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Economic and Policy Aspects of Digital Services Turnover Taxes: A Literature Review

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Contents

Executive Summary

The rise of the digital economy has forced policymakers to grapple with the fundamental issues of taxation—how best to raise revenue to fund government expenditure—in a more challenging context. To evaluate taxes in the digital economy, twenty years ago countries agreed to use the principles of the Ottawa Taxation Framework Conditions, which include neutrality, efficiency, certainty and simplicity, effectiveness and fairness, flexibility, and equity. This paper describes various existing and proposed turnover taxes on digital services, and reviews the economic literature related to turnover taxes in general and to digital services turnover taxes, in particular, to assess the extent to which these policies are consistent with the Ottawa Taxation Framework principles.

Neutrality and horizontal equity. Turnover taxes on digital services are likely to lead to economic distortions because the literature suggests the incidence of the taxes is likely to be different than the incidence of the income taxes for which they are a proxy. Without careful design electronic and conventional commerce would not be treated neutrally by the digital services taxes. To the extent that a turnover tax on digital services acts as a tax on business inputs and alters production decisions by firms, it violates the principle of neutrality. There is likely to be inappropriately disparate treatment of companies of different sizes and organizational structures. If, as the literature suggests, differences in the social costs firms impose bear little relationship to the base of the turnover tax, the tax creates penalties and subsidies that violate neutrality.

Efficiency. While the theoretical literature suggests that tax administration and compliance costs for a turnover tax may be lower than other taxes, the empirical literature has not necessarily found this to be the case Aspects of the digital services tax may cause a high cost of collection and compliance such that countries may not find the additional revenue worthwhile.

Certainty and simplicity. Uncertainty about the scope and duration of the tax as an interim measure to address the challenges of digitalization may contribute to controversy and complexity that are inconsistent with the Ottawa Taxation Framework Conditions.

Effectiveness and fairness. A company that pays a turnover tax in the country in which it is providing services may also pay income tax in the country in which it is a resident. Any such double taxation is a violation of the OECD principle of effectiveness and fairness. A turnover tax may have some advantages over a tax on profits if turnover is easier to verify. However, the potential administrative advantage of a turnover tax over an income tax is an argument for replacement of the income tax with a broad-based turnover tax. It is not a compelling argument for adding a narrow turnover tax on top of the income tax.

Flexibility. It is impossible to say whether any digital turnover tax can continue to provide revenue in the face of technological and commercial developments until those developments occur. This might be less of a concern if the digital services tax is relatively short in duration. However, such a tax would not be flexible enough to cover the existing range of diversity of revenue models, let alone those models that may emerge with continued technological or commercial change.

Vertical equity. A turnover tax applies the same amount of tax to businesses with the same revenue notwithstanding that such companies may have very different incomes or other traditional measures of ability to pay. The design may also favor more profitable companies. To the extent that younger firms are more likely to incur losses, a turnover tax creates barriers to market entry that protect the market shares of incumbents.

Inter-nation equity. A theoretical paper has suggested that a tax on digital services may be justified on inter-nation equity grounds under certain assumptions. However, variation in the value of users across countries that is not properly taken into account by the proposed digital services tax will result in an inequitable distribution of the tax base from electronic commerce. Also, the high thresholds in various proposals before the turnover tax applies are likely to have disparate effects across countries.

Policy makers should carefully consider whether the benefits outweigh the costs of implementing interim taxes on digital services as opposed to waiting for consensus to be reached on a multilateral framework for taxing the digitalizing economy.

I. Introduction

The rise of the digital economy has forced policymakers to grapple with the fundamental issues of taxation—how best to raise revenue to fund government expenditure—in a more challenging context. Some governments have doubted the adequacy of existing tax regimes to continue to raise sufficient revenue. The European Commission has expressed concerns about the ability of existing corporate tax rules, which are "built on the principle that profits should be taxed where the value is created" and where the right to tax and the allocation of taxable income is "largely based on having a physical presence in that country," to address the challenges of a digital economy that may rely less on having a physical presence to create value or supply services.[1]

Countries are in the process of examining, among other things, income tax issues related to nexus, attribution of value, characterization of income, and source rules, as well as the effective collection of consumption taxes on the cross-border supply of digital goods and services.[2] This enquiry is causing a reconsideration of the foundations of the international tax system that were built by the League of Nations in the 1920s. The OECD notes that the concept of permanent establishment "has a long history and reflects the international consensus that, as a general rule, until an enterprise of one State has a permanent establishment in another State, it should not properly be regarded as participating in the economic life of that other State to such an extent that the other State should have taxing rights on its profits."[3]

Some commentators have explained that the rationale for limiting source country taxation to income associated with a permanent establishment is "to prevent countries from trying to ease the burden of taxes on residents by increasing such taxes on nonresidents, who could not vote, and to promote international trade."[4] However, a number of governments have expressed doubts about the appropriateness of the permanent establishment concept in the context of digital activities, where physical presence is less indicative of economic presence. These considerations remain relevant in the development of any new consensus on the allocation of taxing rights in the digitalizing economy.

A range of potential options to address these issues, including an equalization levy, were analyzed in the Action 1 Report of the OECD/G20 base erosion and profits shifting ("BEPS") project, although no consensus prevailed. It was acknowledged, however, that countries could pursue any of the options individually, provided they respected existing tax treaties and other international obligations.

A few countries have enacted or proposed a turnover tax on digital services as an interim measure to address these challenges. The OECD notes "that there is no consensus[5] on either the merit or need for interim measures with a number of countries opposed to such measures on the basis that they give rise to risks and adverse consequences irrespective of their design. Other countries acknowledge these challenges, but consider that they do not outweigh the need to implement interim measures and consider that at least some of the possible adverse consequences can be mitigated through the design of the measure."[6]

Developed countries have agreed that the principles that guide the evaluation of taxation of the digital economy should be the same as those that guide the evaluation of any tax regime. These principles, referred to as the

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[1] European Commission, "Proposal for a Council Directive on the Common System of a Digital Services Tax on Revenues Resulting from the Provision of Certain Digital Services," 148, March 21, 2018, p. 2.
[2] Organization for Economic Cooperation and Development, "Addressing the Tax Challenges of the Digital Economy, Action 1: 2015 Final Report," OECD/G20 Base Erosion and Profit Shifting Project, 2015, p. 16.
[3] OECD Commentaries on Art. 7, par. 11;
[4] Ashok K. Lahiri, Gautam Ray, and D. P. Sengupta, "Equalisation Levy," Brookings Institution India Working Paper -02, January 2017, p. 7.
[5] Austrian Finance Minister Hartwig Löger in advance of a meeting of economic and finance ministers in September 2018 said on the subject of the taxation of the digital economy, "in many cases the positions of the member states could not be more at odds." https://www.eu2018.at/calendar-events/political-events/BMF-2018-09-07-Informal-Ecofin.html
[6] Organization for Economic Cooperation and Development, "Tax Challenges Arising from Digitalisation – Interim Report 2018," OECD/G20 Base Erosion and Profit Shifting Project, 2018, p. 177.

"Ottawa Taxation Framework Conditions," include neutrality, efficiency, certainty and simplicity, effectiveness and fairness, flexibility, and equity.[7] Proponents of interim measures have cited these principles as reasons for pursuing policy changes. For example, the European Commission expressed concern that "uncoordinated measures taken by Member States individually risk further fragmenting the Single Market and distort competition, hampering the development of new digital solutions and the Union's competitiveness as a whole."[8] Concerns about neutrality also explicitly motivated the enactment of the equalization levy in India.[9] The European Commission has described policy makers as "struggling to find solutions which can ensure a fair and effective taxation" of the digital economy, avoiding both double taxation and unintentional nontaxation.[10] Opponents of such measures have also appealed to these principles as reasons these policies do not adequately address the challenges presented by digitalization.

This paper provides a review of the economic literature related to turnover taxes in general and to digital services turnover taxes in particular to assess the extent to which these policies are consistent with the Ottawa Taxation Framework Conditions. Section II describes the existing and proposed turnover taxes on digital services. Section III describes the Framework Conditions that the OECD countries have articulated as a guide for evaluating taxation of the digital economy. Section IV uses these principles as a structure for reviewing the literature on the expected effects of the digital services taxes currently in effect or proposed. The final section offers some conclusions.

