopting the Sales factor in the Formulary Apportionment and Solutions

3.1 Myths to Favor the Single Sales Factor Formula

When referring to FA, it is often to think of the single sales factor formula, widely used in US state taxation.[32] OECD's Pillar One project can be roughly seen as a type of single sales factor formula, too, since it focuses mainly on market jurisdictions. The sales factor based on economic activities happening in the market jurisdiction almost becomes a synonym of FA or the only feasible option for the future of the European Union.[33] This article respectfully disagrees with this narrative.

The sales factor represents the taxing rights of the market jurisdiction, so it is justified to be included in a formula. However, a formula based only on one single sales factor cannot be justified by Benefit-Based Market Neutrality because the single sales factor formula only reflects one type of public benefit provided to MNE taxpayers.

The preference for using the single sales factor formula is based on the three myths below.

Myth: Economic Built-in Incentives of the Single Sales Factor Formula

First, the single sales factor formula was believed to have a built-in incentive for attracting out-of-state investments and encouraging employment. The supporters of build-in economic incentive of the single sales factor formula argue that when a state adopts a single sales factor formula, abolishes or reduces the weighting of the labour factor or the asset factor, there will be an economic effect of encouraging taxpayers to invest more in labour within the state because only in-state sales will be used for apportioning the taxable base.

This build-in incentive argument is heavily based on Goolsbee and Maydew research which analysed the data of US states from 1978 to 1994.[34] Goolsbee and Maydew concluded that by reducing the payroll factor and increase the sales factor in formula, the state could attract state-level employment from neighbouring states.

However, in 2015 David Merriman published another article that reproduced the empirical research of Goolsbee and Maydew and recovered the missing data. Merriman conclu-

32 Thirty states in the US adopt the single sales factor formula, see the survey by Federal Tax Administration, until 2022/01/01 at https://www.taxadmin.org/assets/docs/Research/Rates/apport.pdf.

33 For example, the inaugural lecture of Professor Maarten de Wilde, *On the Future of Business Income Taxation in Europe*, 2019, available at https://www.ssrn.com/abstract=3424681.

34 Austan Goolsbee & Edward L Maydew, 'Coveting Thy Neighbor's Manufacturing: The Dilemma of State Income Apportionment', 75 *Journal of Public Economics* 125 (2000). Austan Goolsbee & Edward L Maydew, *The Economic Impact of Single Factor Sales Apportionment for the State of New York*, The Public Policy Institute of New York State, Inc. 2000.

ded that after adding back the missing data, the research outcome does not support Goolsbee and Maydew's original conclusion. [35] Besides Merriman's new research, several states in the US, such as Wisconsin and California also show that the built-in incentive effect of adopting the single sales factor is not significant.[36] Even previous built-in incentive supporters, such as Clausing,[37] admits that the evidence of built-in incentive might not be enough.

In other words, the claimed economic effect to adopt the single sales factor formula is not convincing anymore for the EU legislators. The EU legislators need to critically and cautiously assess the early (empirical) research that support the single sales factor formula.

Myth: Adopting the Single Sales Factor formula can Achieve Simplicity
Second, the single sales factor formula is claimed to be simpler for tax administration. Theoretically, the tax administration of a single sales factor formula could be simpler because taxpayers and tax authorities only need to deal with one weighting factor.

However, the experiences of US states taxation already demonstrate the opposite to simplicity: a single sales factor formula does not necessarily streamline tax administration. Instead, US states that adopt the sales factor create unsolved complicity by introducing various 'throw-back' rules or 'throw-out' rules[38] to expand their taxing rights on no-where sales or sales of undesirable destinations and to adjust the apportionment result. What makes administration more complicated is that there is no consensus on the meaning of 'no-where sales (sales not taxable at the destination)', so it is also uncertain about the pre-condition of invoking the throw-back rule.[39]

Therefore, when the sales factor does not consistently follow the destination rationale, it does not streamline tax administration but creates complexities and increases the compliance burden.

