

A Comparative Analysis of Personal Income Tax Structures and Revenue Performance: Evidence from India, the United Kingdom, and the United States

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ABSTRACT

Personal income tax represents a fundamental component of modern fiscal systems, contributing to government revenue mobilisation, redistribution of income, and promotion of social equity. Despite its importance, the structure and effectiveness of personal income taxation vary significantly across countries due to differences in economic development, institutional capacity, and policy priorities. This study undertakes a comparative analysis of personal income tax systems in India, the United Kingdom, and the United States, with specific reference to individual taxpayers. Using secondary quantitative data drawn from official national sources and international databases over a multi-year period, the study examines statutory tax structures, exemption thresholds, progressivity, and revenue performance. Descriptive and comparative analytical methods are employed, supported by graphical analysis and selected statistical indicators. The findings reveal that higher personal income tax revenue is associated more strongly with broader tax bases, effective withholding mechanisms, and administrative efficiency than with higher statutory tax rates alone. The study concludes by deriving policy-relevant insights for strengthening personal income taxation in developing economies, particularly India.

Keywords: Personal Income Tax, Tax Structure, Progressivity, Revenue Performance, Fiscal Policy, Comparative Taxation.

Introduction

Taxation is one of the most powerful instruments available to governments for financing public expenditure, correcting income inequalities, and maintaining macroeconomic stability. Among various forms of taxation, personal income tax occupies a unique position because it is directly linked to individual earning capacity and is generally designed on progressive principles. As a direct tax, personal income tax not only serves as a major source of revenue but also plays a crucial role in achieving redistributive objectives and promoting social justice.

Over time, the design of personal income tax systems has evolved considerably across countries. Advanced economies have increasingly focused on broadening tax bases, rationalising tax rates, simplifying statutory structures, and strengthening withholding and information-reporting mechanisms. These reforms are aimed at ensuring stable revenue mobilisation while minimising compliance costs and economic distortions. In contrast, many developing economies continue to face

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persistent challenges in expanding the personal income tax base due to structural constraints such as large informal sectors, limited administrative capacity, and lower levels of voluntary compliance.

India provides an important case in this context. Despite sustained economic growth and rising income levels, personal income tax contributes a relatively modest share of total tax revenue and gross domestic product when compared with advanced economies such as the United Kingdom and the United States. This raises critical questions regarding the adequacy of existing tax structures, the degree of progressivity embedded in the system, and the effectiveness of tax administration in achieving revenue and equity objectives.

Comparative analysis of personal income tax systems across countries at different stages of development offers valuable insights into how statutory design, exemption thresholds, and institutional capacity influence tax outcomes. By examining the experiences of India, the United Kingdom, and the United States, this study seeks to identify structural differences and policy lessons that may inform future tax reforms, particularly in developing economies.

Conceptual and Theoretical Background of Personal Income Taxation

Personal income taxation is grounded in fundamental principles of public finance theory, most notably the ability-to-pay principle and the concept of vertical equity. According to the ability-to-pay principle, individuals should contribute to public finances in proportion to their economic capacity. This principle provides the normative justification for progressive income taxation, under which higher income levels are subject to higher marginal tax rates.

From a theoretical perspective, personal income tax serves a dual function. First, it acts as a revenue-raising instrument to finance government expenditure on public goods and social services. Second, it functions as a redistributive tool aimed at reducing post-tax income inequality. Classical public finance theory views progressive income taxation as an essential mechanism for achieving fairness in the distribution of tax burdens across income groups.

However, the design of personal income tax systems involves important trade-offs between equity and efficiency. While higher marginal tax rates enhance progressivity, they may also influence labour supply decisions, savings behaviour, and investment incentives. Modern optimal tax theory emphasises the need to balance redistributive goals with efficiency considerations, suggesting that moderate marginal rates combined with broader tax bases may yield better overall outcomes.

In practice, the effectiveness of personal income taxation depends not only on statutory tax rates but also on structural features such as exemption thresholds, slab design, deductions, and administrative mechanisms. Countries with simple tax structures, effective withholding systems, and strong enforcement capacity tend to achieve higher compliance and revenue productivity, even with relatively moderate statutory rates.

Review of Literature

Musgrave (1959): Musgrave's seminal work on public finance laid the theoretical foundation for personal income taxation by emphasising the role of taxation in resource allocation, income redistribution, and economic stabilisation. He argued that progressive personal income tax is essential for achieving vertical equity, as it aligns tax liability with an individual's ability to pay. Musgrave's framework continues to influence modern tax policy debates, particularly in evaluating the redistributive role of personal income tax systems across developed and developing economies.

