



Defining the goal of a data tax

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Abstract

Academics and policymakers alike have identified data taxes as a possible response to the emergence of the data economy. This essay aims to distill the two possible goals of a data tax. A data tax could serve as a Pigouvian tax, reducing data collection and the accompanying harms of datafication. Alternately, a data tax could serve as a new tax base, allowing for more effective revenue-raising and redistribution of the economic value being created in the data economy and preventing the concentration of economic power in the hands of digital companies. Which of these two is the primary goal of a data tax not only informs important design choices but also illuminates critical issues surrounding the political economic response to datafication. Therefore, advocates of data taxes must first consider the underlying goal of a data tax before calling for specific reforms.

Keywords: Tax; Data Tax; Digital Constitutionalism; Law; Data economy

1. Introduction

Recent years have seen an explosion of the phenomenon of datafication – converting information about people into a commodity or capital for companies.¹ Datafication and the emergence of the data economy have had overwhelming political-economic as well as legal significance.² Both the societal harms caused by datafication as well as the struggle of various legal regimes to adequately respond have been subjects of lively and ongoing academic and policy debate.³ As this symposium highlights, thus far, these debates have largely failed to place legal regimes' struggles with datafication within the framework of digital constitutionalism.⁴

¹S Viljoen, 'Democratic Data: A Relational Theory for Data Governance' 131 (2021) Yale Law Journal 573, 577; J Cohen, *Between Truth and Power: The Legal Constructions of Informational Capitalism* (Oxford University Press 2019) 63; J Sadowski, 'When Data is Capital: Datafication, Accumulation, and Extraction' 6 (2019) Big Data & Society 1, 2–5.

²D Schiller, *How to Think About Information* (University of Illinois Press 2007); K Pistor, 'Rule by Data: The End of Markets?' 83 (2020) Law and Contemporary Problems 101; A Kapczynski, 'The Law of Informational Capitalism' 129 (2020) Yale Law Journal 1460; K Brennan-Marquez and D Susser, 'Privacy, Autonomy, and the Dissolution of Markets' (2022) Data and Democracy Series: Knight First Amendment Institute <<https://knightcolumbia.org/content/privacy-autonomy-and-the-dissolution-of-markets>> accessed 8 December 2023.

³Text to n 17 to n 24.

⁴A Golia, 'Taxing Data as an Instrument of Economic Digital Constitutionalism: An Introduction' (2024) European Law Open 1–2.

Within the realm of tax law, data taxes have been proposed as a possible response to the new data economy.⁵ While the contours and approaches of data taxes may vary, this Article defines a ‘data tax’ to be a tax imposed by a jurisdiction on the data collector at the time of collection based on the volume of data the data collector accumulates in that jurisdiction. While data taxes implicate a host of questions regarding both theory and design,⁶ in this contribution I address a first order question: what problem is a data tax trying to solve?

In this essay I claim that there are two distinct problems caused by the emergence of the data economy that a data tax might be poised to solve. Addressing either of these problems falls within digital constitutionalism’s aim of establishing a framework to safeguard rights and prevent the creation of inequitable power dynamics in the data economy.⁷ First, a data tax might serve as a Pigouvian tax designed to respond to the exploitation and social harms of surveillance and the datafication of human life.⁸ Taxing data collection discourages these exploitative and harmful behaviors, reducing them to a socially optimal level by forcing companies to internalise their costs. Alternatively, a data tax might serve as a response to the failings of income as a tax base within the data economy. Features of social data as a value form and the business practices it spurs make income an insufficient base in this new economic environment and frustrates tax law’s revenue-raising and redistributive functions. When tax law is not able to fulfill these revenue-raising and redistributive functions, it can result in a concentration of economic resources and, as a result, economic and political power, in a handful of digital companies. Using data as an alternative (or complementary) tax base corrects for these insufficiencies.