Myth: Manipulation Opportunities of The Sales Destination Are Less
Third, the supporters of the single sales factor formula argue that the sales factor is less vulnerable to be manipulated because an MNE taxpayer cannot control the destination where their market and customers would be. Interestingly, the VAT literature has the opposite narrative: in the context of VAT, the difficulty of controlling the destination for enforcement leads to typical abusive VAT carousel scenarios.[40]

The concept of 'destination' for attributing the sales is fluid. Even when an MNE taxpayer cannot control a destination, it is still possible that more manipulation opportunities may appear when the destination is not identifiable.

Therefore, whether a destination is easy to manipulate is not a convincing policy concern to adopt or negate the sales factor per se. Instead, it is necessary to seek a feasible and logical proxy to determine the destination to which the sales can be attributed.

3.2 The Solution: Customer-Centered Sales By Physical Destination

The sales factor is controversial because it aims to regulate the flow of value exchange. It is not always clear where the customer market is located, especially in the case of cross-border services. This difficulty existed for a long time far before the era of e-commerce or the digital economy.

In theory, the sales-by-destination rationale will be the benefit-based market neutral option for the sales factor, because it faithfully represents taxpayers' response to the customers and consistent with the public benefits of maintain a healthy customers' market. The European Commission also reiterated 'sales by destination' in the BEFIT public consultation announcement, just like the 2011 and 2016 CCCTB Directive Proposal.

35 David 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.

36 For example, Wisconsin data show there is no significant relationship between adopting the single sales factor formula and increasing manufacturing employments, see Jamie Bernthal and others, *Single Sales-Factor Corporate Income Tax Apportionment: Evaluating the Impact in Wisconsin*, Workshop in Public Affairs, May (2012). California data show that shifting the sales factor formula does not increase California's corporate tax income tax capacity, see Darien Shanske, 'A New Theory of the State Corporate Income Tax: The State Corporate Income Tax as Retail Sales Tax Complement', 66 *Tax L. Rev.* 305 (2012). Shanske still supports US states adopting the single sales factor formula for levying state taxation, but based on a different rationale: according to Shanske, the single sales factor formula will make state corporate income taxation a complementary tax to retail sales tax. Such 'tax complement' is small but stable.

37 Kimberly A. Clausing, 'Lessons for International Tax Reform from the US State Experience under Formulary Apportionment', in: Tax Analysts and Mindy Herzfeld (eds), *U.S. State Tax Considerations for International Tax Reform* (Tax Analysts 2014). According to Clausing, 'However, in the period of this study, 1986 to 2012, there is scant evidence that state employment, investment, or sales are sensitive to corporate tax policy parameters, once an adequate set of control variables are included in the analysis.'

38 See the survey from Editors the Journal of State Taxation, 'Throwback Rules for Sales of Tangible Personal Property', 34 *J. St. Tax'n* 33 (2016); Tax Foundation published a survey as of July 2021, and it demonstrates the complicities and diversities of the throwback rules in practice. See Katherine Loughead*, Does Your State Have a Throwback or Throwout Rule?*, 22 April 2022 https://taxfoundation.org/state-corporate-tax-throwback-rules/.

39 The criterion of 'no-where sales' might be based on the group level or on the specific group member level. This is so-called the Joyce v. Finnigan debate. The overview of Joyce v. Finnigan debate and the combed reporting, see also Charolette Noel & Carolyn Joy Lee, 'Would States Adopt a Uniform Model Combined Reporting Statute in a New Wave of Combined Reporting?', *The State and Local Tax Lawyer*, Symposium Edition (American Bar Association 2008).

40 S. Cnossen, *Three VAT studies*, Centraal Planbureau 2010.

Even though the 'sales-by-destination' sounds intuitive, the meaning and proxy to decide where the destination is located are still unclear. For example, the 2011/2016 CCCTB Directive Proposal does not consistently implement the destination rule for the services either but uses 'where the services are physically carried out or actually supplied'. The place of service being actually 'supplied' can deviate from the place of service received. It is not certain which place the true destination.

