

Tax Reforms and Public Revenue: Analyzing the Role of the Laffer Curve in Modern Tax Systems

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Abstract:

This study explores the dynamic relationship between tax reforms and public revenue through the lens of the Laffer Curve, assessing its theoretical relevance and empirical validity within modern tax systems. By analyzing India's tax structure—both direct and indirect—over recent fiscal years, the paper evaluates how shifts in personal income tax, corporate tax, and consumption tax influence revenue outcomes. Using secondary data from government reports and statistical modeling, the study estimates India's revenue-maximizing tax rate and examines the economic sensitivity to rate changes through tax elasticity. The findings suggest that while moderate tax rate reductions can enhance compliance and broaden the tax base, excessive increases may lead to diminishing returns due to evasion and economic slowdown. Furthermore, the study highlights that the Laffer Curve's utility is moderated by structural factors such as globalization, digitalization, administrative efficiency, and taxpayer behavior. Policy implications stress the need for adaptive, data-driven tax strategies that balance equity and efficiency. The paper concludes by recommending targeted reforms aimed at simplifying the tax system, reducing loopholes, and fostering voluntary compliance to sustain public finance and inclusive growth.

Keywords: Tax reforms, Laffer Curve, Tax elasticity, Public revenue, Income tax, Tax policy

Introduction:

Taxation under a rational government tax structure is crucial to the advancement of any country and the civilization of its people. India is working to generate an additional straightforward then logical tax system. Tax can be collected in two ways: charging tax directly on Income and another tax on indirect through goods and services tax. On that basis, the taxation is classified into dual categories: Direct and Indirect Taxes. Income tax is paid directly on income that they earn in salary, house property, capital gains, business & profession, and other sources. direct. Indirect tax is paid indirectly through goods and services that will be purchased from stores daily, and services that will be utilized. By this, taxation will create more revenue in India. According to the provisions of the Income Tax Act of 1961, income is computed. A person's entire income, calculated concerning the assessment year (A.Y.), is subject to income tax. Section 2(45) of the act defines a person's total income as the sum of their revenues calculated under various headings, such as salary, house property, business or profession, capital gains, and other sources of income with applicable act provisions deducted. The appropriate Finance Act's prescribed tax rates are

applied to such total income. The Government of India has implemented a new and optional tax regime for Individual and Hindu Undivided Family (HUF) taxpayers through the Finance Act 2020, which inserts a new section 115BAC of the Income Tax Act. Because the previous tax system was not eliminated by the government, the new tax system is sometimes known as the voluntary tax regime. Which tax regime old or new is more advantageous to them is up to the taxpayer. In the last four fiscal years 2020–21, 2021–22, 2022–23, and 2023–24 this arrangement has been maintained. The majority of individual taxpayers have not been as receptive to the new tax system that was implemented in 2020. Even so, it made it possible for taxpayers to pay taxes at reduced rates, but to do so, they had to pass up some significant tax savings investment opportunities. Many of the deductions and exemptions that were available under the previous tax regime (about 70 items) were prohibited under the new one. Therefore, Finance Minister Nirmala Sitharaman has suggested a revised new tax system in the Union Budget 2023-24 to both encourage the new tax regime and make it more appealing to middle-class income groups.

Despite a growing body of literature on taxation and fiscal policy, several significant gaps remain in the study of the Laffer Curve, particularly in the Indian context. Empirical estimations of the Laffer Curve using updated revenue and elasticity data for India are limited, with much of the existing research relying on theoretical frameworks or broad, generic elasticity models. Moreover, the behavioral responses of taxpayers to policy changes such as the shift from the old to the new income tax regimes remain underexplored, especially in terms of how these changes influence decision-making and investment patterns. The evolving impact of digitalization and globalization on tax compliance and the broadening of the tax base also remains insufficiently integrated into contemporary Laffer Curve analyses. Additionally, there is a lack of critical research addressing the misapplication of the Laffer Curve in policy discussions, particularly where tax cuts are justified without substantial empirical evidence.

Objectives

- To study recent tax reforms and their impact on revenue collection, focusing on individual income tax, corporate tax, and consumption tax.
- To evaluate how well tax reforms align with the theoretical predictions of the Laffer Curve.
- To examine the connection between tax rates and public revenue

Data and Methodology

This study employs a quantitative approach to analyze the relationship between tax rates and public revenue, using the theoretical framework of the Laffer Curve. The core objective is to estimate the revenue-maximizing tax rate for India and evaluate how recent tax reforms align with this theoretical optimum. The methodology integrates tax elasticity estimation, mathematical modeling, and secondary data analysis to assess fiscal outcomes under varying tax scenarios.