Mirrlees (1971): Mirrlees introduced the theory of optimal income taxation, highlighting the trade-off between equity and efficiency in personal income tax design. His analysis demonstrated that excessively high marginal tax rates could distort labour supply decisions, thereby reducing economic efficiency. The study provided a theoretical justification for moderate progressivity supported by a broad tax base, an idea that remains central to contemporary tax reform discussions in both advanced and emerging economies.

Atkinson and Stiglitz (1980): Atkinson and Stiglitz examined the relationship between income taxation and social welfare, arguing that personal income tax plays a dual role in financing public expenditure and correcting income inequality. Their work emphasised that progressive tax structures can enhance social welfare when designed alongside efficient public spending policies. The study contributed significantly to understanding how tax policy can balance redistributive goals with economic efficiency.

Tanzi and Zee (2000): Tanzi and Zee analysed tax policy challenges faced by developing countries and highlighted the limited contribution of personal income tax in such economies. They identified structural constraints such as narrow tax bases, large informal sectors, and weak administrative capacity as major obstacles to effective income tax mobilisation. Their findings are particularly relevant for countries like India, where personal income tax revenue remains low despite economic growth.

Bird and Zolt (2008): Bird and Zolt focused on the administrative and institutional determinants of tax performance in developing economies. They argued that the effectiveness of personal income tax depends more on tax administration, enforcement, and compliance mechanisms than on statutory tax rates alone. The study concluded that strengthening institutions and improving information reporting systems are critical for enhancing personal income tax revenue.

Piketty and Saez (2007): Piketty and Saez conducted an empirical analysis of income distribution and taxation, demonstrating that progressive personal income tax plays a significant role in limiting income concentration at the top of the income distribution. Their study provided strong empirical evidence in favour of progressive taxation, particularly in advanced economies such as the United States. The findings underscore the importance of tax policy in addressing income inequality.

OECD (2019): The OECD's comparative analysis of personal income tax systems highlighted substantial cross-country variation in tax structures, exemption thresholds, and progressivity. The report found that countries with simpler tax structures and effective withholding mechanisms tend to achieve higher revenue productivity and compliance. The OECD study emphasised that policy design and administrative efficiency are key determinants of successful personal income tax systems.

Rao and Chakraborty (2010): Rao and Chakraborty examined India's tax system with a focus on structural complexity and limited tax base expansion. They argued that despite multiple reforms, India's personal income tax system continues to suffer from excessive exemptions and deductions, which undermine both equity and revenue mobilisation. The study recommended simplification of tax structures and base broadening as essential steps for improving India's personal income tax performance.

Research Gap

The review of existing literature reveals that personal income taxation has been extensively examined from theoretical, empirical, and policy-oriented perspectives. Classical and modern studies have established the importance of personal income tax in revenue mobilisation, redistribution, and promotion of equity. Several studies have also analysed the trade-off between progressivity and efficiency, as well as the role of tax administration and compliance mechanisms in determining tax performance. However, despite the richness of the existing literature, several important gaps remain.

First, a significant portion of prior research focuses either on single-country analysis or on broad comparisons among advanced economies, particularly within the OECD framework. There is relatively limited comparative research that simultaneously examines personal income tax systems of both developed and developing economies within a unified analytical framework. In particular, focused comparisons between a large developing economy such as India and advanced economies like the United Kingdom and the United States remain scarce.

Second, many empirical studies analyse statutory tax structures, progressivity, and revenue performance as separate dimensions. While some research examines statutory rate schedules and others focus on revenue productivity or redistributive outcomes, there is a lack of integrated analysis that links statutory design features—such as exemption thresholds and slab structures—directly with macro-level revenue outcomes. This limits the ability to draw comprehensive policy conclusions regarding the effectiveness of personal income tax systems.

Third, existing literature often emphasises nominal statutory tax rates while paying comparatively less attention to structural simplicity, exemption thresholds, and withholding mechanisms as determinants of tax performance. As a result, the role of institutional and administrative factors in shaping personal income tax outcomes, particularly in developing economies, is not adequately explored in a comparative context.

Fourth, in the case of India, much of the literature highlights issues of low tax base and informality but does not sufficiently compare India's personal income tax structure with those of advanced economies using consistent indicators and comparable time periods. This creates a gap in understanding whether India's relatively low personal income tax revenue is primarily the result of statutory design, administrative constraints, or broader structural factors.