The following unsolved questions are thus vital for the EU BEFIT Directive Proposal: What proxies are suitable for the sales-by-destination rationale? Put it differently, where should the EU formulary apportionment regime learn insights for deciding 'destination'? Can the EU VAT regime or the US state taxation provide useful lessons? The answers are not simply affirmative.

Under the name of the destination principle, there are deviations in the VAT regimes and US state taxation. For example, the EU VAT regime refers to the destination principle, but in reality the EU VAT regime is a hybrid system that includes quite a few origin-based rules.[41] The place of supply rules in the EU VAT regime have incorporated many origin-based proxies as the 'deemed' destination of consumption for the administration convenience and enforcement purposes. More specifically, for intra-EU B2C services, the supplier's establishment is the key criterion of the place of supply, which is exactly an origin-based rule.[42] In other words, the destination principle keeps as a slogan in the EU VAT regime from the very beginning. As De la Feria[43] has sharply criticized, the EU VAT place of supply rule as 'conceptual incoherencies' due to mixing the destination principle and the origin principle arbitrarily.

Fortunately, the EU VAT reform package[44] for electronically supplied services in 2015 indicated a feasible direction: to re-focusing on individual customers. In my view the EU VAT reform since 2015 has gradually shifted to the destination based on ultimate individual customers. This is where BEFIT Directive Proposal could consider.

Being similar to the EU VAT regime, in US state taxation the destination principle was not fully implemented in the sales factor either. For quite long time (since 1957), many states in the US adopted origin-based attributing rules for service in the sales factor and this origin-based attribution rule has caused unreasonable results.[45]

Since 2014, there has been also a clear paradigm shift in US state taxation regarding the sales factor: from origin-based attribution rules towards destination-based market sourcing attribution rules. In 2017 Multistate Tax Commission in the US has amended the old recommendation adopted a market-sourcing recommendation for attributing the services in the sales factor.[46] This paradigm shift demonstrates that the sales by destination rationale has become the new consensus for designing the sales factor in the US state taxation.

However, the paradigm shift of MTC's 2017 recommendations does not bring in administrative simplicity. MTC recommended market sourcing rules depend on three sets of circumstances (the way of delivering service, the types of services involved, the status of the business or individual customers) and thus results in six different proxies to decide destination of providing services.[47] Such complexity makes the MTC's recommendation quite difficult to follow and creates uncertainty.

In my view, when transplanting the tax reform experiences in the US state taxation, the EU formulary apportionment regime must be cautious and selective. What is insightful is that MTC's new market-sourcing rules also re-focus the ultimate individual customers who receive the services. MTC's 2017 new market-sourcing rules have the similar rationale to the EU VAT reform for the digital economy in 2015. Both US state taxation and the EU VAT regime both demonstrate that the destination principle is gradually becoming the consensus in the digital economy.

Therefore, using 'physical locations of ultimate individual customers' would be the market neutral proxy for desig-

41 M Senyk, *The Origin and Destination Principles as Alternative Approaches towards VAT Allocation: Analysis in the WTO, the OECD and the EU Legal Frameworks*, IBFD 2020, at 6.5.2. As Senyk states: 'the allocation of VAT in respect of business-to-consumer transactions within the European Union is generally based on the common market principle, which presupposes taxation of goods and services in the Member State of purchase (origin). There are a few derogations therefrom, where goods and services are taxed in the Member State of destination or in another Member State where the final consumption is deemed to occur'.

42 The EU VAT regime has followed the origin principle for intra-EU B2C services. The origin principle was the root of the VAT regime. For example, Thomas Ecker, A VAT/GST Model Convention: Tax Treaties as Solution for Value Added Tax and Goods and Services Tax Double Taxation (IBFD 2013), 11.5.1; Alan Schenk, Victor Thuronyi & Wei Cui, *Value Added Tax: A Comparative Approach*, Second edition, Cambridge University Press 2015, chapter 15.