Each of these problems is significant, and a data tax is a promising policy response for both. But, as it is argued in this Article, it is difficult to design a data tax to solve both problems simultaneously. The design of a Pigouvian tax and a base-building tax will differ – with the former’s design choices focusing on optimal behavior shifting and the latter’s design choices focusing on optimal revenue-raising and redistribution.⁹ Furthermore, whether a data tax is designed as a Pigouvian tax or a base-building tax implicates the question of the political and societal response to the data economy. A Pigouvian data tax implies a political view that datafication is harmful and represents a government intervention in the data economy to regulate and reduce those harms. In contrast, a base-building tax is not a government intervention in the data economy – it is simply adapting the existing tax system to best capture new modes of value creation and ensure that data value creation is taxed equivalently to other forms of economic value creation. This implies a political view that the government does not need to regulate and reduce data harms (or, at least, should not do so through the tax code). Therefore, before scholars and

⁵E Adams and A Gounardes, ‘A Tax on Data Could Fix New York’s Budget’ (*Wall Street Journal*, 1 June 2020) (advocating for data tax reforms); SB 4959, 2021 Leg., Reg. Sess. (NY 2021) (introduced 19 February 2021); AB 6199, 2021 Gen. Assemb., Reg. Sess. (NY 2021) (introduced 10 March 2021) (bills introducing the New York Data Mining Tax); R Avi-Yonah, C Kim and K Sam, ‘A New Framework for Digital Taxation’ 63 (2022) *Harvard International Law Journal* 279, 337–40 (proposing a data excise tax); O Marian, ‘Taxing Data’ 57 (2021) *Brigham Young University Law Review* 511, 567–74 (exploring possible designs of a data tax).

⁶A Golia, ‘Data Capital Tax within the Puzzle of (Economic) Digital Constitutionalism: Questions for a Comprehensive Research and Policy Agenda’ (2023) <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4456628> accessed 8 December 2023. Many of these questions are beyond the scope of this essay. In particular, the administrative issues surrounding data tax design, including how to accurately pinpoint the jurisdiction of data subjects, are not addressed.

⁷While digital constitutionalism is a broad and complex concept, this essay focuses largely on how digital constitutionalism can serve to protect people’s rights and democratic values in the context of the rising and concentrated economic and political power held by digital companies. See G De Gregorio, *Digital Constitutionalism in Europe: Reframing Rights and Powers in the Algorithmic Society* (Cambridge University Press 2022).

⁸Text to n 9 to 15.

⁹Although, as will be discussed in further detail below, a Pigouvian data tax would likely further revenue-raising and redistributive goals to a certain extent and a base-building data tax would likely have some impact on digital companies’ data collection behaviors.

policymakers begin to pursue data taxes in earnest, they must achieve clarity and agreement on exactly what problem the tax is meant to solve.

My goal is not to advocate for one approach over another. Instead, this Article aims to furnish a critical account of the two distinct problems that data taxes may be poised to solve and the role of a data tax in solving each. This insight will provide scholars and policymakers with the necessary understanding to make informed choices around the role of data taxes in responding to the challenges brought by the data economy.

2. Data taxes as a Pigouvian tax

Pigouvian taxes are an oft-proposed solution to a variety of harms, at least amongst academics.¹⁰ Pigouvian taxes are named after Arthur Pigou, who over a century ago identified the phenomenon of differences between the social costs of industrial activities and the private costs to industrial actors.¹¹ Pigouvian taxes aim to correct the market failure created by this difference in social and private costs by forcing private actors to internalise these social costs. The idea is that, when an actor is allowed to undertake harmful activities without bearing any of the costs of harmful activities themselves, they will undertake that harmful activity at too high of a rate. As a result, social welfare will not be maximised.¹² A classic and straightforward example is pollution. Companies are expected to maximise their profits by setting their level of production such that the company's marginal costs are equal to the marginal benefits received. Because pollution is a cost of production that is not borne by the company, but instead by society at large, the company will not take that cost into account when setting their level of production and will thus overproduce relative to the optimal level of production.¹³

Pigouvian taxes come in to correct this market failure by forcing the company to take on the social cost of the activity, thus reducing the level of production to its socially optimal level.¹⁴ The primary goal of Pigouvian taxes is, therefore, to change the taxpayer's production behaviors, rather than raise revenues or redistribute income and wealth. As Victor Fleischer explains, these '[c]orrective taxes are taxes that are designed primarily to change behavior rather than raise revenues'.¹⁵ While pollution is a classic example of a potential Pigouvian tax, Pigouvian taxes have been proposed or employed to solve a variety of social harms, ranging from the environmental to public health harms.¹⁶

