WHAT IF TAX LAW’S FUTURE IS NOW?

AN INTRODUCTION TO THE SYMPOSIUM ON ARTIFICIAL INTELLIGENCE & THE FUTURE OF TAX LAW

STEPHANIE HOFFER*

* Professor of Law, The Ohio State University Moritz College of Law.
For decades, the primary discussion of artificial intelligence (AI) in tax law has been a discussion of “what if?” This symposium—Artificial Intelligence and the Future of Tax Law and Policy—shifts that conversation to “what now?” and “what’s next?” Twenty years ago, none of us would have dreamt of the President sending out 280-character insults to our phones or of advertisers individually tailoring content for us. And most of us wouldn’t have taken seriously the possibility that large portions of the tax base could become non-geographically bounded through cloud computing or that the IRS would use heat-mapping and data analytics to find non-filers.

It long has been tempting to think that scholarship on AI is premature because the science fiction from our favorite movies is still nascent. But as Jeff Butler of the IRS notes in his paper, the IRS has had an AI lab since the mid-1980s, and the use of AI, even in its current form, raises novel cultural, ethical, and legal questions. It is shaping the current practice of tax law in important ways, even if our wilder predictions of its role in our society never come to fruition. Tax is essential to a well-functioning government, and most of us agree that a well-functioning government is essential to human flourishing. A robust dialogue on the role of AI in tax, then, is also essential. The articles here are proactive in their research and analysis of AI’s current and potential future impact on tax law and its administration, a sea

---


3 See Jeff Butler, Analytical Challenges in Modern Tax Administration, 16 OHIO ST. TECH. L. J. 258, 259 (2020).

4 For example, Blue J Legal claims that its AI can predict the outcome of tax cases with 90% accuracy. BLUE J LEGAL, https://www.bluejlegal.com/ [https://perma.cc/Y3AK-NC3L].
change to which we now must respond, even if the technology never advances another jot.

As Jeff Butler also observes in his work, *Analytical Challenges in the Modern Tax Administration*, “[i]n the past several years, the IRS has made progress through partnerships with industry and academia to incubate and test a range of new analytical approaches, such as those with a renewed emphasis on AI subfields like machine learning, natural language processing, knowledge representation, and evolutionary systems.” Butler’s detailed description of the IRS’s current technology and its future challenges highlights the complexity of the area, how much can be done already with existing programs, and how much there is left to explore. Butler’s present and historical analysis of the agency’s use of computing power leads him to a powerful conclusion for the tax academy and the agency: the future of tax administration demands investment in the data analytical and technological competence of the talent pool, including industry-academic partnerships.

Butler is right. Without cross-pollination between the law and data sides of tax administration (and even drafting), technology will continue to struggle in its application to law. For example, consider the IRS’s Interactive Tax Assistant, an online taxpayer interface that answers people’s questions based on a pre-programmed decision-tree. As Joshua Blank and Leigh Osofsky highlight in their article, *Legal Calculators and the Tax System*, the tool produces “simplicity.” Automation of rules-based responses allows the tool to give simple, easy-to-reach answers, but it can produce wrong answers when it fails to capture the law’s underlying complexity. Here, then, is an instance of the marriage of law and technology that demonstrates the importance of a strong working relationship between the two. By employing the technology, despite its limitations, the IRS has brokered

---

6 See id.
a compromise between its demands for accuracy and taxpayers’ demands for access. Something similar is happening outside of the agency as well. Susan Morse’s study of tax preparation software reveals that as “centralized sources of legal decisions,” these programs tend to take conservative positions in hard cases. As Morse observes in *Do Tax Compliance Robots Follow the Law*, increasing use of automation may have implications for legal design, including who bears responsibility for non-compliance generated by an automated agent.

The significance of incremental change to the familiar, like the automation of previously static guidance, or the emergence of the fillable TurboTax form, is a common theme in the works presented here. Just as in tort and contract law, tax law meant to address failures may bend around the social need to encourage innovation while protecting its users. Technology also may give rise to new uses for pre-existing tools, such as Sarah Lawsky’s proposal for probabilistic tax forms in *Form as Formalization*. And as Allison Christians notes in her work, *Taxation in the Age of Smart Contracts*, emerging technology, and in particular, block chain, opens novel avenues for avoidance and evasion, for which the most effective means of resistance in the “quixotic fight” are “familiar weapons.”