43 Rita de La Feria, *The EU VAT System and the Internal Market*, IBFD 2009.

44 Marta Papis-Almansa, 'VAT and Electronic Commerce: The New Rules as a Means for Simplification, Combatting Fraud and Creating a More Level Playing Field?', *ERA Forum*, Springer 2019.

45 The short introduction of 'cost of performance' rule, J. Heyman & Marc Weinstein, 'Calculating the Sales Factor for Service Businesses', 4. *Loc. Tax Law*. 35 (1999).

46 See the website of Multistate Tax Commission, the development of the new market-sourcing rules for the sales factor https://www.mtc.gov/Uniformity/Project-Teams/Section-17-Model-Market-Sourcing-Regulations Michael S. Schadewald, 'Multistate Tax Commission's Market-Sourcing Regulations: Will They Promote Uniformity', 95 *Taxes* 23 (2017).

47 These six proxies include: customer's primary residence, customer's billing address, where the services are received, where the contract is manged, the place of order, tax authorities' 'reasonable approximation'. Michael S. Schadewald, 'Multistate Tax Commission's Market-Sourcing Regulations: Will They Promote Uniformity', 95 *Taxes* 23 (2017). It is a brief version of the flowchart published by Multistate Tax Commission in 2014.

ning the destination of the sales factor for the BEFIT Directive Proposal.

4. Myths of the Asset Factor and Solutions

4.1 Myths about Manipulation of the Asset Factor
The asset factor is not always adopted in a formulary apportionment regime. For example, Canada only adopts the sales factor and the payroll factor in the formula, which are equally weighted as 50%.[48] In Canada, the sales factor and the payroll factor are symmetric to each other to represent the output side and the input side. This design is not completely groundless.

However, taxpayers' assets have a different way of contributing to the production process than taxpayers' employees. A jurisdiction where assets are utilized in the production process provides legal protection related to these assets. I believe this is the public benefit that the asset factor must represent. Therefore, the adoption of the asset factor is still necessary.

Moreover, two prevalent arguments for rejecting the asset factor are both related to manipulation opportunities: First, it is often argued that the asset factor involves valuation rules, and there is no consensus on how to evaluate assets, whether for tangibles or intangibles. Valuation of intangibles is especially problematic. Second, it is also argued that the asset factor is within taxpayers' control, so the asset factor seems easy to shift. Intangibles are believed to be especially vulnerable to manipulation because it is easy to change the ownership of intangibles. These two arguments are also cited to exclude intangibles in the asset factor

In my view these two concerns are exaggerated. According to Benefit-Based Market Neutrality, the asset factor should represent the taxpayers' input of material recources to the production process. The composition of the asset factor and the attribution rule should also follow this rationale. Therefore, it is logical to adopt the original cost valuation method to demonstrate taxpayers' input. The valuation difficulty can be eliminated by adopting the original cost method instead of various complicated market-based valuation methods.

Moreover, the assets should be attributed to where the assets are utilized, instead of to the legal owner or the economic owner. The place of actual utilisation reflects the economic reality, which is not as easily shifted as ownership.[49] To sum up, the concerns that the asset factor is too complex and too vulnerable to manipulation could be reduced.

The truly unsolved controversy in 2011/2016 CCCTB preparation work is whether the asset factor should include intangibles. When a formula needs to incorporate intangibles, the valuation difficulty and manipulation concerns even are more problematic. This is the reason that the European Commission is consulting the public on the option to have intangibles as the 'fourth factor' in the BEFIT Directive Proposal. [50] Inclusion of intangibles seems inevitable but it is not clear how BEFIT should do.

Traditionally in the US state taxation, the asset factor does not include intangibles. However, excluding intangibles from the asset factor is unreasonable nowadays because intangibles represent innovation activities conducted within the jurisdiction, and intangibles are undoubtedly the main value creation drivers of most MNEs. Therefore, I propose a solution for the EU's formulary apportionment in Section 4.2.