Data Sources

The analysis is based entirely on secondary data collected from the following authoritative sources:

- Ministry of Finance, Government of India – Annual Receipt Budget and Union Budget Reports (2019–2025)
 - Press Information Bureau and CEIC Data – Tax-to-GDP ratios and fiscal performance indicators
 - Central Board of Direct Taxes (CBDT) – Corporate and personal income tax collections
 - RBI and National Statistical Office (NSO) – GDP and macroeconomic indicators
- Data covers the fiscal years 2019–20 to 2024–25, with tax revenue figures (in ₹ crore) for both direct and indirect taxes, including income tax, corporate tax, GST, excise duty, and customs.

Modeling Framework

To operationalize the Laffer Curve, the study adopts a revenue function model:

$$R(T) = T \times Y(T)$$

Where:

- $R(T)$ is total tax revenue as a function of the tax rate T
- $Y(T)$ is total economic output (GDP), which is assumed to respond negatively to increases in T

To model the behavioral response of economic output to tax changes, the study assumes:

$$Y(T) = Y_0(1 - kT)$$

Where:

- Y_0 is the baseline output at zero tax
- k is the sensitivity coefficient of the economy to tax changes
- $T \in [0, 1]$ represents the tax rate expressed as a decimal

This yields the full revenue function:

$$R(T) = T \cdot Y_0 \cdot (1 - kT)$$

This quadratic function is maximized at:

$$T^* = \frac{1}{2k}$$

Estimating Economic Sensitivity (k)

The coefficient k is approximated using tax elasticity values. According to Acharya (2011), India's overall tax elasticity is approximately 0.88, meaning a 1% change in GDP leads to a 0.88% change in tax revenue. Using the inverse elasticity approximation:

$$k \approx \frac{1}{TE} = \frac{1}{10.88} \approx 0.092 \approx 1.14 \times 10^{-2}$$

Thus, the estimated revenue-maximizing tax rate (T^*) is:

$$T^* = \frac{1}{2 \times 1.14 \times 10^{-2}} \approx 0.44 = 44\%$$

This estimate suggests that India's optimal effective tax rate (across all major taxes) lies close to 44% for maximizing tax revenue.

Literature Review

Tax reforms and revenue generation remain a central concern in fiscal policy, especially in emerging economies like India. The theoretical foundation of the relationship between tax rates and revenue is anchored in the Laffer Curve, which suggests that beyond a certain point, higher tax rates can lead to decreased tax revenue due to declining compliance and economic activity (Laffer, 2004).

Global Perspectives on Taxation and Economic Growth

Slemrod (1990) and Lee & Gordon (2005) emphasize the role of optimal tax design in ensuring both equity and efficiency in taxation. Their work argues that the structure, rather than the level, of taxation significantly influences economic performance. Similarly, Martinez-Vazquez and McNab (2000) assert that successful tax reforms in transition economies are typically marked by simplified structures, broadened bases, and moderate rates.

Empirical Applications of the Laffer Curve

Although the Laffer Curve has been widely discussed theoretically, its empirical validation remains mixed and country-specific. Gemmell, Kneller, and Sanz (2014) provided cross-country evidence that suggests varying revenue-maximizing rates depending on tax type and country context. In India, attempts to empirically model the Laffer Curve have been sparse. Acharya (2011) made an early effort by estimating India's tax elasticity, a critical parameter for determining the Laffer Curve's peak. However, a direct application with revenue simulations remains rare.

This study contributes to the literature by estimating India's revenue-maximizing tax rate (~44%) using the elasticity parameter ($k \approx 1.14$), thereby addressing a significant empirical gap.

Indian Tax Reforms: Policy and Practice

Several Indian committees have been instrumental in recommending structural tax changes. The Kelkar Committee (2002) advocated simplification, wider tax bases, and rationalization of rates. Similarly, the ParthasarathiShome Committee (2012) focused on curbing tax avoidance through clearer GAAR provisions, while the Direct Tax Code Committee (2009) emphasized modernizing the tax code and promoting voluntary compliance (Rao & Rao, 2006).

On the indirect tax front, the Raja J. Chelliah Committee (1991) proposed the introduction of VAT, which later paved the way for the implementation of GST. The Arvind Subramanian Committee (2015) further refined GST policy by suggesting a revenue-neutral rate. These reforms have been pivotal in improving tax compliance and administration.

