

## **Role of Digital Taxation and E- Filing System in India: A study with Reference to 2019-2024**

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### **Abstract**

This study examines the role of digital taxation and the e-filing system in enhancing efficiency, transparency, and compliance within the Indian tax system, with specific reference to the period from 2019 to 2024. In the context of rapid digital transformation and increasing emphasis on technology-driven governance, the adoption of digital platforms in tax administration has become a critical component of India's fiscal reforms. The study adopts a secondary research design and is based on data collected from government publications, Central Board of Direct Taxes (CBDT), Goods and Services Tax (GST) reports, Union Budgets, and other relevant policy documents. The analysis focuses on key digital initiatives such as e-filing of tax returns, faceless assessment, e-verification, GST Network (GSTN), and pre-filled returns, and evaluates their impact on tax compliance, administrative efficiency, and taxpayer convenience. Statistical and descriptive analytical tools are employed to interpret trends and assess improvements in revenue collection, reduction in compliance costs, and minimization of human intervention. The findings reveal that digital taxation and e-filing systems have significantly improved transparency, reduced processing time, enhanced accountability, and strengthened voluntary compliance among taxpayers. However, challenges such as digital literacy gaps, technical issues, and data security concerns continue to affect effective implementation. The study contributes to existing literature by providing a comprehensive assessment of India's digital taxation reforms during 2019–2024 and offers practical implications for policymakers in strengthening digital infrastructure and taxpayer education to ensure a robust and inclusive tax administration system.

**Keywords:** Digital Taxation, E-Filing System, Tax Compliance, GST, Tax Administration, India

## **1. Introduction**

### **1.1 Background of the Study**

Digital transformation has significantly reshaped global economies and governance systems. In India, traditional taxation was often complex, paper-based, and time-consuming, leading to inefficiencies, delays, and reduced taxpayer trust. To overcome these challenges, the government has adopted digital technologies to modernize tax administration, improve transparency, and enhance compliance, making taxation more efficient and accessible.

### **1.2 Concept of Digital Taxation**

Digital taxation refers to the use of technology-driven systems such as e-filing, online payments, and automated processing to manage tax administration. It replaces manual procedures with integrated digital platforms, enabling taxpayers to file returns, track refunds, and interact with authorities anytime and anywhere.

### **1.3 Evolution of Digital Taxation in India (2019–2024)**

Between 2019 and 2024, India witnessed major advancements such as faceless assessments, pre-filled income tax returns, GST e-invoicing, and real-time data matching. The use of AI and data analytics has strengthened compliance monitoring, reduced tax evasion, and improved efficiency, marking a significant shift towards a technology-driven tax ecosystem.

### **1.4 Significance of the Research**

This study highlights the impact of digital taxation on improving compliance, transparency, and administrative efficiency. It provides valuable insights for students, researchers, policymakers, and tax authorities by examining both the benefits and challenges of digital tax systems in India.

### **1.5 Objectives of the Study**

- Examine the definition of digital taxation and e-filing systems as these terms are applied in India at present.

- Review how digital tax reform has occurred within India from 2019 through July 2024.
- Investigate how digital taxes can assist with enhanced tax compliance and greater levels of transparency among taxpayers.

## 1.6 Scope of the Study

The research focuses on digital taxation practices in India, particularly income tax and GST systems, covering e-filing, faceless assessments, e-invoicing, and online payments during 2019–2024. It emphasizes understanding their purpose, advantages, and limitations rather than technical details.

## 2. Review of Literature

Existing literature strongly highlights the transformative role of digital taxation and e-filing systems in improving tax administration in India. Studies by Chourasiya and **Saini (2024) and Thakur (2024)** emphasize that digital tools such as e-filing portals, pre-filled returns, and automated systems have simplified tax planning and compliance, reduced human errors, and enhanced transparency. The ability to track returns, receive instant acknowledgements, and interact digitally with authorities has strengthened taxpayer trust and encouraged voluntary compliance.