[7] Organization for Economic Cooperation and Development, "Taxation and Electronic Commerce: Implementing the Ottawa Taxation Framework Conditions," OECD Publishing, 2001,
[8] European Commission, "Proposal for a Council Directive on the Common System of a Digital Services Tax on Revenues Resulting from the Provision of Certain Digital Services," 148, March 21, 2018.
[9] "The word 'equalization' represents the objective of ensuring tax neutrality between different business conducted through differing business models of residing within or outside the taxing jurisdiction." Committee on Taxation of E-Commerce, Government of India, *Proposal for Equalization Levy on Specified Transactions*, February 2016, p. 75.
[10] European Commission, "Proposal for a Council Directive on the Common System of a Digital Services Tax on Revenues Resulting from the Provision of Certain Digital Services," 148, March 21, 2018, p. 1.

II. Existing and Proposed Turnover Taxes on Digital Services

A number of countries have enacted various targeted provisions to impose additional tax on digital services. Others have proposed legislation to do so, but have not yet implemented a digital services tax regime. This section describes a number of the features of these taxes or proposed taxes in various countries.

Enacted taxes

France

In 2016, France expanded the scope of a preexisting tax on audio-visual content to include advertising revenue related to video-on-demand services provided to the customer for free.[11] France imposes a tax of two percent (10 percent in the case of certain explicit or violent content) on 1) the consideration paid (exclusive of VAT) for the purchase, rental, or access to online audio-visual content and 2) the consideration paid (including through an advertising intermediary) for the display of advertisements and/or sponsorships linked to a particular online audio-visual content. Liability for online services arises if the audience is located in France, without regard to the location, residence, or status of the supplier. Threshold exemptions apply for amounts in 2) above. A taxpayer is allowed a deduction of four percent (66 percent where the audio-visual content is created by private users for the purpose of sharing and exchanging among members of a community sharing interests), and only the remaining amount in excess of EUR 100,000 is subject to tax.

Hungary

In 2014, Hungary introduced a tax on advertising services, which was subsequently suspended due to a State aid challenge from the European Commission.[12] A modified version of the advertisement tax took effect July 1, 2017. Advertisement tax applies to certain advertising services, including advertising services made available over the internet, television, radio, billboards, newspapers, vehicles, and others. The tax applies in respect of advertisements that are published in Hungarian, or where the advertisement is available on a website/webpage that is mainly in Hungarian. In the case of primary taxpayers, the tax is based on total trading revenue (exclusive of VAT) at a rate of zero percent for the first HUF 100 million and 7.5 percent thereafter. The tax does not apply to self-promotion, and advertisement tax liability arises only for publishing as business activity.

The company providing the advertising service is the primary taxpayer. For online advertisements, the taxpayer that has right of disposal over the advertising space is the publisher of the advertisement subject to tax. The customer is not obligated to withhold tax on payments made to the advertising service provider. The person/company that orders and pays for the advertisement is considered to be the secondary taxpayer. Secondary tax obligation does not arise if: 1) the secondary taxpayer possesses a declaration from the primary taxpayer stating its identity as the primary taxpayer and its intent to fulfil its obligations under the tax; 2) the primary taxpayer applies for a registration with the tax authority stating its identity as the primary taxpayer and its intent to fulfil its obligations on time or that it does not have advertisement tax payment obligation in the tax year because it will not exceed the HUF 100 million threshold; or 3) the secondary taxpayer notifies the tax authority with the name of the primary taxpayer and the value of the services and proof it requested the declaration but has not received it.

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[11] Organization for Economic Cooperation and Development, "Tax Challenges Arising from Digitalisation – Interim Report 2018," OECD/G20 Base Erosion and Profit Shifting Project, 2018, p. 146-147.
[12] Commission Decision (EU) 2017/329 of 4 November 2016 on the measure SA.39235 (2015/C) (ex 2015/NN) implemented by Hungary on the taxation of advertisement turnover (notified under document C(2016) 6929), 2016 O.J. L 49, February 25, 2017.

Otherwise, the secondary taxpayer is subject to tax on 5 percent of the value of the advertising (provided that the secondary taxpayer spends at least HUF 2.5 million in a month for advertisement services). In cases when annual advertising spending exceeds HUF 30 million, it is not deductible against corporate income tax for the secondary taxpayer.[13]

While penalties apply for noncompliance, "local tax authorities have reported relatively low levels of compliance of non-resident enterprises with the measure and, consequently, no meaningful tax revenue."[14]

India

Effective June 1, 2016, India imposes an equalization levy of 6 percent of the gross amount of consideration paid by an Indian business, or non-resident having a permanent establishment in India, to a non-resident for the provision of any specified service.[15] A specified service means online advertisement, any provision for digital advertising space or any other facility or service for the purpose of online advertisement, and includes any other service as may be notified by the Central Government. The tax does not apply where the non-resident providing the specified service has a permanent establishment in India and the specified service is effectively connected with such permanent establishment. The tax also does not apply where the aggregate consideration for specified services for a year does not exceed INR 100,000 (about $1350). The levy is effective for payments made from June 1, 2016. For the 2016-2017 fiscal year, the Indian government reported revenue from the equalization levy of INR 3.4 billion (about $45.8 million).[16]

Italy

Italy enacted a digital transactions tax in 2017 effective from January 1, 2019.[17] The tax applies to services provided via electronic means to Italian-resident corporations, government bodies, partnerships, sole proprietorships, and self-employed professionals, as well as to Italian permanent establishments of nonresident persons, subject to a few exceptions. Such services are those provided through the internet or any other electronic network, the nature of which makes the provision of the service essentially automated and accompanied by minimal human intervention and that is impossible to be provided without information technology. The tax rate is 3 percent of the value of consideration paid for the service, net of VAT. Tax is due from both Italian and non-Italian resident service providers that, during a calendar year, perform more than 3,000 transactions falling within the scope of the tax. The service recipient withholds the tax from the consideration payment and remits it to the tax authorities by the 16th day of the month following payment. The service recipient does not withhold the tax if the service provider attests that it has not exceeded the 3,000 transaction threshold during the calendar year.[18]

[13] http://taxsummaries.pwc.com/ID/Hungary-Corporate-Taxes-on-corporate-income
[14] Organization for Economic Cooperation and Development, "Tax Challenges Arising from Digitalisation – Interim Report 2018," OECD/G20 Base Erosion and Profit Shifting Project, 2018, p. 145.
[15] Finance Act of 2016, Chapter VIII Equalisation Levy, Secs. 163ff., available at https://www.incometaxindia.gov.in/Pages/acts/finance-acts.aspx.
[16] Finance Accounts of the Union Government for the Year 2016-2017, October 26, 2017, p.98, available at http://cga.nic.in/writereaddata/Fin20162017Statement8.pdf.
[17] Italian Statute 27 December 2017, n. 205, Article 1, paragraphs 1011-1019, available at http://www.normattiva.it/uri-res/N2Ls?urn:nir:stato:legge:2017;205.
[18] https://www.pwc.com/us/en/tax-services/publications/insights/assets/pwc-italy-2018-bill-includes-provisions-on-cross-border-taxation.pdf

Proposed taxes

Chile

On June 21, 2018, the Chilean finance minister announced that the government's proposal for tax modernization would include taxation of the digital economy.[19] On August 23, 2018, Chile introduced a proposal to tax digital services.[20] The proposed tax applies to digital services provided by persons or entities domiciled or resident abroad to Chilean natural persons. Digital services include 1) digital intermediation between providers and users of services that may be concluded by electronic means; 2) paid entertainment services for digital content, including images, movies, series, videos, music, games, and other digital entertainment provided through download, streaming, or other technology; 3) certain advertising and promotional services and the use and subscription of internet platform services; and 4) data storage services, including cloud services. The rate of tax is 10 percent. If payment for services is made in cash, the tax is due by the provider of the digital services. If payment is made by electronic means, the issuer of the electronic payment has an obligation to withhold the tax from the payment for services.

European Commission

The European Commission proposes a digital services tax of three percent on the gross revenues (net of value added tax or similar taxes) resulting from the provision of certain digital services.[21] Taxable services are 1) the placing on a digital interface of advertising targeted at users of that interface, 2) the making available to users of a multisided digital interface which allows users to find other users and to interact with them, and which may also facilitate the provision of underlying supplies of good or services directly between users, and 3) the transmission of data collected about users and generated from users' activities on digital interfaces. A user is any individual or business. A digital interface means any software accessible by any individuals or businesses.