4.2 The Solution: Attributing IP Rights By Utilization in the Asset Factor
To represent the non-human material resources involved in the jurisdiction, the asset factor should include all assets that have contributed to the production process. All the included assets should be attributed to where they are utilised. Assets that do not attribute to the production process, such as inventories, should not be included.

Intangibles should not be excluded. But what types of intangibles should be included, and how do we attribute and decide their value?

In my view the justification to include intangibles in the asset factor is based on the public benefit of providing an innovation-promoting environment. Therefore, the intangibles that can be included in the asset factor should be universally accepted intellectual property (IP) rights, i.e., patents, trademarks, and copyrights. These IP rights are well-recognized as innovation related. Other types of 'intangibles', such as goodwill, locational savings[51], etc.,

48 As to Canada's experiences, see Joanna Weiner, 'Formulary Apportionment and Group Taxation in the European Union: Insights from the United States and Canada', *European Commission Taxation Papers*, 2005; Michael Smart and François Vaillancourt, 'Formulary Apportionment in Canada and Taxation of Corporate Income in 2019: Current Practice, Origins and Evaluation', in: Richard E. Krever & François Vaillancourt, *The Allocation of Multinational Business Income: Reassessing the Formulary Apportionment Option*, Kluwer Law International 2020.

49 For example, land or a building will be logically attributed to the situs state and will not be attributed to a legal/economic owner which might not be in the situs state. The 2011/2016 CCCTB Directive Proposal has this problem. See criticisms by H. Vermeulen & M.F.A. Blaauw, 'The Tax Treatment of Directly Held Real Estate under the Proposed CCCTB Directive' (2011) 51 *European Taxation*. In this regard, the 2011/2016 CCCTB Directive Proposal should be amended because it still relies on economical ownership as the main attribution rule.

50 European Commission, Directorate-General for Taxation and Customs Union, Call For Evidence For An Impact Assessment, Business in Europe: Framework for Income Taxation (BEFIT), Ref. Ares (2022)7086603 – 13/10/2022, at p. 5.

51 Jinyan Li & Stephen Ji, 'Location-Specific Advantages: A Rising Disruptive Factor in Transfer Pricing', 71 (5) *Bulletin for International Taxation* 259 (2017).

should not be included in the asset factor because they are not contributing to innovation or the production process. Goodwill or locational savings are in line with the fundamental rationale of the asset factor because taxpayers do not utilize these intangibles in the production process.

Regarding attributing the IP rights, ownership is not the right criterion either. Ownership of IP rights does not represent innovation activities. Instead, IP rights are attributed to where these rights 'function'.

To decide where IP rights are functioning, OECD and scholars have cultivated the concept of DEMPE functions (development, enhancement, maintenance, protection, exploration) in the context of transfer pricing.[52] In my view DEMPE functions are suitable proxies to attribute IP rights in the asset factor too because DEMPE functions capture where IP-rights are 'utilized'. In this way, IP rights, as intangibles, are not as easily manipulated as presumed. Ownership of IP rights might be easily shifted via well-known tax avoidance scenarios such as setting IP holding companies and various IP-structures and IP-migration schemes.[53] Still, enforcement and exercise of IP rights is inherently territorial[54] and thus where IP rights function cannot be changed easily. Put simply, even a German patent that a BVI company legally or economically owns can only be enforced by the German patent system in Germany.

Moreover, costs incurred to DEMPE functions of each IP right can be the logical valuation method. The difficulty of evaluating intangibles is also reduced consequently.

To sum up, when designing the market neutral asset factor it is necessary to think beyond the fear of tax avoidance. IP migration scenarios are only part of the story. Innovation activities that are represented by IP rights, are the more important part of MNE taxpayers' production process. By adopting DEMPE-functions as the attribution rule proxy, the asset factor refocuses on how IP rights are contributed and utilized in the production process.

