

AI and Tax system

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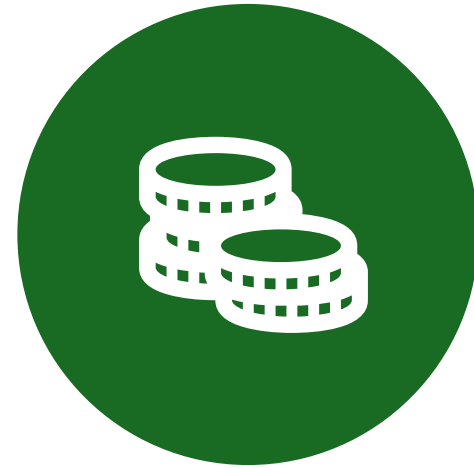
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Today's topic



1. AI AND TAX RESEARCH



2. TAXATION ON AI

1. AI and Tax Research

How does AI work ?

Three questions

◆ Asking the following questions to **Copilot** (Windows 11, Chat-GPT4).

1. *“Propose table of contents for a report on the following theme”.*

- Digitalization has been transforming tax administration practices over recent decades and generative AI promises to further revolutionize this. These changes go well beyond adopting new technologies – they require a transformation of organizations, people, processes and relationships with customers. While sometimes successful, digitalization also often fails to deliver its potential. This session will address the broader context of digital transformation, ranging from data integrity, information security, increasing ICT expenditures and navigating competing reform priorities. Countries will share experiences regarding emerging implications of AI in tax administration, including how to deal with challenges. Selected AI challenges and opportunities for tax administrations will also be addressed. Moreover, the session will cover the tax policy implications of digitalization.

2. Please tell us about the impact of AI on taxation.

3. What are the key challenges faced by tax administrations in adopting AI?

First Question (Reply by Copilot)

1. **Introduction: Digitalization and Tax Administration**
 - Progress of Digitalization and its Impact
 - Advent of AI and its Potential
2. **The Bigger Picture of Digital Transformation**
 - Changes Beyond Adoption of New Technologies
 - Transformation of Organizations, People, Processes, and Customer Relationships
3. **Successes and Failures of Digitalization**
 - Cases of Successful Digitalization
 - Cases Where Digitalization Fails to Deliver its Potential
4. **The Broad Context of Digital Transformation**
 - Data Integrity
 - Information Security
 - Increasing ICT Expenditures
 - Navigating Competing Reform Priorities
5. **AI and Tax Administration: Experiences from Countries**
 - Implications of AI in Tax Administration
 - Dealing with Challenges
6. **AI Challenges and Opportunities**
 - Selected Challenges of AI
 - Opportunities for Tax Administrations with AI
7. **Tax Policy Implications of Digitalization**
 - Impact of Digitalization on Tax Policies
 - Future Outlook
8. **Conclusion**
 - Summary of the Impact of Digitalization and AI on Tax Administration
 - Directions for Future Research

Second Question (Reply by Copilot)

Certainly, the impact of AI on taxation can be viewed from several perspectives:

1. ****Increase in AI/Robots and Tax Revenue****: The rapid development of AI and robots has the potential to replace human jobs, which could lead to widespread unemployment and a decrease in government tax revenue. However, some studies suggest that AI and robots (Industry 4.0) could potentially increase human jobs.
2. ****Taxation on AI/Robots****: There are proposals to tax AI and robots as independent entities or to attribute income to the owners of AI/robots, but these may violate the principles of neutrality, simplicity and certainty, efficiency, effectiveness and fairness, and flexibility.
3. ****Digitalization and Tax Compliance****: Digitalization, including AI, machine learning, and blockchain technology, can enhance tax compliance behavior and reduce tax evasion and avoidance. Also, digitalization through AI and blockchain can significantly improve tax compliance and operational efficiency.
4. ****AI and Tax Professionals****: With the introduction of AI, tax professionals can focus on more advanced issues and leave low-level tasks to machines.
5. ****AI and Tax Compliance Reporting****: By leveraging capabilities such as machine learning, generative AI, and advanced data analysis algorithms, tax professionals can provide accurate and timely calculations, tax filings, and reports, and create clear visibility for ensuring compliance with tax regulations.