Several exceptions to the definition of taxable services apply. Where the entity placing the advertising does not own the software, the owner of the software is not considered to be providing a taxable service.[22] Making available a multisided digital interface where the sole or main purpose of doing so is for the entity making it available to supply digital content, communication services, or payment services is not considered a taxable service. This exception does not apply to a digital interface that facilitates supply of digital content directly between users. Certain services provided by trading venues or systematic internalizers[23] "to bring together buyers and sellers of financial products" or by "investment and lending based crowdfunding" platforms are exempt as is transmission of data by such entities. This exception does not apply to "donation or reward based crowdfunding, or services provided by such platforms consisting in the placing of advertising."[24]

The digital services tax is only chargeable in a Member State on the portion of taxable revenues obtained by a taxable person in a calendar year that is treated as obtained in that Member State. A taxable person means an

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[19] Rodrigo Winter Salgado and Raul Fuentes Ugalde, "Taxes on the Digital Economy in Chile," International Tax Review, September 26, 2018, available at http://www.internationaltaxreview.com/Article/3834717/Taxes-on-the-digital-economy-in-Chile.html.

[20] Mensaje de s.e. el Presidente de la República con el que Inicia el Proyecto de Ley que Moderniza la Legislación Tributaria, Cámara de Diputados, Mensaje No. 107-366, Boletín No. 12043-05, August 23, 2018, available at https://www.camara.cl/pley/pley_detalle.aspx?prmID=12561&prmBL=712043-05.

[21] European Commission, "Proposal for a Council Directive on the Common System of a Digital Services Tax on Revenues Resulting from the Provision of Certain Digital Services," 148, March 21, 2018, pp.24ff.

[22] The Directive explains this exception as an attempt "to avoid possible cascading effects or double taxation of the same revenues (part of the revenues obtained by the entity placing a client's advertising will be paid to the owner of the digital interface where such an advertisement is to appear, in exchange for the renting of digital space in that interface)." European Commission, "Proposal for a Council Directive on the Common System of a Digital Services Tax on Revenues Resulting from the Provision of Certain Digital Services," 148, March 21, 2018, p. 8.

[23] A systematic internalizer is an investment firm which, on an organized, frequent, systematic, and substantial basis, deals on own account by executing client orders outside a regulated market, a multilateral trading facility, or organized trading facility without operating a multilateral system. European Directive 2014/65/EU of 15 May 2014 on markets in financial instruments, 2014 O.J. L 173, June 12, 2014, paragraph 20, p. 382.

[24] European Commission, "Proposal for a Council Directive on the Common System of a Digital Services Tax on Revenues Resulting from the Provision of Certain Digital Services," 148, March 21, 2018, pp. 9-10.

entity with 1) total worldwide revenues for the year that exceed EUR 750 million (approximately $867 million) and 2) total taxable revenues obtained within the European Union for the year that exceed EUR 50 million (approximately $58 million). The determination of the location of taxable revenues (and thus liability for the tax and the distribution of tax revenue among Member States) is generally made on the basis of the location of users with respect to taxable services.

Spain

In its budget agreement announced on October 11, 2018, Spain proposed a digital services tax at a rate of three percent on revenues (exclusive of value added tax) resulting from the supply of certain digital services including online advertising, intermediation services (online marketplaces), and commercialization of data collected about information provided by users.[25] The tax applies to companies with worldwide annual revenues of at least EUR 750 million, and with revenues in Spain of more than EUR 3 million. The tax applies to transaction between entities within the same controlled group.

The following are excluded from the tax: 1) sales of goods or services contracted online through the website of the provider of those goods or services in which the supplier does not act as an intermediary; 2) delivery of goods or services between users of an online marketplace; 3) provision of intermediation services when the main purpose is to provide digital content, communication services, or payment services; 4) certain financial intermediation services; 5) business financing services; and 6) certain financial data transmission services.

United Kingdom

In the Budget presented to Parliament on October 29, 2018, the UK proposed a digital services tax effective April 2020.[26] The two-percent tax applies to revenues that are linked to the participation of UK users and that are generated from the provision of search engines, social media platforms, and online marketplaces. The first £25 million of revenue linked to the participation of UK users is exempt. Groups that generate global revenues from such business activities in excess of £500 million per year are subject to the tax. A safe harbor exempts loss-making firms and reduces the rate of tax on businesses with very low profit margins.

The tax does not apply to all revenue from online advertising or the collection of data, but only to revenues derived directly or indirectly from these activities, to the extent they are related to the provision of a search engine, social media platform, or online marketplace.[27] Financial and payment services, the provision of online content, sales of software and hardware and television and broadcasting services are not subject to tax.

The tax is intended to apply temporarily, is subject to formal review in 2025, and may be terminated sooner if an appropriate international solution is in place. The digital services tax is a deductible expense for purposes of the corporate income tax, but it is outside the scope of double tax treaties and is therefore not creditable against the corporate tax.[28]

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[25] Ministerio de Hacienda, Impuesto Sobre Determinados Servicios Digitales, October 23, 2018, available at http://www.minhafp.gob.es/Documentacion/Publico/NormativaDoctrina/Proyectos/Tributarios/ANTEPROYECTO%20LEY%20IDSD.pdf.
[26] HM Treasury, Budget 2018, October 29, 2018, available at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/752201/Budget_2018_print.pdf, p. 44.
[27] HM Treasury, Budget 2018: Digital Services Tax, available at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/752172/DST_web.pdf, p. 1.
[28] *Ibid*, p. 2.

III. OECD Principles for Evaluating Taxes on the Digital Economy

Twenty years ago, the OECD Committee on Fiscal Affairs published a set of taxation principles to guide governments in relation to electronic commerce ("Ottawa Taxation Framework Conditions").[29] The Committee concluded that these principles are the same as those that apply in evaluating any tax. They are: 1) neutrality, 2) efficiency, 3) certainty and simplicity, 4) effectiveness and fairness, and 5) flexibility.

1. **Neutrality.** Taxes should not motivate taxpayers to prefer (or reject) one form of electronic commerce over another form or to prefer (or reject) electronic commerce over conventional commerce. Production decisions by firms and consumption decisions by customers should be motivated by nontax considerations rather than by disparate tax treatment of various activities. The Ottawa Taxation Framework Conditions also consider similar treatment of similarly situated taxpayers to be within the scope of its neutrality principle.[30] Different treatment to correct an existing nonneutrality may be appropriate.[31]

2. **Efficiency.** The Ottawa Taxation Framework Conditions describe efficiency in terms of the collection of tax. "Compliance costs for taxpayers and administrative costs for the tax authorities should be minimized as far as possible."[32]

3. **Certainty and simplicity.** Clear tax rules that are simple to understand enable taxpayers to know the tax results of any transaction before entering into it. Uncertainty and complexity may create opportunities for controversy and tax planning.

4. **Effectiveness and fairness.** "Taxation should produce the right amount of tax at the right time."[33] There should be neither double taxation nor unintentional nontaxation. If taxes are due by some class of taxpayers, but are never paid due to a lack of ability to enforce collection, the public may view the tax as ineffective and unfair. The potential for tax avoidance (permissible but potentially distortive measures undertaken to reduce tax liability) and tax evasion (illegal measures undertaken to escape payment of tax due) should be minimized. Another component of fairness is that any countervailing measures to combat avoidance and evasion should be proportionate to the risks involved.

5. **Flexibility.** The direction of technological change in the digital economy is difficult to anticipate. It is desirable for a tax system to be flexible enough to continue to provide revenue as technological and commercial developments unfold.

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[29] Organization for Economic Cooperation and Development, "Electronic Commerce: Taxation Framework Conditions," Committee on Fiscal Affairs, October 8, 1998, available at https://www.oecd.org/ctp/consumption/1923256.pdf.

[30] The similar treatment of similarly situated taxpayers is also known as horizontal equity. In a subsequent publication on the digital economy, the OECD rearticulated the Ottawa Taxation Framework Conditions but separated the principle of horizontal equity from the principle of neutrality. See the discussion below and Organization for Economic Cooperation and Development, "Addressing the Tax Challenges of the Digital Economy, Action 1: 2015 Final Report," OECD/G20 Base Erosion and Profit Shifting Project, 2015, pp. 20-21. For purposes of this document, these principles will be treated together.

[31] For an early articulation of this longstanding principle, see Arthur C. Pigou, *The Economics of Welfare*, London: Macmillan, 1920.

[32] Organization for Economic Cooperation and Development, "Electronic Commerce: Taxation Framework Conditions," Committee on Fiscal Affairs, October 8, 1998, p. 4, available at https://www.oecd.org/ctp/consumption/1923256.pdf.

