

Rethinking the Nexus Rules in the Age of Artificial Intelligence-Driven Business Models: Limitations in Traditional Doctrinal Concepts and Pathways for Reform

Conceptual Framework

- What is the justification for the allocation of taxing rights under international tax law?
- To what extent is the nexus concept grounded in human economic activity and physical presence?
- Can existing nexus doctrines adequately capture digitalized business models and AI-driven business models?
- Can existing nexus doctrines form a basis for allocating taxing rights in an AI-driven economy?
- How should AI be understood: as a tool, an agent, or a form of capital? Does it represent a new form of activity that challenges the existing legal concepts?
- To what extent should existing international tax nexus concepts be redesigned or reconceptualized to address the source country nexus gap emerging with AI-driven business models?

Structural Analysis

- Existing international tax framework majorly anchored in concepts developed for human centric and territorially grounded business.
- For example, the permanent establishment concept relies on a fixed place of business, geographical fixity and human business activity.
- AI, particularly autonomous AI severs the link to human activity.
- Autonomous AI systems can perform functions, interact with users and markets and operate autonomously across jurisdictions.

Tension with Traditional and Emerging Nexus Concepts

- Nexus is tied to territoriality, physical presence and human economic activity whereas AI-driven business models disrupt nexus relying on:
 - Mobility
 - Automation
 - Intangibility
- For nexus rules, activities are ultimately performed by identifiable persons.
- Value creation by AI-driven business models.
- Emerging concepts or proposals for reform majorly address profit reallocation rather than the issue of nexus.

Limitations of Current Approaches

- Income generating activities are not always traceable to a human agent operating through a fixed tangible location thus rendering concepts such as PE structurally ill suited for AI-driven business models.
- Distinction between AI conducting autonomous activity without human review or authorization of a human being versus the use of AI as a tool in the human activity.
- Key reform proposals and related concepts that may potentially be applicable but remain conceptually ill suited include:
 - Significant economic presence
 - Pillar 1 Amount A
 - Virtual PE
- Structural failure of nexus concepts leading to under-taxation in source jurisdictions.