Finally, there is limited recent research that incorporates post-reform developments and digitalisation efforts into comparative analysis of personal income taxation. Given ongoing reforms in tax administration and compliance systems, especially in developing economies, updated comparative evidence is required to assess the evolving effectiveness of personal income tax structures.

In light of these gaps, the present study seeks to provide a structured comparative analysis of personal income tax systems in India, the United Kingdom, and the United States by integrating statutory tax design, progressivity assessment, and revenue performance within a single analytical framework. By relying on official secondary data and comparable macro-level indicators, the study aims to contribute to existing literature and offer policy-relevant insights for strengthening personal income taxation in developing economies.

Objectives of the Study

The present study aims to explore the structural and fiscal dimensions of personal income taxation through a cross-country comparative perspective. Rather than replicating existing frameworks, the study seeks to generate fresh analytical insights into how personal income tax systems operate across different institutional and developmental contexts. The specific objectives of the study are as follows:

- To examine how differences in institutional and administrative frameworks influence the functioning of personal income tax systems in selected economies.
- To analyse the role of exemption thresholds and rate progression in shaping the distribution of tax burden across income groups.
- To compare the effectiveness of personal income tax systems in translating statutory provisions into actual revenue outcomes.
- To investigate whether simplicity in tax structure contributes to improved compliance and revenue productivity.
- To evaluate cross-country variations in personal income tax performance in relation to broader fiscal structures.
- To identify structural features of advanced personal income tax systems that may offer practical insights for reform in emerging economies.

Research Hypotheses

In accordance with the above objectives, the study formulates the following hypotheses for empirical examination:

- H₁:** Institutional and administrative differences significantly affect the performance of personal income tax systems across countries.
- H₂:** Higher exemption thresholds are associated with a more equitable distribution of the personal income tax burden.
- H₃:** Simplified personal income tax structures are more effective in generating stable revenue outcomes than complex multi-layered systems.
- H₄:** Variations in personal income tax revenue performance across countries are influenced more by compliance mechanisms than by statutory marginal tax rates.

Research Methodology

Nature of the Study

The present study is **comparative, descriptive, and analytical** in nature. It aims to examine differences in the structure and performance of personal income tax systems across selected countries through systematic comparison of statutory and macro-level indicators. The study does not involve primary data collection and relies exclusively on secondary quantitative data obtained from official and internationally recognised sources.

Research Design

A **cross-country comparative research design** is adopted to analyse personal income tax systems in India, the United Kingdom, and the United States. This design is appropriate for identifying similarities and differences in tax structures, institutional frameworks, and revenue outcomes across

economies operating at different stages of development. The comparative approach allows assessment of how variations in tax design and administration influence revenue performance.

Sources of Data

The study is based entirely on **secondary data** collected from authentic and reliable sources to ensure accuracy and comparability. The main sources of data include:

- OECD Tax Database and Revenue Statistics
- World Bank World Development Indicators
- Government of India: Union Budget documents and Income Tax Department publications
- HM Revenue & Customs (United Kingdom) official statistics
- Internal Revenue Service (United States) statistical reports

Only finalised and published data are used; estimates or provisional figures are excluded.

Period of the Study

The analysis covers a **multi-year period of seven years**, which allows for examination of medium-term trends and reduces the influence of short-term fluctuations. The selected period ensures consistency across countries and availability of comparable data.

Selection of Countries

The selection of India, the United Kingdom, and the United States is **purposive** and analytically justified:

- **India** represents a large developing economy undergoing continuous tax reforms.
- **The United Kingdom** represents a mature tax system with strong withholding and compliance mechanisms.
- **The United States** represents a large federal economy with a progressive but complex personal income tax structure.

Together, these countries provide meaningful contrast for comparative analysis.

Variables and Indicators Used

The study uses statutory and macro-level indicators to evaluate personal income tax systems. The key variables include:

- **Statutory Variables**
 - Marginal tax rates
 - Number of tax slabs
 - Exemption thresholds / personal allowances
- **Progressivity Indicators**
 - Rate progression across income levels
 - Relative exemption levels
- **Revenue Performance Indicators**
 - Personal income tax as a percentage of GDP
 - Share of personal income tax in total tax revenue

All variables are measured using official definitions to ensure cross-country comparability.

Analytical Tools and Techniques

The study employs both **descriptive and analytical techniques**, including:

- Comparative tables to examine statutory tax structures
- Trend analysis of revenue indicators
- Graphical representation to illustrate cross-country differences
- Simple inferential techniques, such as comparison of means, where appropriate

The analysis focuses on identifying patterns and relationships rather than establishing causal inference.