[33] *Ibid.*

In its final report addressing the tax challenges of the digital economy, the OECD Task Force on the Digital Economy supplemented the Ottawa Taxation Framework Conditions with a broader discussion of three tax equity considerations: 1) horizontal equity, 2) vertical equity, and 3) inter-nation equity.[34]

6. **Horizontal equity.** Similarly situated taxpayers should be treated similarly, that is, they should bear similar tax burdens. It may not always be straightforward to determine whether taxpayers are in fact similar in regard to their nontax attributes. Nonetheless it is considered desirable in the design of tax policy to have the objective of treating similar taxpayers similarly, however that similarity is determined.

7. **Vertical equity.** The OECD notes that "[v]ertical equity is a normative concept, whose definition can differ from one user to another….[and] is traditionally delivered through the design of the personal tax and transfer systems."[35] It is concerned with comparing the tax burdens of taxpayers that are determined to be differently situated in some nontax attribute. If a tax system is characterized by horizontal equity, there must be vertical differentiation unless all taxpayers are determined to be similarly situated. That is, to some extent horizontal equity implies a degree of vertical equity.

8. **Inter-nation equity.** Inter-nation equity concerns the distribution of tax revenue among countries in cross-border transactions. While not listed as a separate principle of taxation in the Ottawa Taxation Framework Conditions, that document did note that "any adaptation of existing international principles should be structured to maintain the fiscal sovereignty of countries[] [and] to achieve a fair sharing of the tax base from electronic commerce between countries."[36] The 2015 final report identifies this statement as recognizing the importance of inter-nation equity in the context of the digital economy.

The OECD "recognises that there are circumstances in which the principles may compete, and that government and business may have different views on what the balance and priority of their application should be in particular contexts….[I]t is important to give due weight to all the principles, recognising that they form a package."[37] The analysis that follows does not attempt to assess what it is the "due weight" of any particular principle, but it provides information about how aspects of the various proposals fare with respect to each principle. Policymakers must make the ultimate determination with regard to their relative importance.

[34] Organization for Economic Cooperation and Development, "Addressing the Tax Challenges of the Digital Economy, Action 1: 2015 Final Report," OECD/G20 Base Erosion and Profit Shifting Project, 2015, pp. 20-21.
[35] *Ibid*, p. 21.
[36] Organization for Economic Cooperation and Development, "Electronic Commerce: Taxation Framework Conditions," Committee on Fiscal Affairs, October 8, 1998, p. 3, available at https://www.oecd.org/ctp/consumption/1923256.pdf.
[37] Organization for Economic Cooperation and Development, "Taxation and Electronic Commerce: Implementing the Ottawa Taxation Framework Conditions," OECD Publishing, 2001, p. 18.

IV. Assessment of Digital Services Turnover Taxes Relative to OECD Principles

Neutrality and horizontal equity

Incidence

Understanding the incidence of a tax, that is how the tax affects prices, is necessary to its economic analysis. The change in price of a good as a result of imposition of a tax depends on how sensitive consumer demand and producer supply are to changes in prices, that is, on the price elasticity of demand relative to the price elasticity of supply.[38] For an analysis of the economic incidence of a tax, it is this structure of the market that matters and not whether the tax is a direct tax such as a corporate income tax or an indirect tax such as a turnover tax or what the statutory incidence might be. Proponents of the digital services tax argue that income appropriately attributable to value created by users in the jurisdiction where digital services are provided escapes income tax that should be payable in that jurisdiction. The digital services tax is supposed to act as a proxy for the amount of income tax that would be due on income from those activities. If firms are to be treated neutrally, the incidence of the turnover tax should be similar to the incidence of the income tax with respect to the income generated by the provision of the digital services. However, economic literature suggests this is unlikely to be the case.

Incidence of the corporate income tax has been the subject of economic research for more than 50 years.[39] While debate over the incidence of the corporate income tax is ongoing,[40] there seems to be a consensus that the burden of corporate income taxes is shared by capital owners and labor, though with the share borne by each being the subject of ongoing debate. One review of the literature summarizes it this way. "Does labour bear a significant part of the [corporate income] tax burden? Although there are diverging views about how this should be measured, the answer to the question is almost unanimously yes. There is less agreement about how large the effect is."[41] Because of methodological difficulties of estimating incidence on capital, labor, and consumer prices jointly, it is a "standard assumption … that output prices are determined in national markets

[38] For a general discussion of the incidence of taxes under various market conditions, see E. Glen Weyl and Michael Fabinger, "Pass-Through as an Economic Tool: Principles of Incidence under Imperfect Competition," *Journal of Political Economy*, vol. 121, no. 3, June 2013, pp. 528-583.
[39] Arnold C. Harberger, "The Incidence of the Corporate Income Tax," *Journal of Political Economy*, vol. 70, no. 3, June 1962, pp. 215-240. For a detailed review of the literature on the incidence of the corporate income tax, see William Gentry, "A Review of the Evidence on the Incidence of the Corporate Income Tax," Office of Tax Analysis Paper 101, December 2007, and Jennifer C. Gravelle, "Corporate Tax Incidence: A Review of Empirical Estimates and Analysis," CBO Working Paper No. 2011-01, June 2011.
[40] See, for example, Clemens Fuest, Andreas Peichl, and Sebastian Siegloch, "Do Higher Corporate Taxes Reduce Wages? Micro Evidence from Germany," *American Economic Review*, vol. 108, no. 2, February 2018, pp. 393-418.
[41] Clemens Fuest, "Who Bears the Burden of Corporate Income Taxation?" European Tax Policy Forum Policy Paper 1, June 1, 2015, available at http://etpf.org/papers/PP001CorpTax.pdf, p. 14.

for goods and services so that the tax burden cannot be shifted onto consumers."[42] One paper that relaxes this assumption finds that overall consumer prices change "slightly."[43]

In contrast, there is more empirical evidence[44] suggesting that consumers bear the burden of indirect taxes such as turnover taxes, value-added taxes, excise taxes, and sales taxes in the form of higher prices, though some studies have found that prices may rise by more or less than the full amount of the tax depending on market conditions.[45] Retail prices have been found to change with changes in sales taxes in the United States[46] and Canada.[47] Another study finds that prices rise by the amount of the tax for half of the goods studied and by more than the amount of the tax for the remainder.[48] In the context of taxes on beverages, studies have found that companies have absorbed some of the tax, that is, prices have risen by less than the full amount of the tax.[49] Another finds that excise taxes are more than shifted to consumers, though there is less shifting if the tax change is larger relative to the price of the good and in the case of tax reductions as compared to tax increases.[50]

For purposes of judging whether the turnover tax treats firms subject to it similarly to firms subject to domestic income taxes, the exact share of the burden borne by consumers is less relevant than the fact that the incidence is different from that of the corporate income tax to which domestic suppliers of digital services are subject. This would seem to violate the principles of neutrality and horizontal equity.

Electronic vs. conventional

Equal treatment for electronic commerce vs. conventional commerce is one dimension of neutrality articulated in the Ottawa Taxation Framework Conditions. The OECD has noted that "[b]ecause the digital economy is increasingly becoming the economy itself, it would be difficult, if not impossible, to ring-fence the digital economy from the rest of the economy for tax purposes."[51] Depending on the scope of a digital services tax, it

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[42] Clemens Fuest, Andreas Peichl, and Sebastian Siegloch, "Do Higher Corporate Taxes Reduce Wages? Micro Evidence from Germany," *American Economic Review*, vol. 108, no. 2, February 2018, p. 409. See also, Joint Committee on Taxation, *Modeling the Distribution of Taxes on Business Income* (JCX-14-13), October 16, 2013, p. 8, which states that "[f]ollowing the standard view expressed in the economic literature, the Joint Committee staff's distributional methodology assumes that none of the burden of corporate income taxes flows through to consumers."

[43] William C. Randolph, "International Burdens of the Corporate Income Tax," CBO Working Paper No. 2006-09, Congressional Budget Office, August 2006, p. 23.

[44] A *theoretical* paper shows that if a monopolist supplies a service at zero marginal cost, a tax on the service may not increase the price of the service. The incidence of the tax falls on the seller of services or on consumers in the form of lower quality. Wolfram F. Richter, "Taxing Direct Sales of Digital Services: A Plea for Regulated and Internationally Coordinated Profit Splitting," Munich Society for the Promotion of Economic Research, CESifo Working Paper 7017, April 2018, pp. 16.