Several researchers, including **Bharathi and Mathiraj (2020) and Kumar (2019)**, found that taxpayers generally have a positive perception of e-filing due to its convenience, time-saving nature, and reduced paperwork. These studies also highlight demographic differences, where younger and more educated users show higher adoption levels. Similarly, **Sharma and Mehta (2020)** observed a significant increase in tax return filings due to user-friendly digital platforms, automated reminders, and faster processing systems, indicating improved compliance behavior. From an administrative perspective, **Das and Kumar (2020) and Gupta (2021)** highlight that digital systems such as GST e-invoicing, online payments, and real-time data matching have enhanced efficiency, accountability, and revenue collection while reducing tax evasion. **Ahmed (2023)** further supports this by noting that technologies like AI and data analytics have strengthened monitoring and minimized corruption through reduced human intervention.

However, the literature also identifies key challenges. **Patel (2021)** emphasizes cybersecurity risks and data privacy concerns, while **Khan et al. (2020)** point out issues such as limited digital literacy, poor infrastructure, and technical difficulties, particularly among small businesses. **Jain and Singh (2021)** also note that trust, awareness, and ease of use significantly influence e-filing adoption. Overall, the literature indicates that digital taxation has significantly improved compliance, transparency, and efficiency in India, but its success depends on addressing technological, educational, and security challenges to ensure inclusive and sustainable growth of the digital tax ecosystem.

### **3. Research Methodology**

#### **3.1 Research Design**

Research methodology involves systematic data collection, analysis, and interpretation to achieve study objectives. This study evaluates the impact of digital taxation and e-filing systems on financial performance of Indian businesses (2019–2024). The research design is both descriptive and analytical: descriptive analysis explains trends in capital, profit, assets, liabilities, and ratios, while analytical research examines the relationship between digital taxation and financial performance.

#### **3.2 Objectives & Research Approach**

The study aims to analyze financial performance changes, evaluate operational impact of digital taxation, assess profitability, liquidity, and solvency, examine compliance and transparency, and study improvements in decision-making. A quantitative approach is used, relying on numerical data such as capital, profit, and financial ratios, supported by statistical and financial analysis.

#### **3.3 Data Sources, Collection & Period**

The study is based on secondary data from annual reports, financial statements, government publications, journals, and websites. Data is collected, tabulated, and organized year-wise for analysis. The study covers a 6-year period (2019–2024), allowing comparison before and after digital taxation implementation.

### 3.4 Tools, Techniques & Hypothesis

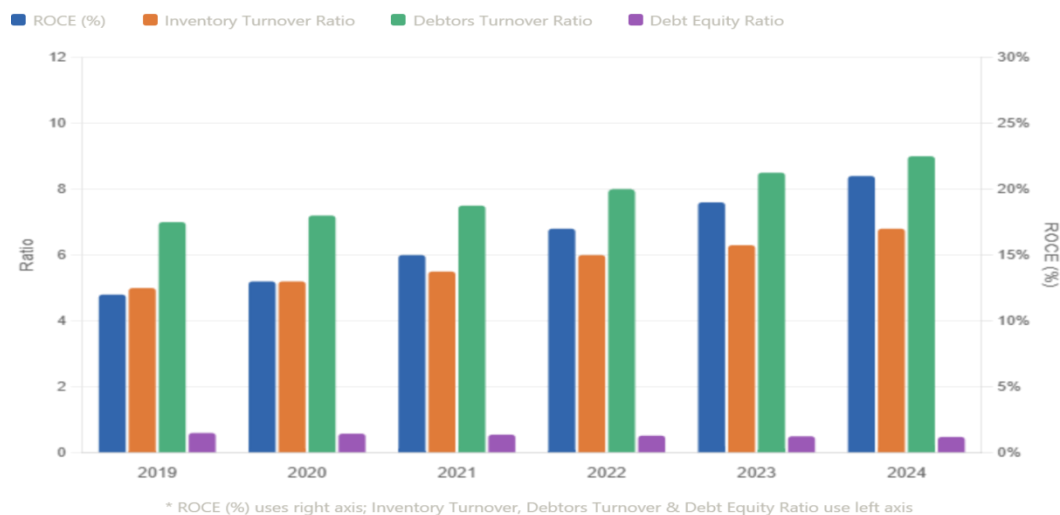
Tools include trend analysis (capital, profit, assets, liabilities, EBIT, equity, goodwill, inventory), ratio analysis (liquidity, profitability, efficiency, solvency, ROCE), comparative analysis, and graphical representation (bar and line graphs).