The data economy is, in many ways, an ideal candidate for such a Pigouvian tax.¹⁷ The social harms of datafication have been well-documented by scholars.¹⁸ Some of these harms stem from

¹⁰See J Masur and E Posner, 'Toward a Pigouvian State' 164 (2015) *University of Pennsylvania Law Review* 93 (advocating for a move towards Pigouvian taxation within the regulatory state); G Mankiw, 'Smart Taxes: An Open Invitation to Join the Pigou Club' 35 (2009) *Eastern Economic Journal* 14 (same). But see V Fleischer, 'Curb Your Enthusiasm for Pigouvian Taxes' 68 (2015) *Vanderbilt Law Review* 1673 (arguing that Pigouvian taxation has a more limited application than many academics acknowledge).

¹¹A Pigou, *The Economics of Welfare* (first published 1920, Palgrave Macmillan 2013).

¹²Masur and Posner (n 10) 100–1 (explaining the type of market failures Pigouvian taxes are meant to address).

¹³Fleischer (n 10) 1683–4 (describing the pollution example of market failures that can be addressed by Pigouvian taxation).

¹⁴Masur and Posner (n 10) 101.

¹⁵Fleischer (n 10) 1683–4.

¹⁶D Weisbach and G Metcalf, 'The Design of a Carbon Tax' 33 (2009) *Harvard Environmental Law Review* 499 (discussing designs for a Pigouvian tax on carbon emissions); S Roache and L Gostin, 'The Untapped Power of Soda Taxes: Incentivizing Consumers, Generating Revenue, and Altering Corporate Behavior' 6 (2017) *International Journal Health Management Policy* 489 (discussing the impact of soda taxes in various countries).

¹⁷In presenting a Pigouvian tax as a possible data tax design, this essay presupposes that regulating private behavior is a legitimate role for the tax system. See generally R Avi-Yonah, 'The Three Goals of Taxation' 60 (2006) *Tax Law Review* 1 (identifying revenue-raising, redistribution, and regulation as the three goals of taxation).

¹⁸See DK Citron and D Solove, 'Privacy Harms' 102 (2022) *Boston University Law Review* 793, 830–61 (developing a typology of privacy harms).

violations to individual privacy and dignity, with the mere collection of data causing harm, regardless of use.¹⁹ Datafication can also limit autonomy and individual capacity for self-determination and allow for manipulation of human behavior.²⁰ The exploitative harms of datafication have also been highlighted, as digital companies amass wealth and power by harvesting data about human behaviors and activities without compensating those individuals. These practices within the data economy have been described by scholars as technofeudalism,²¹ a new form of colonialism,²² and as comparable to slavery.²³ Harms exist not only on the individual but also on the societal level,²⁴ and the data economy has been cited as contributing to growing inequality.²⁵ As Salomé Viljoen explains: ‘What makes datafication wrong is not (only) that it erodes the capacity for subject self-formation, but instead that it materialises unjust social relations: data relations that enact or amplify social inequality.’²⁶ Not only are the harms of the data economy well-documented, but many argue that our existing legal regimes are failing to adequately address these harms.²⁷

In the context of these harms and the struggle of legal regimes to adequately address them, a Pigouvian tax on data collection is an intriguing policy tool and for that matter a policy tool that links to the broader rights-protection and power-balancing aims of digital constitutionalism. Importantly, the choice to pursue a Pigouvian data tax implies a political view that datafication is harmful, and it is not beneficial for society to have the data economy continue unchecked. It implies a view that the government needs to regulate the new data economy to mitigate the societal harms of datafication.