[45] For a review of the literature of over- or under-shifting of excise taxes into prices, see Christopher T. Conlon and Nirupama S. Rao, "Discrete Prices and the Incidence and Efficiency of Excise Taxes," June 17, 2016, available at SSRN: https://ssrn.com/abstract=2813016.

[46] James M. Poterba, "Retail Price Reactions to Changes in State and Local Sales Taxes," *National Tax Journal*, vol. 49, no. 2, June 1996, pp. 165-176.

[47] Michael Smart and Richard M. Bird, "The Economic Incidence of Replacing a Retail Sales Tax with a Value-Added Tax: Evidence from Canadian Experience," *Canadian Public Policy*, vol. 35, no. 1, March 2009, pp. 85-97.

[48] Timothy J. Besley and Harvey S. Rosen, "Sales Taxes and Prices: An Empirical Analysis," *National Tax Journal*, vol. 52, no. 2, June 1999, pp. 157-178.

[49] Fabrice Etilé, Sébastien Lecocq, and Christine Boizot-Szantaï, "The Incidence of Soft-Drink Taxes on Consumer Prices and Welfare: Evidence from the French "Soda Tax," PSE Working Paper no. 2018-24, March 7, 2018. John Cawley and David Frisvold, "The Pass-Through of Taxes on Sugar-Sweetened Beverages to Retail Prices: The Case of Berkeley, California," *Journal of Policy Analysis and Management*, vol. 36, no. 2, Spring 2017, pp. 303-326.

[50] U. Michael Bergman and Niels Lynggård Hansen, "Are Excise Taxes on Beverages Fully Passed Through to Prices? The Danish Evidence, June 26, 2017, available at https://www.researchgate.net/publication/268429840.

[51] Organization for Economic Cooperation and Development, "Addressing the Tax Challenges of the Digital Economy, Action 1: 2015 Final Report," OECD/G20 Base Erosion and Profit Shifting Project, 2015, p. 54.

has been noted that "many non-digital sectors now feature digital business models" such that disputes about the boundary could "become a source of significant competitive distortions."[52]

The tax in Hungary applies to a broad list of advertising services, both digital and conventional. However, the European Commission proposal applies more narrowly to placements "on a digital interface of advertising targeted at users of that interface."[53] The turnover tax in India also applies to what the OECD has described as "a rather narrow class of digital transactions: online business-to-business advertising services. By design, such narrow scope may fail to achieve neutrality in its treatment of the taxation of digital services more generally…and lead in some cases to unequal treatment between economically equivalent digital transactions."[54] The OECD further notes that the Italian tax may face similar problems.[55] The different application of these taxes could distort the decision to use electronic versus conventional advertising, or business-to-business versus business-to-consumer digital services, based on differential tax treatment.

Production efficiency

The digital services tax may act as a tax on business inputs, for example, advertising. As part of an optimal tax system, taxes on business inputs should generally be avoided as they may distort production decisions by firms and prevent production efficiency.[56] Such taxes may distort not only decisions about which inputs to purchase but also about whether such inputs are purchased in markets or produced in-house.[57] The intuition behind the desirability of production efficiency is that business transactions should not be taxed because any distortion of production decisions reduces total economic output. Unless taxation of intermediate goods can be justified on the grounds that the intermediate goods generate externalities, "production efficiency … remain[s] the best guiding principle for practical tax design."[58] The desirability of production efficiency "implies that turnover taxes are inefficient."[59] To the extent that a turnover tax on digital services alters production decisions by firms, it violates the principle of neutrality.

Size

Many of the turnover tax proposals contain thresholds below which the taxes do not apply. Some have questioned why such a tax should apply to only large companies.[60] The OECD has noted "thresholds can act to reduce the administrative burden, by permitting tax administrations to focus resources where the return is likely to be high. The principal disadvantage…is the risk to neutrality/competitive equity between taxpayers below and above the threshold."[61] A bright line threshold may create incentives for taxpayers operating near

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[52] Matthias Bauer, "Digital Companies and Their Fair Share of Taxes: Myths and Misconceptions," European Center for International Political Economy, ECIPE Occasional Paper No. 03/2018, 2018, p. 3.
[53] European Commission, "Proposal for a Council Directive on the Common System of a Digital Services Tax on Revenues Resulting from the Provision of Certain Digital Services," 148, March 21, 2018,, p. 24.
[54] Organization for Economic Cooperation and Development, "Tax Challenges Arising from Digitalisation – Interim Report 2018," OECD/G20 Base Erosion and Profit Shifting Project, 2018, p. 141.
[55] *Ibid.*
[56] Peter A. Diamond and James A. Mirrlees, "Optimal Taxation and Public Production I: Production Efficiency," *American Economic Review*, vol. 61, no. 1, March 1971, p. 24. It has been observed that the production efficiency theorem articulated by Diamond and Mirrlees relies on assumptions that may not be satisfied. However, one researcher has commented that the theorem "provides a very useful bench-mark that is widely applicable. It is best to presume the desirability of production efficiency, and place the burden of proof on the people who are arguing for an exception." Christopher Heady, "Optimal Taxation as a Guide to Tax Policy: A Survey," *Fiscal Studies*, vol. 14, no. 1, February 1993, p. 39.
[57] Michael Smart and Richard M. Bird, "The Impact on Investment of Replacing a Retail Sales Tax with a Value-Added Tax: Evidence from Canadian Experience," *National Tax Journal*, vol. 62, no. 4, December 2009, p. 595.
[58] Ian Crawford, Michael Keen, and Stephen Smith, "Value Added Tax and Excises" in *Dimensions of Tax Design*, edited by Sir James Mirrlees, *et al.*, pp. 275-422, Oxford University Press, 2010, p. 283.
[59] Christopher Heady, "Optimal Taxation as a Guide to Tax Policy: A Survey," *Fiscal Studies*, vol. 14, no. 1, February 1993, p. 38.
[60] Wissenschaftlicher Beirat beim Bundesministerium der Finanzen [Scientific Advisory Board at the Federal Ministry of Finance (Germany)], "Stellungnahme zu den EU-Vorschlägen für eine Besteuerung der digitalen Wirtschaft [Opinion on the EU Proposals for Taxation of the Digital Economy]," September 2018, p. 4.
[61] Organization for Economic Cooperation and Development, "Taxation and Electronic Commerce: Implementing the Ottawa Taxation Framework Conditions," OECD Publishing, 2001, p. 31.

the threshold to alter their behavior.[62] Depending on how the threshold is designed, there could be a cliff effect (as in the case of a secondary taxpayer in Hungary or companies under the European Commission proposal) where crossing the threshold subjects a taxpayer to the full liability of the tax, including on activity below the threshold amount. Other proposals mitigate the effect by applying tax only to amounts in excess of the threshold (as in the case of the French tax on consideration paid for advertisements linked to a particular online audio-visual content). In either case, however, it has been noted that any such size distinction "most probably conflicts with principles of equal treatment."[63]

The European Commission itself has challenged a prior version of the Hungarian advertising turnover tax as a violation of the State aid prohibitions because "[i]n the Commission's view, the reference system for the taxation of advertisement turnover should be a tax on advertisement turnover which would comply with State aid rules i.e. where: advertisement turnovers are subject to the same (single) tax rate [and] no other element is maintained or introduced that would provide a selective advantage to certain undertakings."[64] It further commented that in the case where there is a threshold under which a zero-percent rate applies "progressivity is maintained in the taxation of companies with an advertisement turnover bigger than the threshold."[65] "The Commission considered that the progressive tax rates differentiate between undertakings with high advertisement revenues (and thus larger undertakings) and undertakings with low advertisement revenues (and thus smaller undertakings), and grant a selective advantage to the latter based on their size."[66] If any threshold maintains progressivity, and progressivity introduces an unfair advantage to a certain group, then a threshold and the associated "progressive rates for taxes on turnover could only be justified exceptionally….[if] for example…the externalities created by an activity that the tax is supposed to tackle also increase progressively—i.e. more than proportionately—with its turnover."[67] From the standpoint of the Commission, any digital services tax with a threshold would satisfy neutrality in only exceptional circumstances.

