Measuring Firm-Level Tax Audit Risks with Generative AI

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Abstract

Understanding corporate tax behavior around tax audits has been a longstanding question in taxation literature. This is because the list of firms that received tax audits is strictly confidential. We analyze a large sample of tax-audit-related narrative disclosures with generative AI and develop a novel measure of firm-level tax audit risks. Our measure exhibits substantial heterogeneity even within the same asset-size-based audit probability group and has significant time-series variation within a single firm. We show that tax audits effectively reduce tax avoidance and such effects linger for an extended period of time. Furthermore, we find that tax audits are associated with reduced capital investments and increased stock market volatility, consistent with tax audits being a source of corporate risk.

Keywords: Tax audit, IRS, tax avoidance, tax behavior, textual disclosure, large language models, GPT, generative AI, firm-level risk exposure, tax audit risk

JEL Codes: C45, D80, G32, H25, H26, H71, M41, O16

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