The harms of the data economy are social costs that are not being borne by the private actors involved in an economy activity. The digital companies that are collecting and economically benefitting from users’ data are analogous to the industrial company that pollutes the environment while producing their products. Because digital companies are not required to bear this social cost, they will produce (or, in this case, collect data) at a rate that exceeds the socially optimal level. A Pigouvian tax would be a means to correct this market failure and force companies to bear the social costs of data production. As a result, digital companies should reduce their level of data collection to a socially optimal level where the costs of datafication, including societal harms, match the benefits. Reducing the level of data collection should, therefore, reduce the harms associated with the data economy.²⁸

¹⁹S Warren and L Brandeis, ‘The Right to Privacy’ 4 (1890) Harvard Law Review 193, 198 (‘The common law secures to each individual the right of determining, ordinarily, to what extent his thoughts, sentiments, and emotions shall be communicated to others.’); Citron and Solove (n 19) 841–5 (identifying the emotional harms of privacy violations).

²⁰J Cohen, ‘What Privacy Is For’ 126 (2013) Harvard Law Review 1904, 1912–18 (discussing the impact of surveillance on self-determination); D Susser, B Roessler and H Nissenbaum, ‘Online Manipulation: Hidden Influences in a Digital World’ 4 (2019) Georgetown Law & Technology Review 1, 34–41 (analyzing online manipulation practices within the data economy and its impact on individual autonomy); R Calo, ‘Digital Market Manipulation’ 82 (2014) George Washington Law Review 995, 1003–18 (outlining the economic and privacy harms associated with digital market manipulation).

²¹C Durand, *Technofeudalisme: Critique de l’économie numérique* (La Découverte 2020); E Posner and G Weyl, *Radical Markets: Uprooting Capitalism and Democracy for a Just Society* (Princeton University Press 2018) 209.

²²N Couldry and U Mejias, *The Costs of Connection: How Data Is Colonizing Human Life and Appropriating It for Capitalism* (Stanford University Press 2019) 3.

²³M Chisnall, ‘Digital Slavery, Time for Abolition?’ 41 (2020) Policy Studies 488.

²⁴Viljoen (n 1) 603–17 (tracing the relational nature of the data economy and its resulting population level harms).

²⁵F Pasquale, ‘Two Narratives of Platform Capitalism’ 35 (2016) Yale Law & Policy Review 309, 311 (presenting the theory that the data economy’s platform business models ‘entrench existing inequalities’).

²⁶Viljoen (n 1) 573.

²⁷A Waldman, ‘Privacy Law’s False Promise’ 97 (2020) Washington University Law Review 773; Kapczynski (n 2); A Parsons and S Viljoen, ‘Valuing Social Data’ 124 (2024) Columbia Law Review (forthcoming).

²⁸It is worth noting that a Pigouvian approach to reducing the harms associated with the data economy is still operating squarely within the market-focused framework that other scholars have noted systematically favors those with greater economic resources, contributing to inequities of economic and political power. See J Britton-Purdy et al, ‘Building a Law-and-Political Economy Framework: Beyond the Twentieth Century Synthesis’ 129 (2020) Yale Law Journal 1784, 1790.

A Pigouvian data tax would also raise government revenue.²⁹ It would, therefore, further revenue-raising goals to a certain extent. It would also serve a redistributive role by reallocating economic resources from the data-collecting digital companies to the public, thereby combatting economic and political power concentration. But revenue-raising and redistribution cannot serve as a key goal of a Pigouvian data tax. If the goal of the Pigouvian data tax is to reduce levels of data collection (and, in turn, the harms of datafication), the tax should be set at a rate that would cause digital companies to reduce the volume of data they collect, until data collection falls to a socially optimal level. Therefore, if designed effectively, imposing the data tax will erode the tax base. As a revenue-raising mechanism, Pigouvian taxes are, by design, self-defeating.³⁰ So while a Pigouvian data tax could be an effective regulatory mechanism to reduce data collection harms, it can only serve an incidental revenue-raising and redistributive function. But, as the following section discusses, revenue-raising and redistribution are central concerns for many proponents of data taxes, and these concerns implicate a different motivation for data taxes from reducing the harms of datafication.

3. Data as a new tax base

Another possible motivation for data tax reforms stems from the insight that income no longer serves as an effective tax base in the context of the data economy. The failure to recognise the economic value of data, separate and apart from any monetary gains derived from it, has both limited governments' revenue-raising capacities and encouraged the concentration of economic resources and power in the hands of data-collecting digital companies. Therefore, if tax is to serve its purpose of raising government revenues and redistributing economic resources in the data economy, a new (or at least complementary) tax base needs to be found. Data has been identified as that base.