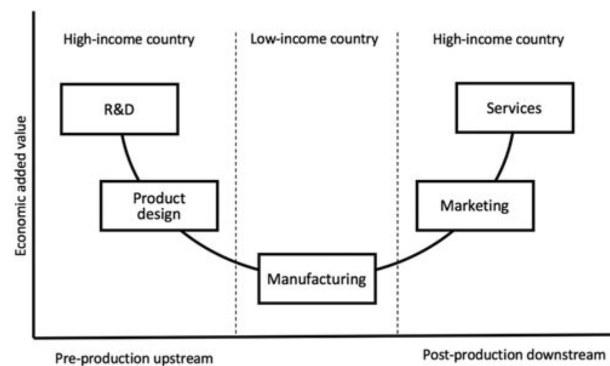
5. The Myths Of The Labour Factor And Solutions

5.1 Myths About Designing The Labour Factor

According to the benefit-based market-neutrality framework, the labour factor is justified in the formula, because it represents the public benefit of a healthy labour market. However, there are two myths about the labour factor.

Myth: Regarding Production Labour As Pure Costs

The first myth is to regard production labour as pure costs[55] and presume that production labour contributes little to value creation. This presumption accepts that activities like R&D, product design, marketing, services contribute much more to value creation because these activities created more added value in high-income countries. Such idea is widely accepted in the value chain analysis literature and demonstrated as 'a smile curve', as illustrated below.[56]



While interpreting manufacturing as low economic added value in the smile curve, the labour factor might look redundant. It becomes questionable whether the labour factor should be equally weighted as the sales factor or the asset factor. In my view, neverthelesss, we should interpret the lower part of the smile curve (i.e. the manufacturing) as the necessary bridge between the marketing and the R&D activities. In this value creation chain, each segment is necessary and highly integrated with each other. Therefore, it is justified to make the labour factor equally weighted as the sales factor and the asset factor.

Myth: Designing The Labour Factor Can Rely On The Labour Law or Social Security Law

The second myth is to presume that designing the labour factor in the formula can directly copy the definition from the labour or social security law. This presumption is also in the preparation work of 2011/2016 CCCTB Directive Proposal. Unfortunately, these two fields of law cannot directly provide instructions for the labour factor.

52 A short introduction of DEMPE, see Isabel Verlinden, Stefaan De Baets & Vasistha Parmessar, 'Grappling with DEMPEs in the Trenches: Trying to Give It the Meaning It Deserves', 47 *Intertax* 1042 (2019); Mirna Solange Screpante, 'The Arm's Length Principle Evolves Towards a 'Value Creation Functional (i.e. DEMPE) Formula Standard': A Barrier or a Gateway to Locational Business Planning?', 48 *Intertax* (2020).

53 Mirna Screpante, 'Rethinking the Arm's Length Principle and Its Impact on the IP Licence Model after OECD/G20 BEPS Actions 8-10: Nothing Changed But the Change?' (2019) 11 *World Tax Journal*, 557.

54 Justine Pila & Paul Torremans, 'Introduction to European Patent Law', in Justine Pila & Paul Torremans, *European Intellectual Property Law*, Oxford University Press 2019.

55 Criticism about this idea, Clair Quentin, 'Gently Down the Stream: BEPS, Value Theory and the Allocation of Profitability along Global Value Chains', (2021) 13 *World Tax Journal* 163. Many works accept the smile curve, for example, Michael Devereux & John Vella, 'Debate: Implications of Digitalization for International Corporate Tax Reform', (2018) 46 *Intertax* 550.

56 The figure is copied from Laurens van Apeldoorn, 'Exploitation, International Taxation, and Global Justice', 77 *Review of Social Economy* 163 (2019), at 7. See also Gary Gereffi & Karina Fernandez-Stark, *Global Value Chain Analysis: A Primer, Center on Globalization, Governance & Competitiveness (CGGC)*, (2011), Duke University, North Carolina, USA, at 14. Allison Christians,'Taxing According to Value Creation', 90 *Tax Notes International* (2018).