Form of business entity

The European Commission proposal notes that "to alleviate possible cases of double taxation where the same revenues are subject to the corporate income tax and DST, it is expected that Member States will allow businesses to deduct the DST paid as a cost from the corporate income tax base in their territory, irrespective of whether both taxes are paid in the same Member State or different ones."[68] However, a deduction of the digital services tax from the corporate income tax base ameliorates, but does not eliminate, double taxation (see the discussion below). Nevertheless, even if one assumes that the deduction perfectly addresses concerns about double taxation for corporate taxpayers, it may create a distortion with respect to businesses that are not taxed as corporations. This disparate treatment may also have implications for inter-nation equity.[69]

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[62] For a detailed review of research on bunching behavior, including applications outside of the United States and outside of the tax context, see Henrik Kleven, "Bunching," *Annual Review of Economics*, vol. 8, October 2016, pp. 435-464.
[63] Wolfgang Schön, "Ten Questions about Why and How to Tax the Digitalized Economy," Max Planck Institute for Tax Law and Public Finance Working Paper 2017-11, December 2017, p. 8, available at SSRN: https://ssrn.com/abstract=3091496.
[64] Commission Decision (EU) 2017/329 of 4 November 2016 on the measure SA.39235 (2015/C) (ex 2015/NN) implemented by Hungary on the taxation of advertisement turnover (notified under document C(2016) 6929), 2016 O.J. L 49, February 25, 2017, paragraph 56, p.42.
[65] *Ibid*, paragraph 80, p. 46.
[66] *Ibid*, paragraph 26, p. 39.
[67] *Ibid*, paragraph 69, p. 44.
[68] European Commission, "Proposal for a Council Directive on the Common System of a Digital Services Tax on Revenues Resulting from the Provision of Certain Digital Services," 148, March 21, 2018, p. 20.
[69] In a study analyzing corporate and individual shares of net income from business activities in five countries, the Joint Committee on Taxation reports that "[t]he corporate share of net income from business operations was 81.9 percent in Australia, 74.5 percent in Canada, and 67.5 percent in the United Kingdom in 2009, while it was 34.1 percent in Germany in 2007 and 43.8 percent in the United States in 2009. In 2010, roughly equal shares of business income were earned by corporations and individuals in Japan." Joint Committee on Taxation, *Foreign Passthrough Entity Use in Five Selected Countries*, October 2013, p. 11, available at https://www.jct.gov/publications.html?func=startdown&id=4806.

Social costs

Neutrality "requires that businesses be taxed uniformly, so that relative prices are not changed, *unless tax differentials can be linked to differences in social costs* [emphasis in original]."[70] In considering the appropriateness of turnover taxes, one author emphasizes that "[t]he well-known criticisms of the gross receipts tax are valid. But more important than the standard criticisms, a [gross receipts tax] is not an ideal business tax because businesses' gross receipts are not well correlated with the social cost of their activities."[71] To the extent that the turnover tax is uncorrelated with social costs, it creates penalties and subsidies that are "capricious and potentially distortive to decisions concerning investment and location. In particular, considered as an implicit user charge to firms that should relate to the firm's usage of in-state public services or the costs it imposes on the state, this flaw of the [gross receipts tax] is significant….[T]he level of gross receipts produced by a firm will have little relationship to the services it consumes from government."[72]

Efficiency

One principle of desirable tax policy is that administrative costs for tax authorities should be kept to a minimum. Efficiency in tax administration is often measured by comparing the annual costs of collecting taxes to the revenues collected ("cost of collection ratio"). While this measure is sensitive to changes in law or in the economic environment that may influence the amount of revenue collected, it can provide some information on the relative efficiency of tax collection and compliance.[73] For 2013, the OECD reports cost of collection ratios for OECD members of between 0.29 and 1.74, with an OECD average of 0.92.[74] It has been argued that tax administration costs are likely lower for a turnover tax than for other taxes,[75] if, for example, "its taxable base is easier to identify and calculate, thereby reducing compliance burdens."[76] However, a report by the State of Washington on collection costs for various taxes does not indicate that the turnover tax offers significantly lower costs of collection compared to other taxes.[77]

Allocation of the tax base in the European Commission proposal is based on user location, under the theory that the user serves as a proxy for the value created in that jurisdiction. However, it has been noted that because users often interact with digital platforms for free, it is challenging to assess the value of those interactions for tax purposes. An allocation based on the value that users contribute could be expensive to implement.[78] In addition to allocation, other aspects of the digital services tax that may cause a high cost of collection include (1) lack of a physical presence for many of the potential taxpayers, making it difficult for authorities to enforce the tax (see the Hungarian experience noted above), and (2) the boundaries between taxable and nontaxable

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[70] Thomas F. Pogue, "The Gross Receipts Tax: A New Approach to Business Taxation?" *National Tax Journal*, vol. 60, no. 4, December 2007, p. 800.
[71] *Ibid*, p. 814.
[72] William A Testa and Richard H. Mattoon, "Is There a Role for Gross Receipts Taxation?" *National Tax Journal,* vol. 60, no. 4, December 2007, p.824.
[73] The OECD notes that international comparisons of cost of collection ratios should be made with care. For a discussion of the issues, see Organization for Economic Cooperation and Development, "Tax Administration 2015: Comparative Information on OECD and Other Advanced and Emerging Economies," OECD Publishing, 2015, pp. 178ff., available at https://www.oecd-ilibrary.org/taxation/tax-administration-2015_tax_admin-2015-en.
[74] Organization for Economic Cooperation and Development, "Government at a Glance 2015," OECD Publishing, 2015, p. 163, available at https://www.oecd-ilibrary.org/docserver/gov_glance-2015-en.pdf.
[75] This is part of the argument for less evasion and potential efficiency gains from the minimum tax schemes in some parts of the developing world. See Michael Carlos Best, et. al., "Production versus Revenue Efficiency with Limited Tax Capacity: Theory and Evidence from Pakistan," *Journal of Political Economy*, vol. 123, no. 6, December 2015, pp. 1311-1355, and related discussion on "Effectiveness and fairness" below.
[76] William A Testa and Richard H. Mattoon, "Is There a Role for Gross Receipts Taxation?" *National Tax Journal*, vol. 60, no. 4, December 2007, pp. 823-824.
[77] The Business and Occupation tax, the State's gross receipts tax, had collection costs of $0.75 per $100 of revenue collected compared to $0.63 for State taxes overall, $1.06 for combined local excise taxes, and $0.70 for all State and local taxes. Washington State Tax Structure Study Committee, Tax Alternatives for Washington State: A Report to the Legislature, Volume 2 Appendices, November 2002, p. 50, available at https://dor.wa.gov/reports/tax-structure-final-report. Washington State has no income tax.
[78] Daniel Bunn, "A Summary of Criticisms of the EU Digital Tax," Tax Foundation Fiscal Fact no. 618, October 2018, p. 4.

services are not clear, which will likely lead to considerable controversy between taxpayer and tax authorities (see discussion in the next section). Countries may not find the additional revenue worth the enforcement cost for the tax authorities or the compliance costs imposed on the part of companies.[79] At least one country has "determined that the costs of administering the [digital services tax proposed by the European Commission] will be higher than the revenue."[80]

It has been proposed that a digital services tax should be only temporary "until a comprehensive solution is in place."[81] However, tax administrators may face challenges from the temporary nature of a turnover tax. It will take time to train existing personnel. It is also unclear whether limited tax capacity resources are optimally allocated to enforce temporary measures. It has been suggested that a temporary measure would be rejected because of the costs of implementation.[82]

Certainty and simplicity

Uncertainty about scope

The OECD has said, "it would be difficult, if not, impossible to ring-fence the digital economy from the rest of the economy. Attempting to isolate the digital economy as a separate sector would inevitably require arbitrary lines to be drawn between what is digital and what is not."[83] Some have pointed out that the turnover tax raises considerable problems in the delineation of the scope of the tax. In particular, they note that the definition of digital services is likely to be difficult and controversial, if the EU definition of "electronic service" for purposes of the value added tax is any guide.[84]

The ability of the government of India to identify additional services subject to the equalization levy creates some uncertainty about its applicability and whether practices currently outside the scope of the provision will remain so. This may be in tension with the desire to have a tax that is flexible to adapt to changes in technology or to attempts by taxpayers to avoid the tax. However, this flexibility about what services are covered comes at the expense of certainty about the scope of the tax.

If a turnover tax only applies to the digital component of a bundle of services, uncertainty may arise with respect to the allocation of payments between the digital component and the remainder of the bundle. For example, in the context of a turnover tax on advertising, taxpayers and tax administrators need to determine the portion, if any, of payment for advertising in a printed publication is subject to tax when the printed publication is also available to readers online.[85] Allocation of bundled services is a potential source of controversy and uncertainty.