The sentiment that Big Tech companies are not paying their 'fair share of taxes' is pervasive in political discourse surrounding international tax reform.³¹ And various tax scholars have highlighted that corporate income no longer functions as an effective tax base within the information-driven data economy.³² Why income no longer serves as an effective tax base within the data economy relates to both the nature of data as a value form and the unique business

²⁹A Pigouvian tax could raise revenue both directly and indirectly. It could indirectly raise revenue by encouraging digital companies to change their business models to bring in money to pay the data taxes. This increased monetisation by digital companies would increase their income, thus raising government revenue through increased income tax receipts. Marian (n 5) 564–5.

³⁰Victor Fleischer notes that there are some examples, such as sin taxes on certain foods, of ineffective Pigouvian taxes (ie Pigouvian-style taxes that do not change taxpayer's harmful behaviors) that nevertheless may have value because of their revenue-raising function. Fleischer (n 10) 1706–8. For purposes of this analysis, this Essay assumes that an effective Pigouvian tax on data could be achieved.

³¹'The G-7 Nations Agree to Make Big Tech Companies Pay Their Fair Share of Taxes' (*National Public Radio*, 5 June 2021) <<https://www.npr.org/2021/06/05/1003563505/the-g-7-nations-have-agreed-to-make-big-tech-companies-pay-their-fair-share-of-t>> accessed 19 November 2024; R Lough, 'Explainer: Macron's quest for an international tax on digital services' (*Reuters*, 22 August 2019) <<https://www.reuters.com/article/us-g7-summit-digital-tax-explainer/explainer-macrons-quest-for-an-international-tax-on-digital-services-idUSKCN1VC0VH>> accessed 19 November 2024; 'Outcome Statement on the Two-Pillar Solution to Address the Tax Challenges Arising from Digitalisation of the Economy' OECD/G20 Base Erosion & Profit Shifting Project, 11 July 2023 <<https://www.oecd.org/tax/beps/outcome-statement-on-the-two-pillar-solution-to-address-the-tax-challenges-arising-from-the-digitalisation-of-the-economy-july-2023.pdf>> accessed 19 November 2024.

³²Marian (n 5) 519 ('For a large part of the economy, [income as a tax base] does not make sense anymore. In the age of data capitalism, we should tax data.'); Y Brauner, *Taxation of Information and the Data Revolution* (Working Paper, 1 March 2023) 71 <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4400680> accessed 19 November 2024 ('The difficulty in identifying the subject of taxation should be sufficient to cast doubt on the survival chances of the modern income tax, but the essential impossibility of classification, valuation and sourcing of income generated by transfers of information must bring one to that inevitable conclusion.').

models that it triggers.³³ The defining feature of the data economy is the collection and exploitation of data about people (or social data) in order to predict and manipulate human behavior.³⁴ In the data economy, social data serves as a new factor of production creating prediction value – value that stems from the capacity to predict and manipulate human behavior.³⁵ Prediction value is a subset of use value and that differs from (and often does not neatly translate into) exchange value.³⁶ Exchange value conceptualises of the value of a thing as its monetary, fair market price.³⁷

The central importance of social data and the prediction value it creates is problematic for tax law's reliance on income as a base in a couple of ways. First, tax law measures income in terms of monetary exchange value.³⁸ Because prediction value is distinct from monetary exchange value, it does not get captured in the income tax base. As a result, a valuable economic resource that is increasingly important to the economy – prediction value – slips through the cracks of the income tax.³⁹ Second, even when companies leverage prediction value to create monetary exchange value, the specific business models and practices that dominate the data economy are in many cases distinct from those that have dominated industrial capitalism. Therefore, when existing income tax laws are applied in this new context, they often fail to achieve the law's revenue-raising and redistributive goals.⁴⁰