Hypothesis Testing Approach

The hypotheses formulated in the study are examined using comparative analysis of statutory indicators and revenue outcomes. Differences across countries are evaluated based on observed variations in tax structure, progressivity, and revenue performance. The results are interpreted in the context of institutional and administrative frameworks rather than purely statistical significance.

Scope of the Study

The scope of the study is limited to:

- Personal income taxation
- Individual (non-corporate) taxpayers
- National-level statutory and macro-economic indicators

Corporate taxation, behavioural responses of taxpayers, and sub-national taxes are outside the scope of the present analysis.

Limitations of the Study

Despite careful design, the study has certain limitations:

- Reliance on secondary data limits the ability to capture individual behavioural responses.
- Effective tax rates and micro-level distributional impacts are not analysed.
- The study focuses on three countries, which may limit broader generalisation.

These limitations are acknowledged but do not undermine the validity of the comparative findings.

Data Analysis and Comparative Results

This section presents a comparative analysis of personal income tax systems in India, the United Kingdom, and the United States using secondary quantitative data compiled from official government publications and internationally recognised statistical sources. The analysis focuses on statutory structure, progressivity, and revenue performance in order to assess differences in the effectiveness of personal income taxation across the selected countries.

• Comparative Structure of Personal Income Tax Systems

Table 1 presents a comparative overview of the statutory structure of personal income tax systems in India, the United Kingdom, and the United States.

Table 1: Statutory Structure of Personal Income Tax Systems

Country	Basic Exemption / Personal Allowance	Top Marginal Rate (%)	Number of Tax Slabs
India	₹2.5–3.0 lakh	30	5–6
United Kingdom	£12,570	45	3
United States	\$14,600 (standard deduction)	37	7

Analysis

The table highlights clear structural differences across the three countries. India applies a moderate top marginal tax rate but maintains a relatively low exemption threshold and multiple tax slabs. The United Kingdom operates a simplified structure with a high personal allowance and fewer tax slabs, while the United States follows a highly progressive rate schedule combined with a standard deduction and multiple brackets. These structural differences reflect variations in administrative capacity and policy priorities.

• Progressivity of Personal Income Tax Systems

Progressivity is assessed using statutory rate spread and exemption thresholds.

Table 2: Progressivity Indicators

Indicator	India	United Kingdom	United States
Minimum Rate (%)	0	20	10
Maximum Rate (%)	30	45	37
Rate Spread	Moderate	High	High
Exemption Level	Low	High	Moderate
Overall Progressivity	Moderate	High	High

Analysis

The United Kingdom and the United States exhibit stronger statutory progressivity due to higher exemption thresholds and steeper marginal rate progression at higher income levels. India's system shows moderate progressivity, as tax liability begins at relatively lower income levels, resulting in earlier tax incidence on middle-income earners.

- **Revenue Performance of Personal Income Tax**

Revenue performance is evaluated using personal income tax revenue as a percentage of gross domestic product.

Table 3: Personal Income Tax Revenue as Percentage of GDP

Country	PIT as % of GDP (Approx. Range)
India	2.5 – 3.0
United Kingdom	9.0 – 10.0
United States	8.0 – 9.0

Analysis

The table demonstrates substantial cross-country variation in personal income tax revenue performance. The United Kingdom and the United States record significantly higher personal income tax contributions to GDP compared to India. This indicates that personal income tax plays a more prominent role in financing public expenditure in advanced economies.

- **Structure of Direct Tax Revenue (India)**

To understand India's internal tax structure, the composition of direct taxes is examined.

Table 4: Composition of Direct Taxes in India

Component	Share in Direct Taxes (%)
Personal Income Tax	52 – 54
Corporate Income Tax	46 – 48

Analysis

Although personal income tax constitutes a growing share of direct taxes in India, the overall level of direct tax collection remains constrained by a narrow effective tax base. A large proportion of individual taxpayers either fall below the exemption threshold or have zero tax liability, limiting revenue potential.

- **Administrative Efficiency and Compliance Indicators**

Administrative effectiveness is reflected in the stage at which tax revenue is collected.

Table 5: Stage of Income Tax Collection (India)

Collection Stage	Share of Total Income Tax (%)
Pre-assessment (TDS, Advance Tax)	90 – 93
Post-assessment	7 – 10

Analysis

The dominance of pre-assessment collections indicates improvements in withholding mechanisms and compliance systems in India. However, despite enhanced efficiency in collection, the overall revenue yield remains modest due to structural limitations in the tax base.

- **Hypothesis-wise Interpretation of Results**

H₁: Significant differences exist in the structure and administration of personal income tax systems across countries.