First, the regulatory purposes of the labour or social security law differ from the tax law. The labour factor in a formula aims to represent the labour market and human resources mobilised by the MNE taxpayer, not aims to protect the weaker party or deal with risks happening to the workers.

Second, disputes of (mis-)classifying employee are triggered by the fact that hiring non-traditional employees will bear lighter tax law or social security burdens. This is the so-called 'fiscalization' problem that misclassifying a workforce is driven by the tax law effects. Consequently, many labour law/social security law cases turn to tackle these tax planning/tax avoidance problems. Therefore, looking at the already problematic fields for designing the labour factor is not wise.

Third, until now there is no uniform definition of an employee, either in the labour or social security law at the EU level or between different EU Member States. These two fields of law provide different sets of indicators to show 'control' or 'dependence' to capture the definition of employees. 'What is an employee' is an unsolved big-bang question. Without having its own autonomous definition of 'employees' for the EU formulary apportionment regime, the labour factor can bring in more complexity and unnecessary competition between EU Member States.[57]

5.2 The Solution: Including All Mobilized Human Resources

In my view the labour factor under the EU's formulary apportionment regime should merely exclude genuine independent contractors from the scope, instead of trying to complete the mission impossible of defining an employee, as the labour law and social security law traditionally do (and fail).

After excluding genuine independent contractors, the composition of the labour factor will be broad enough to cover all human resources mobilized by MNE taxpayers.

As to 'genuine independent contractors', there has been developed 'the ABC test' in the US to classify employees.[58] The three cumulative prongs in the ABC test require employers to demonstrate an individual/workforce:

1. the workforce is free from control;
2. the work involved is outside the usual course of business of the claimed employer;
3. the workforce has a profession which is independently established trade or business.

Only when three cumulative prongs are fulfilled, such an individual workforce is a genuine independent contractor and consequently not defined as an employee.

In my view, shifting the burden of proof to exclude the genuine independent contractors will create a broader description of employees in the current labour market. The ABC test is thus consistent with Benefit-Based Market Neutrality because the labour factor will comprehensively reflect all the mobilised human resources. The BEFIT Proposal should consider this option.

6. Conclusion

In conclusion, this article clarifies several myths about a formulary apportionment system from the literature and in the 2011/2016 CC(C)TB preparation works. European Commission is facing the challenges of thinking beyond the existing policy options in US state taxation and preventing mistaken legal transplantation. I advocate Benefit-Based Market Neutrality as the reformed normative framework for BEFIT.

To achieve Benefit-Based Market Neutrality, the BEFIT Directive Proposal should consist of three equally weighted factors: the sales, the assets and the labour. Moreover, there are three technical suggestions for the BEFIT Directive Proposal:

1. The sales-by-destination principle should be implemented consistently. The physical location of ultimate customers is the key criterion.
2. The asset factor should include all the tangible assets and intellectual property rights contributing to the production process.
3. The labour factor needs a harmonised but broad definition of employee. Relying on un-harmonised national labour law cannot solve the problem. Carving-out the genuine independent contractors, would be a feasible solution.

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57 Eva Eberhartinger & Matthias Petutschnig, 'CCCTB: The Employment Factor Game' (2017) 43 *European Journal of Law and Economics* 333. Eberhartinger and Petutschnig apply the game theory and argue that the EU Member States will compete to have a narrow definition of employee.

58 Anna Deknatel & Lauren Hoff-Downing, 'ABC on the Books and in the Courts: An Analysis of Recent Independent Contractor and Misclassification Statutes', 18 *U. Pa. JL & Soc. Change* 53 (2015); Robert Sprague, 'Using the ABC Test to Classify Workers: End of the Platform-Based Business Model or Status Quo Ante?', 11 *Wm. & Mary Bus. L. Rev.* 733 (2019). John A Pearce & Jonathan P Silva,'The Future of Independent Contractors and Their Status as Non-Employees: Moving on from a Common Law Standard', 14 *Hastings Bus. LJ* 1 (2018). (The history of the ABC test and current overview among states in USA, p. 27-29).