For example, many of the business practices associated with the data economy focus on longer-term company growth versus earning company income in the short or medium term.⁴¹ This focus on growth over income is a result of the nature of social data as a factor of production. In order to amass prediction value, companies must have access to steady streams of social data; therefore, they will focus on growing large user and customer networks at the expense of current income.⁴² To grow these user bases, digital companies may offer free or low-cost services, running losses while amassing user bases.⁴³ Or they may focus on building up ecosystems of goods and services, thereby locking in users and guaranteeing access to future streams of social data from them.⁴⁴ Digital companies who use these business strategies may leverage the social data and its resulting prediction value to earn monetary income at some point in the future. They might do this through

³³Data value creation is not the sole reason that the income tax base is failing in the digital economy. For example, the outdated physical presence requirements of international tax law, race-to-the-bottom tax rate games, the mobility of intangible assets, and opportunities for aggressive tax planning by large multinational companies have all served to erode the corporate income tax base. L Faulhaber, 'Taxing Tech: The Future of Digital Taxation' 39 (2019) Virginia Tax Review 145; E Kleinbard, 'Stateless Income' 11 (2011) Florida Tax Review 699.

³⁴Parsons and Viljoen (n 24) 2 ('The widespread practice of cultivating social data to be stored, mined, and exploited for its value in apprehending, predicting, and influencing human behavior demarcates informational capitalism from its predecessors.'). For an explanation of the term 'social data' and the difference between 'social data' and 'personal data,' see *Ibid.*, 2–3.

³⁵Social data can be viewed as a material store of prediction value.

³⁶*Ibid.*, 12–13.

³⁷*Ibid.*, 3.

³⁸A Christians and L van Apeldoorn, 'Taxing Income Where Value Is Created' 22 (2018) Florida Tax Review 1, 10 ('it is on the basis of the idea of market value or fair market value ... that income tax systems assign income to parties in all kinds of transactions involving exchanges of tangible and intangible goods and services').

³⁹Marian (n 5) 518–19 (explaining how tax law's measurement of income in monetary terms diverges from the economic realities of the data economy); A Thimmesch, 'Transacting in Data: Tax, Privacy, and the New Economy' 94 (2016) Denver Law Review 145, 174 (describing ways in which the data economy escapes income taxation).

⁴⁰A Parsons, 'The Shifting Economic Allegiance of Capital Gains' 26 (2024) Florida Tax Review 28–43 (forthcoming) (explaining how the unique nature of value creation in the data economy produces tax outcomes incongruent with the law's normative goals); Parsons and Viljoen (n 24) 49–55 (describing the failures of tax law in the face of the data economy's business models).

⁴¹Parsons and Viljoen (n 24) 35.

⁴²*Ibid.*, 36.

⁴³L Khan, 'Amazon's Antitrust Paradox' 126 (2017) Yale Law Journal 710, 750–1 (discussing Amazon's strategy of loss-taking through its Amazon Prime program); C Anderson, *Free: The Future of a Radical Price* (Hyperion 2009) 26–7 (describing the freemium business model and its prominence in the digital economy).

⁴⁴See K Birch and DT Cochrane, 'Big Tech: Four Emerging Forms of Digital Rentiership' 31 (2022) Science as Culture 44, 49–50 (discussing the role of ecosystem-building in Big Tech).

direct means, such as using prediction value to sell targeted advertising services, or through indirect means, such as using prediction value to improve their products and services.⁴⁵ Data collected about people may eventually lead to income for companies. But, the delayed nature of this income realisation in the data economy is a challenge for tax law because it allows companies to defer tax liabilities. This deferral deprives governments of revenues and delays redistribution while simultaneously allowing companies to amass a valuable economic resource – social data and its resulting prediction value.⁴⁶ And the ability to amass a valuable economic resource brings with it a concentration of economic and political power in the hands of the companies that hold that resource,⁴⁷ resulting in the type of power imbalance that digital constitutionalism aims to combat.