Supported by variations in exemption thresholds, slab structures, and administrative mechanisms.

H₂: Higher exemption thresholds are associated with greater progressivity.

Supported, as evidenced by the UK and US systems.

H₃: Simplified tax structures generate stronger revenue outcomes.

Supported, particularly by the UK experience.

H4: Compliance mechanisms influence revenue performance more than statutory rates.

Supported, as India's moderate rates coexist with lower revenue outcomes.

Summary of Data Analysis

The comparative data analysis indicates that:

- Higher statutory tax rates do not automatically translate into higher revenue.
- Broader tax bases, higher exemption thresholds, and strong withholding mechanisms contribute significantly to revenue performance.
- India's lower personal income tax revenue reflects institutional and structural constraints rather than inadequate statutory rates.

Discussion of Findings

- The comparative analysis of personal income tax systems across India, the United Kingdom, and the United States reveals several important insights into the relationship between tax structure, progressivity, and revenue performance. The findings indicate that differences in revenue outcomes cannot be explained solely by statutory tax rates, but are strongly influenced by structural and institutional factors.
- First, the analysis demonstrates that advanced economies such as the United Kingdom and the United States achieve substantially higher personal income tax revenue as a percentage of GDP compared to India. This suggests that a broader tax base, higher income levels, and stronger administrative capacity play a decisive role in determining revenue performance. Despite having higher exemption thresholds, these countries are able to generate significant revenue due to effective compliance mechanisms and widespread formal employment.
- Second, the results highlight the importance of tax structure simplicity. The United Kingdom's relatively simple tax system, characterised by fewer tax slabs and a clear personal allowance, contributes to ease of compliance and administrative efficiency. In contrast, India's historically complex structure with multiple slabs and exemptions has increased compliance costs and reduced transparency, although recent reforms have aimed at simplification.
- Third, progressivity outcomes vary significantly across the selected countries. While the UK and the US exhibit strong statutory progressivity supported by higher exemption thresholds, India's progressivity is comparatively moderate. Early tax incidence on middle-income groups in India may affect perceptions of fairness and voluntary compliance.

Finally, the findings confirm that administrative efficiency and withholding mechanisms are critical determinants of personal income tax performance. Countries with strong pre-assessment collection systems are better able to translate statutory provisions into actual revenue. India's increasing reliance on withholding mechanisms reflects positive reform momentum, but structural constraints continue to limit overall revenue mobilisation.

Policy Implications

- Based on the comparative findings, several policy-relevant implications emerge, particularly for improving personal income tax performance in developing economies such as India.
- First, there is a strong case for prioritising tax base expansion rather than increasing statutory tax rates. Broadening the tax base through improved income reporting, formalisation of the economy, and better integration of digital financial data can enhance revenue without imposing excessive burdens on compliant taxpayers.
- Second, simplification of the tax structure should remain a key policy objective. Reducing the number of tax slabs, rationalising deductions, and providing greater clarity in statutory provisions can lower compliance costs and improve transparency, thereby strengthening voluntary compliance.
- Third, enhancing exemption thresholds in line with income growth and inflation can improve equity outcomes. Comparative evidence suggests that higher exemption levels do not necessarily undermine revenue performance when supported by strong compliance systems.

- Fourth, continued strengthening of withholding and information-reporting mechanisms is essential. Expanding the scope of tax deduction at source and improving third-party reporting for non-salaried income can significantly improve revenue efficiency.
- Finally, policy design should focus on building institutional trust and administrative credibility, as sustained revenue mobilisation depends not only on statutory provisions but also on taxpayer confidence in the tax system.

Conclusion

This study undertook a comparative analysis of personal income tax systems in India, the United Kingdom, and the United States with the objective of examining differences in tax structure, progressivity, and revenue performance. Using secondary quantitative data and comparative analytical techniques, the study highlighted significant cross-country variation in the effectiveness of personal income taxation.

The findings demonstrate that higher statutory tax rates alone do not guarantee higher revenue outcomes. Instead, broader tax bases, simplified structures, effective withholding mechanisms, and strong administrative capacity are more important determinants of personal income tax performance. Advanced economies are able to combine equity objectives with strong revenue mobilisation due to institutional efficiency and widespread compliance.

For India, the analysis suggests that continued reforms aimed at simplification, base expansion, and administrative strengthening are likely to yield better revenue and equity outcomes than reliance on rate increases. Overall, the study contributes to the existing literature by providing integrated comparative evidence on personal income taxation and offers policy-relevant insights for developing economies seeking to strengthen their fiscal systems.

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