There is a sense, in these essays, not of a science fiction sea change, but of sea change through the natural technological growth of our existing approaches to tax.

“The more we change, the more we stay the same” is a theme not only in the integration of AI and administration, but also in conversations about ways in which AI may affect the law itself. Exponential

---

8 See Susan C. Morse, *Do Tax Compliance Robots Follow the Law?*, 16 OHS TECH. L. J. 278 (2020).
9 Id. at 298.
increases in new technology have come at a time of unprecedented wealth concentration. Increasingly, scholars are calling for solutions to wealth inequality.\textsuperscript{13} A part of that movement, notes Robert Kovacev, is heightened enthusiasm, and even a handful of concrete proposals, for the taxation of robots.\textsuperscript{14} In his essay, Kovacev describes existing robot tax proposals and concludes that drafting a robot tax law would be difficult from definitional and enforcement perspectives and could place an undue burden on the development of new technologies as well as the use of already-existing ones.\textsuperscript{15} Robots are merely capital, and existing laws already cover earnings through automation. Daniel Hemel argues in \textit{Does the Tax Code Favor Robots} that the switch from labor to automation may even be revenue neutral as gains to labor are simultaneously increased and displaced to higher tax brackets.\textsuperscript{16} And from a policy perspective, whether the Code currently encourages or discourages the replacement of labor with automation depends on whether we view our hybrid system as a consumption tax or an income tax.\textsuperscript{17} Whether to change our existing laws, then, remains a live question from both a practical and a theoretical perspective. Even if technology does not advance another inch, more work in this area is needed, as Kovacev’s and Hemel’s pieces demonstrate.

Still, the pace of change forces us also to ask “what’s next” in a more forward-looking way. Anton Korinek’s work, \textit{Taxation and the Vanishing Labor Market in the Age of AI}, examines first principles of how to support the government and the governed when automated labor supplants human labor.\textsuperscript{18} He observes that taxation of labor is the government’s primary source of revenue, but that as automation

\textsuperscript{13} See e.g., Ari D. Glogower, \textit{Taxing Inequality}, 93 N.Y.U. L. REV. 1421 (2018) (surveying proposals to tax wealth and suggesting the integration of wealth not as a tax base but as a factor in computation of the progressive income tax).


\textsuperscript{15} Id.


\textsuperscript{17} Id. at 224-227.

\textsuperscript{18} See Anton Korinek, \textit{Taxation and the Vanishing Labor Market in the Age of AI}, 16 OHIO ST. TECH. L. J. 244 (2020).
displaces labor, the difficulty of taxation will increase as the need for revenue to support the displaced increases.\textsuperscript{19} Problematically, just as taxing capital may impair the supply of capital, taxing labor as it is made redundant by technology may impair its supply, simply making it more difficult for laborers to afford to live.\textsuperscript{20} In addition, a tax on human laborers, the incidence of which is partially or wholly born by entrepreneurs, may encourage substitution, causing entrepreneurs to develop automated labor instead.\textsuperscript{21} The tax system, Korinek concludes, should instead look to Pigouvian taxes and taxes on amounts seized through rent-seeking behavior.\textsuperscript{22} These bases and forms would be better from an optimal taxation standpoint because they increase efficiency while impairing the creation of neither capital nor labor.

In a final “what’s next,” my essay \textit{Tax Theory and Feral AI}, tests our current law and underlying philosophies of income taxation in the context of an independent non-sentient AI that creates and monetizes economic value and yet is not owned by any person.\textsuperscript{23} Income tax law and philosophy are necessarily humancentric, but considering them through the lens of an individual non-human earner highlights some ways in which our laws may reward or punish the dehumanized. Imagining non-owned AI as a taxpayer forces us to abandon our heuristics and gives us a chance to adopt rationality as a baseline in tax policy. Just as important, it allows us to be intentional about our incorporation of human irrationality. At bottom, advances in AI give us a once-in-a-lifetime opportunity to explore the broader, meaningful question: what is the role of humanity in the law?

\textsuperscript{19} Id.
\textsuperscript{20} Id.
\textsuperscript{21} Id.
\textsuperscript{22} Id. at 256-57.