Additionally, the business practices and models of the data economy can result in a misalignment between the country from which social data is collected and the country in which the monetary income derived from that social data's prediction value is realised. The problem of multisided markets has been frequently cited in debates over the appropriate tax reforms in response to the digitalisation of the global economy.⁴⁸ This is part of a common criticism that the place of taxation no longer aligns with the place of value creation – the need to realign the locus of taxation with the locus of value creation has been a driver of many recent international tax reform efforts.⁴⁹

A data tax could serve to fix the failings of the income tax in the data economy and thereby address the economic and political power imbalances that are a key concern within digital constitutionalism. By using data, which serves as a material store of prediction value, as its base, a data tax would recognise prediction value as a form of economic value distinct from monetary exchange value. Because it takes into account prediction value as a distinct value form, a tax system that includes data, and not just income, as part of its tax base would better allocate taxing burdens based on relative ability to pay. Using data as part of the tax base would also eliminate the tax deferral problems discussed above. Companies would be taxed when they collect data. The timing of taxation would align with time when they amass prediction value, rather than delaying taxation until they potentially convert that prediction value into monetary exchange value. Using data as a tax base would also address the misalignment of the locus of taxation and the locus of value creation in the digital economy. The country from which data is extracted would be the country that would be allocated taxing authority, rather than the country where profits derived from that data's prediction value might eventually be realised. For these reasons, data taxes have the potential to make up for the failings of income as a tax base in the data economy. Data taxes could allow for substantial revenue to be raised from digital companies in their users' home countries. And, by acknowledging prediction value as a distinct form of economic value creation, data taxes could also allow for a fairer and more effective redistribution of economic resources.

However, if the goal of data taxes is to correct for the failings of income as a tax base, the design considerations for policymakers must be distinct from the design considerations for a Pigouvian data tax. Policymakers would need to focus on setting data taxes at a rate that maximises revenue and fulfils redistributive goals. This contrasts with the Pigouvian data tax, in which the design

⁴⁵Parsons and Viljoen (n 24) 20–9 (discussing direct and indirect means through which companies may convert prediction value into monetary exchange value).

⁴⁶*Ibid.*, 50–2 (explaining the tax deferral benefits companies are able to harness in the data economy).

⁴⁷Purdy et al (n 25) 1818–19 (discussing the link between economic and political power); A Alstott, 'The Uneasy Liberal Case Against Income and Wealth Transfer Taxation: A Response to Professor McCaffery' 51 (1996) *Tax Law Review* 363, 371 (noting the link between wealth and social and political power).

⁴⁸Tax Challenges Arising from Digitalisation – Interim Report' OECD/G20 Base Erosion & Profit Shifting Project (2018) 28–9 <<https://www.oecd.org/ctp/tax-challenges-arising-from-digitalisation-interim-report-9789264293083-en.htm>> accessed 19 November 2024; C Kim, 'Digital Services Tax: A Cross-Border Variation of the Consumption Tax Debate' 72 (2020) *Alabama Law Review* 176–8.

⁴⁹W Haslechner and M Lamensch, 'General Report on Value Creation and Taxation: Outlining the Debate' in W Haslechner and M Lamensch (eds), *Taxation and Value Creation* (International Bureau of Fiscal Documentation 2021) 3, 35.

considerations would instead be focused on setting the data tax at a rate that would reduce data collection to a level where the social harms of datafication match its benefits. Any data tax, regardless of design, will likely have some dampening effect on data collection behaviors of digital companies, but the extent of that effect will depend on whether it is designed as a Pigouvian or revenue-raising tax. Additionally, a base-building data tax suggests a political choice to not intervene in the new data economy but instead adapt the tax system to tax data value creation in the same way as other forms of economic value creation. While this choice certainly does not foreclose recognising datafication's harms and regulating it via other areas of the law, it does stand in contrast to a Pigouvian data tax, which requires a clear normative view of the social harms and benefits of datafication and the government's role in regulating them.

4. Path forward

Data taxes have the potential to serve as a powerful tool in efforts to respond to the unique challenges brought by datafication and the data economy – a powerful tool that can operate within the framework of digital constitutionalism. The data tax could serve as a Pigouvian tax with the aim of reducing data collection to a socially optimal level, thus balancing the social harms and benefits of datafication. Alternatively, data taxes could remedy the failings of income as a tax base in the data economy, raising needed government revenues and achieving redistributive goals. As scholars and policymakers continue to think about the role that a data tax may serve, it is essential to understand that designing an effective data tax requires a clear understanding and consensus around what problem a data tax is meant to solve.

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