These points provide some perspectives on the impact of AI on taxation. The specific impact can vary depending on the specific use and scope of AI, as well as the tax system and economic conditions of each country. Therefore, it is recommended to seek the opinion of experts according to the specific situation.

Third Question (Reply by Copilot)

- Tax administrations face several key challenges when adopting AI:
 1. **Data Governance:** Ensuring data integrity and privacy is a major challenge. Tax administrations handle sensitive taxpayer information, and it's crucial to have robust data governance frameworks in place¹.
 2. **System Reliability and Security:** AI systems must be reliable and secure to maintain trust with taxpayers. Any system vulnerabilities could lead to data breaches or incorrect tax calculations².
 3. **Fairness and Inclusiveness:** AI systems should be designed to be fair and inclusive. There's a risk that AI could inadvertently lead to biased or discriminatory outcomes³.
 4. **Transparency and Accountability:** It's important for tax administrations to be transparent about how they're using AI and to be accountable for the decisions made by AI systems³.
 5. **Cultural Changes:** Digital transformation involves not only structural but also cultural changes. Authorities need to understand how technology impacts their functions and develop the skills to use it efficiently⁴.
 6. **Managing Expectations:** There's often a gap between what AI can realistically achieve in the short term and the expectations of stakeholders. It's important to manage these expectations and take incremental steps towards AI adoption⁵.
- These challenges highlight the need for careful planning and implementation when adopting AI in tax administrations¹⁵²⁴³.

AI answer trends

Improvement
points

Database
constraints

Open access

• SSRN, OECD, Major accounting
firm website

English or

Non-English

Reply with
similar
results

Matters of concern

- ◆ Alarie et.al. (2023)
 - False Information
 - Hallucination
 - Opacity Regarding Sources
- ◆ Plagiarism

2. Taxation on AI

European Parliament, Committee on Legal Affairs (2017):
*Report with Recommendations to the Commission on Civil
Law Rules on Robotics, (2015/2103 (INL))*

- “whereas at the same time the development of robotics and AI may result in a large part of the work now done by humans being taken over by robots without fully replenishing the lost jobs, so raising concerns about the future of employment, the viability of social welfare and security systems and the continued lag in pension contributions, **if the current basis of taxation is maintained, creating the potential for increased inequality in the distribution of wealth and influence,** while, for the preservation of social cohesion and prosperity, the likelihood of **levying tax on the work performed by a robot or a fee for using and maintaining a robot should be examined** in the context of funding the support and retraining of unemployed workers whose jobs have been reduced or eliminated;”

Taxation on AI

- Oberson(2017)
 - Robots (AI) could replace human activities.
 - Tax and social security losses.
 - Potential needs for additional revenues.
 - Electronic “ability to pay”.
 - Options
 - 1) Income tax on an **imputed salary** from AI activities.
 - 2) **VAT** on AI (entrepreneurs)
 - 3) **Wealth holding tax** to the owner of AI

Arguments against taxing AI ?

① Argument: Governments Need to Tax Robots Because There Will Be Little Else Left to Tax

- Atkinson (2019)

- Robots and Automation Do Not Reduce Employment
- Firms That Adopt Robots Still Pay Taxes

Arguments against taxing AI ?

② Argument: Governments Need to Tax Robots or Inequality Will Grow

- Berg et.al. (2018); Guerreiro et.al. (2022)
 - AI is good for growth and bad for equality
- Atkinson (2019)
 - “some individuals mak[e] winner-take-all incomes at the expense of other worker”.
 - “inequality is not caused by robots, it is caused by a small share of the 0.1 percenters gaining an increasing share of national income.”

Arguments against taxing AI ?

③ Argument: We Need to Tax Robots Because the Current Tax Code Leads to Inefficient Investment in Machines

- Ahmed(2018); Atkinson (2019)
 - Tax Incentives for Investing in Robots (AI) Spur National Economic Competitiveness

Considerations

Definition of AI

Purpose of taxing AI

Design of tax

International competition & Tax avoidance

Conclusion

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