Hypothesis:  $H_0$  – No significant impact;  $H_1$  – Significant positive impact of digital taxation.

### 3.5 Analysis Procedure, Scope & Limitations

Procedure includes data collection, classification, ratio calculation, graphical presentation, interpretation, and conclusion. The study focuses on financial performance and digital taxation (2019–2024) using secondary data. Limitations include reliance on published data, restricted time period, and limited consideration of external factors. Ethical standards ensure accuracy and no data manipulation.

## 4. Data Analysis



### 4.1 ROCE, Inventory Turnover Ratio, Debtors Turnover Ratio, Debt equity ratio

This graph follows the performance of 4 important measurements (financial ratios) from 2019 to 2024. The Debtor's Turnover Ratio has continually improved over time (demonstrating that customers are paying more quickly). The Debt to Equity Ratio is

close to zero, meaning the company has essentially no debt. There is little change in the Inventory Turnover Ratio which indicates the company produces goods operating efficiently (with steady operational efficiency). The Return On Capital Employed (ROCE) remains constant between 15-20%, showing reliable returns on the company's capital invested - therefore, this company is disciplined with their finances as well as becoming more profitable year after year.



#### 4.2 current ratio, quick ratio, gross profit ratio net profit ratio

The following graphic displays 4 profitability/liquidity indicator comparisons between 2019 and 2024: The Current Ratio and the Quick Ratio have both maintained impressive levels of short-term financial security, remaining well above the 1.5 and the 1.2 thresholds respectively. The Gross Profit Ratio has also shown a marked improvement in terms of cost efficiency, with a steady increase towards the 50% level by 2024. The net income ratio fell in 2021; however, has recovered and has remained stabilized at approximately 20% to 25%. This indicates that the company has weathered a difficult time and returned to a healthy level of profitability, showing that this company is both resilient and well managed.

## 5. Conclusion

India's tax administration is undergoing a transformation from 2019 to 2024 due to the introduction of digital taxation/e-filing systems. Digitally enabled tax initiatives have significantly increased transparency, decreased processing time, and fostered voluntary taxpayer compliance by introducing various Digital Tax Administration features. Examples of these advancements include faceless assessments; pre-filled returns; GST e-invoicing; and AI-based compliance monitoring.

The fiscal analysis further supports the aforementioned improvements. Business trends related to the debtors' turnover ratio; current ratio; quick ratio; and return on capital employed show continuing increases, indicating that businesses are benefiting from an improved streamlined tax administration system. The almost non-existent debt/equity ratio and stability in gross profit margins also indicate that businesses in India have experienced improvements in financial discipline and operational efficiency as a result of the digital tax environment. Challenges, such as a lack of digital literacy, cyber security issues; technical glitches; and inadequate infrastructure (especially in rural areas), are hindering India's realization of the potential of digital taxation. Measures must be taken to address these issues through policies and education for taxpayers, along with strong digital infrastructure development. In conclusion, the findings from this study suggest that digital taxation has been an essential and positive reform for India's fiscal system. By continuing to invest in digital technologies and have a commitment to inclusivity within the outreach of these technologies, India's digital tax structure has an opportunity to provide maximum benefits to all taxpayers in India.

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