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[79] Wissenschaftlicher Beirat beim Bundesministerium der Finanzen [Scientific Advisory Board at the Federal Ministry of Finance (Germany)], "Stellungnahme zu den EU-Vorschlägen für eine Besteuerung der digitalen Wirtschaft [Opinion on the EU Proposals for Taxation of the Digital Economy]," September 2018, p. 4.
[80] Finland Finance Minister Petteri Orpo in Joe Kirwin, "EU Races to Solve Issues Hampering Digital Tax Proposal," *Bureau of National Affairs*, September 10, 2018, available at https://www.bna.com/eu-races-solve-n73014482428/.
[81] European Commission, "Proposal for a Council Directive on the Common System of a Digital Services Tax on Revenues Resulting from the Provision of Certain Digital Services," 148, March 21, 2018, pp. 3, 16.
[82] Wissenschaftlicher Beirat beim Bundesministerium der Finanzen [Scientific Advisory Board at the Federal Ministry of Finance (Germany)], "Stellungnahme zu den EU-Vorschlägen für eine Besteuerung der digitalen Wirtschaft [Opinion on the EU Proposals for Taxation of the Digital Economy]," September 2018, p. 2, fn.4.
[83] Organization for Economic Cooperation and Development, "Addressing the Tax Challenges of the Digital Economy, Action 1: 2015 Final Report," OECD/G20 Base Erosion and Profit Shifting Project, 2015, p. 54.
[84] Johannes Becker and Joachim Englisch, "Ein größeres Stück vom Kuchen [A Bigger Piece of the Pie]: Besteuerung der Gewinne von Google und Co.," *Wirtschaftsdienst Zeitschrift für Wirtschaftspolitik*, vol. 97, no. 11, November 2017, p. 807.
[85] Organization for Economic Cooperation and Development, "Tax Challenges Arising from Digitalisation – Interim Report 2018," OECD/G20 Base Erosion and Profit Shifting Project, 2018, p. 185.

Duration

The European Commission has proposed a turnover tax be temporary, "an interim solution that will tackle this issue in a targeted way until a comprehensive solution is in place."[86] At the same time, the Commission notes that it "may take time to adopt and implement" such a solution. "By their nature, temporary provisions cause uncertainty for taxpayers."[87] While the provision is presumed to be temporary, its exact duration is unknown. One commentator has noted that it may prove difficult for countries to repeal turnover taxes after having expended the political energy to enact them. "Quick fixes can introduce even more complexity, incoherence and distortions into the existing system. We are particularly concerned about the turnover taxes proposed due to the [sic] their well-known distortive effect. Once such taxes are introduced – even if acknowledged to be economically harmful – it will be politically difficult to repeal them."[88]

Effectiveness and fairness

One justification for the turnover tax on digital services is to "capture the global reach of digital services where physical presence is not a requirement anymore in order to be able to supply digital services." However, some have suggested that gross receipts are "an inappropriate guide for assessing the economic presence of a firm," noting that a firm's gross receipts "have little relationship to the services it consumes from government" or "the costs it imposes."[89] Thus, the tax is unlikely to produce the "right amount of tax at the right time" as laid out in the Ottawa Taxation Framework Conditions.

Double taxation

A company that pays a turnover tax in the country in which it is providing services may also pay income tax in the country in which it is a resident. Unless a turnover tax is levied conditional on lack of taxation or under taxation in the country of residence there would be double taxation. One commentator has noted that the existence of double taxation "cannot be ruled out."[90] One option to address the double taxation would be for the resident country to provide a foreign tax credit against the income tax liability in the resident country for the turnover tax paid in the foreign country in which the services are provided. However, under such a regime, there could be an incentive for the country levying the turnover tax to increase the rate.[91] Another option is for the country levying both an income tax and the turnover tax to allow a deduction for any turnover tax paid against the income tax base in that country. This would mitigate the problem, but only for a subset of companies.[92] Any such double taxation is a violation of the OECD principle of effectiveness and fairness.

Avoidance or evasion justification for turnover tax

A turnover tax may have some advantages over a tax on profits if turnover is easier to verify. Avoidance or evasion of a tax on profits may manifest itself by more firms than one might otherwise expect reporting profit levels just below points where there is a large increase in the marginal tax rate on profits. This tendency of taxpayers to distort actual or reported behavior to locate at kinks in the rate structure is known as bunching. The distortions associated with a turnover tax may be small relative to the distortions associated with

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[86] European Commission, "Proposal for a Council Directive on the Common System of a Digital Services Tax on Revenues Resulting from the Provision of Certain Digital Services," 148, March 21, 2018, p. 16.
[87] Joint Committee on Taxation, *Study of the Overall State of The Federal Tax System and Recommendations For Simplification, Pursuant To Section 8022(3)(B) of the Internal Revenue Code Of 1986: Volume I* (JCS-3-01), April 2001, p. 63, available at https://www.jct.gov/publications.html?func=startdown&id=2088.
[88] Michael P. Devereaux and John Vella, "Response to the EU Commission's Consultation: Fair Taxation and the Digital Economy," Oxford University Centre for Business Taxation, January 3, 2018, p. 3, available at https://ec.europa.eu/info/consultations/fair-taxation-digital-economy_en.
[89] William A Testa and Richard H. Mattoon, "Is There a Role for Gross Receipts Taxation?" *National Tax Journal,* vol. 60, no. 4, December 2007, p.824.
[90] Ashok K. Lahiri, Gautam Ray, and D. P. Sengupta, "Equalisation Levy," Brookings Institution India Working Paper -02, January 2017, p. 16.
[91] Wolfram F. Richter, "Taxing Direct Sales of Digital Services: A Plea for Regulated and Internationally Coordinated Profit Splitting," Munich Society for the Promotion of Economic Research, CESifo Working Paper 7017, April 2018, p. 17-18.
[92] Wissenschaftlicher Beirat beim Bundesministerium der Finanzen [Scientific Advisory Board at the Federal Ministry of Finance (Germany)], "Stellungnahme zu den EU-Vorschlägen für eine Besteuerung der digitalen Wirtschaft [Opinion on the EU Proposals for Taxation of the Digital Economy]," September 2018, p. 3.

manipulating reported profits.[93] One study has found bunching consistent with this theory in the context of a minimum tax regime involving turnover in Pakistan, and that a switch to turnover taxes could reduce "evasion by up to 60 to 70 percent of corporate income" and "increases revenue by 74 percent without reducing aggregate profits."[94] The authors note that there are negative effects on welfare from the turnover tax, including from cascading turnover taxes on intermediate inputs, that offset these gains. Whether the limited tax administration capacity observed in Pakistan is comparable to the situation in countries considering digital services turnover taxes is an empirical question. Nevertheless, the potential administrative advantage of a turnover tax over an income tax is an argument for replacement of the income tax with a broad-based turnover tax. It is not a compelling argument for adding a narrow turnover tax on top of the income tax.

Flexibility

It is impossible to say whether any digital turnover tax can continue to provide revenue in the face of technological and commercial developments until those developments occur. This might be less of a concern if the digital services tax is relatively short in duration. One commentator has noted that the largest Internet firms represent "very different business models and … challenges to the international tax regime."[95] To the extent that advertising continues to be a significant means for digital companies to monetize the value of their services, even as the nature of those services change, taxes based on advertising will still be relevant. However, such a tax would not be flexible enough to cover the existing range of diversity of revenue models,[96] let alone those models that may emerge with continued technological or commercial change.

One approach to dealing with the possibility of technological and commercial change is that taken by India. The government there may identify additional services that will be subject to the tax. As previously noted, this ability provides some flexibility, but this flexibility comes at the expense of certainty about the scope of the tax.

The European Commission proposal is in the context of a directive that requires unanimity. The unanimity requirement applies not only for the introduction of new tax measures but also for their modification or abolition. This requirement could limit the flexibility of the European Commission proposal to respond to changes in the technological or commercial environment.[97]

Vertical equity

If a turnover tax is intended to be a form of income tax, the effective tax rate will vary widely except in the unlikely event that profit margins are equal across all firms and that such firms do not incur losses.[98] One study found that among 140 publicly traded corporations that operate across borders, 15 had more than three years of losses in the five-year period under study (2012-2016), including 12 of the 91 companies classified as digital.[99]

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[93] Justin M. Ross, "Gross Receipts Taxes: Theory and Recent Evidence," Tax Foundation Fiscal Fact No. 529, October 2016, p. 9.
[94] Michael Carlos Best, et. al., "Production versus Revenue Efficiency with Limited Tax Capacity: Theory and Evidence from Pakistan," *Journal of Political Economy*, vol. 123, no. 6, December 2015, pp. 1311-1355.
[95] Wolfgang Schön, "Ten Questions about Why and How to Tax the Digitalized Economy," Max Planck Institute for Tax Law and Public Finance Working Paper 2017-11, December 2017, pp. 8-10, available at SSRN: https://ssrn.com/abstract=3091496.
[96] For a description of various revenue models, see Organization for Economic Cooperation and Development, "Addressing the Tax Challenges of the Digital Economy, Action 1: 2015 Final Report," OECD/G20 Base Erosion and Profit Shifting Project, 2015, p. 64.
[97] Wissenschaftlicher Beirat beim Bundesministerium der Finanzen [Scientific Advisory Board at the Federal Ministry of Finance (Germany)], "Stellungnahme zu den EU-Vorschlägen für eine Besteuerung der digitalen Wirtschaft [Opinion on the EU Proposals for Taxation of the Digital Economy]," September 2018, p. 5.
[98] Ashok K. Lahiri, Gautam Ray, and D. P. Sengupta, "Equalisation Levy," Brookings Institution India Working Paper -02, January 2017, p. 28.
[99] Matthias Bauer, "Digital Companies and Their Fair Share of Taxes: Myths and Misconceptions," European Center for International Political Economy, ECIPE Occasional Paper No. 03/2018, 2018.

To the extent that younger firms are more likely to incur losses, a turnover tax creates barriers to market entry that protect the market shares of incumbents.[100]

A turnover tax applies the same amount of tax to businesses with the same revenue notwithstanding that such companies may have very different incomes or other traditional measures of ability to pay. In describing the treatment of such companies under the digital services tax in India, one study notes that "[s]ubjecting their sales to the same rate of equalisation levy violates the principle of equity that the levy implicitly tries to achieve....[M]arket structure in digital services is likely to result in such cases particularly with very different mark-up rates for the dominant players and new entrants."[101] This design is likely to favor companies that are more profitable, since "two firms with the same receipts but different net incomes would face the same gross receipts tax bill, effectively taxing low-margin firms more heavily than high-margin firm[s,]"[102] a result that is likely to conflict with most proponents' views of vertical equity.

Inter-nation equity

A theoretical paper has suggested that a tax on digital services may be justified on inter-nation equity grounds if neither the export of services nor the provision of a market in the importing country "entails positive costs at the margin."[103] Under those assumptions, the paper shows that some countries that import digital services have an incentive to tax them if they have markets that are too small to affect the quality of digital services. However, absent other significant changes to the international taxing regime, "there will be a problem of double taxation....If many small countries choose to tax the import of digital services and if the resulting double taxation is not mitigated, digital R&D is harmed and global production efficiency suffers."[104] The author is careful to "stress[] the theoretical nature of the analysis. The results are obtained by relying on various simplifying assumptions. Policy makers have to be aware of this and they do well to draw conclusions with due caution."[105]

If one accepts the European Commission view that a turnover tax is justified as a proxy for value creation by users, there may still be issues with the distribution of the revenue among nations based on the Commission's proposal. One commentator has noted that an "issue with the EU's approach, if adopted more widely, is that different users might be worth different amounts in different countries."[106] Variation of this kind that is not properly taken into account by the proposed digital services tax will result in an inequitable distribution or "fair sharing of the tax base from electronic commerce" among Member States.

The high thresholds in the European Commission proposal before the turnover tax applies are likely to have disparate effects across countries. It has been observed that it is foreseeable that it would apply for the most part to U. S. companies, potentially in violation of European commitments to guarantee cross-border advertising services nondiscriminatory market access.[107]

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[100] Wissenschaftlicher Beirat beim Bundesministerium der Finanzen [Scientific Advisory Board at the Federal Ministry of Finance (Germany)], "Stellungnahme zu den EU-Vorschlägen für eine Besteuerung der digitalen Wirtschaft [Opinion on the EU Proposals for Taxation of the Digital Economy]," September 2018, p. 4.
[101] Ashok K. Lahiri, Gautam Ray, and D. P. Sengupta, "Equalisation Levy," Brookings Institution India Working Paper -02, January 2017, p. 16. Another study raises the concern that since new firms are often the source of market innovation, a tax that disfavors new entrants could have broader consequences than the first order concerns about equity. Matthias Bauer, "Five Questions about the Digital Services Tax to Pierre Moscovici," European Center for International Political Economy, ECIPE Occasional Paper No. 04/2018, 2018.
[102] Justin M. Ross, "Gross Receipts Taxes: Theory and Recent Evidence," Tax Foundation Fiscal Fact No. 529, October 2016, p. 9.
[103] Wolfram F. Richter, "Taxing Direct Sales of Digital Services: A Plea for Regulated and Internationally Coordinated Profit Splitting," Munich Society for the Promotion of Economic Research, CESifo Working Paper 7017, April 2018, p. 3.
[104] *Ibid*, p. 3.
[105] *Ibid*, p. 20.
[106] Inland Revenue Department and the Treasury, New Zealand, "Update on Taxing the Digital Economy," Tax Working Group Background Paper, July 2018, p. 12.
[107] Johannes Becker and Joachim Englisch, "Ein größeres Stück vom Kuchen [A Bigger Piece of the Pie]: Besteuerung der Gewinne von Google und Co.," *Wirtschaftsdienst Zeitschrift für Wirtschaftspolitik*, vol. 97, no. 11, November 2017, pp. 807-808.

V. Conclusion

In reporting on relevant tax policy developments related to digitalization, the OECD finds that the initiatives with respect to turnover taxes are "likely to generate some economic distortions, double taxation, increased uncertainty and complexity, and associated compliance costs for businesses operating cross-border and, in some cases, may potentially conflict with some existing bilateral tax treaties."[108] As discussed in this report, the review of the literature on the subject of turnover taxes, both in general and those applicable to digital services in particular, suggests that without further discussion and consensus among policymakers, the proposals for digital services taxes are likely to confirm the OECD's findings.

If it is the case, as the review of the empirical literature suggests, that the incidence of turnover taxes is likely to be different from the incidence of either the corporate income taxes for which they are supposed to be proxies or the value added taxes for which they may be substitutes, then similarly situated companies will not be treated similarly. Without careful attention to the scope of any digital services tax, companies on different sides of the electronic versus conventional commerce divide are likely to be treated differently under the turnover taxes currently on the table, which may result in distortion of production decisions of firms. Because of that same risk of distortion to production decisions, the optimal tax literature views taxes on business inputs, like a turnover tax on advertising, skeptically. While the theoretical literature suggests that tax administration and compliance costs for a turnover tax may be lower than other taxes, the empirical literature has not necessarily found this to be the case, and features of the proposed digital services taxes raise the possibility that the costs of administration and compliance may outweigh the benefits of any revenue collected. Uncertainty about the scope and duration of an interim turnover tax may create controversy. While studies have found that in some contexts of limited tax capacity a turnover tax may reduce tax avoidance or evasion, it is not clear that those conditions apply in the countries currently pursuing a digital services turnover tax. Several writers have raised concerns about the risk of double taxation, calling the effectiveness and fairness of the turnover tax into question. Turnover taxes may not need to be very flexible, if they are expected to be of very limited duration; nevertheless, governments may not be able to respond adequately to rapid changes in technology or the commercial environment. Smaller, younger, and less profitable firms may all bear a greater burden from turnover taxes than larger, established, and highly profitable ones, with potentially adverse effects on fairness and competition. Questions also remain about whether the digital services taxes would result in an equitable distribution of revenue among countries.

Policy makers should carefully consider whether the benefits outweigh the costs of implementing interim taxes on digital services as opposed to waiting for consensus to be reached on a multilateral framework for taxing the digitalizing economy.

[108] Organization for Economic Cooperation and Development, "Tax Challenges Arising from Digitalisation – Interim Report 2018," OECD/G20 Base Erosion and Profit Shifting Project, 2018, available at https://www.oecd-ilibrary.org/taxation/tax-challenges-arising-from-digitalisation-interim-report_9789264293083-en, p. 159.

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For questions, please contact:

William H. Morris
Deputy Leader, Global Tax Policy & Administration Network, PwC United States

william.h.morris@pwc.com

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