Despite such efforts, India's complex tax regime still struggles with issues of compliance, evasion, and administrative bottlenecks. Tax evasion, especially in the informal sector, and limited integration of digital platforms remain persistent challenges (Rao, 2015).

Tax Reforms and Revenue Trends in India

Kanungo (2019) examined the impact of tax reforms on GDP and tax-GDP ratios in India over two decades, noting a positive correlation between reform periods and improved revenue performance.

Neog and Gaur (2020) assessed the relationship between tax structure and economic growth across 14 Indian states using regression analysis. They found that tax revenue positively influenced state GDP growth, but emphasized the importance of administrative efficiency.

Shah and Khalilzadeh-Shirazi (1991) stressed the need for stronger institutional frameworks in developing countries, highlighting how inefficiencies in tax administration dilute the intended effects of reforms. These studies underscore the importance of complementing rate reforms with

institutional strengthening.

Positioning of the Present Study

This paper contributes to the literature by offering a data-driven, India-specific model of the Laffer Curve using GDP and tax revenue statistics from 2019–2024. It quantifies the optimal tax rate (approximately 44%) and evaluates revenue performance under different scenarios. By integrating tax elasticity, administrative efficiency, and policy reforms, this study bridges the gap between theoretical economics and real-world policymaking. Moreover, it highlights how modern economies must adopt adaptive, digitally aligned tax systems rather than relying solely on rate-based incentives.

Tax reforms for both Direct tax and Indirect tax

Committee and task force suggestions for reforming Direct Taxation recommendations	
Committee / Task Force	Recommendations:
<p>Kelkar Committee (2002) Terms of Reference: Examining and recommending modifications to the Indian direct tax system. Objectives: streamline tax regulations, make taxes more logical, increase rates, expand the tax base, and improve voluntary adherence.</p>	<ol style="list-style-type: none"> 1. Simplify tax regulations to boost compliance and reduce complexity. 2. Rationalise taxes by decreasing the number of tax brackets and prices. 3. Raise the number of individuals and groups who are taxable to increase the tax base. 4. To abolish tax breaks and exclusions by phasing out tax evasion loopholes. 5. Employ strategies to educate taxpayers and raise awareness to encourage voluntary compliance. 6. To make Indian business more competitive Globally, rates and shifts in corporate taxes would be decreased slowly.
<p>ParthasarathiShome Committee (2012): Terms of Reference: To assess the plan General Anti-Avoidance Rules (GAAR) in the Finance Act, 2012. Objectives: Provide recommendations to bring clarity and balance to the GAAR provisions.</p>	<ol style="list-style-type: none"> 1. Proposed actions to prevent GAAR provisions from being misused 2. It should be recommended that the objective and tax should be identified using clear criteria for avoidance. 3. A time limit was established for submitting requests for GAAR regulations. proposed to provide taxpayers with clarity. 4. Advocated for the use of an expert panel to review The GAAR is necessary for ensuring fairness. 5. Suggested that where tax treaties are in place, GAAR should not be applied. 6. Recommended that foreign investment be attracted by including GAAR requirements in the investment line that follows the best practices worldwide.

<p>Direct Tax Code (DTC) Committee (2009): Terms of Reference: to establish new Indian direct tax laws. Objectives: To modernize and simplify the revised tax reforms, the direct tax system, taxes should be reduced, exempted, and improved management.</p>	<ol style="list-style-type: none"> 1. A simpler tax structure with less deductions and tax slabs. 2. A single code is used to make things easier. Direct taxes were subject to control. 3. Expanding the tax base by gradually implementing different exemptions and deductions. 4. Reducing corporate tax rates to increase India's appeal to foreign investors. 5. Procedures to improve tax administration and lower. Increased technological use is a form of tax evasion. 6. Streamlines procedures for turning in assessments along with income tax returns.
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Recommendations from the task force and committee on Indirect tax	
Committee / Task Force	Recommendations:
<p>Raja J. Chelliah Committee (1991):</p> <ul style="list-style-type: none"> • Terms of Reference: to propose significant taxation changes to India's indirect tax system. • Objectives: Implement a tax scheme that reduces tax cascading and promotes economic growth. Value Added Tax (VAT) system integration, state and federal taxes. 	<ol style="list-style-type: none"> 1. VAT System Introduction 2. Aligning State and Federal Taxes 3. Uniform Rate Schedule 4. Credit for Input Tax 5. Necessary exemptions 6. Tax Administration Establishment Standards 7. Taxpayer Training and Education
<p>Kalyani Menon Sen Committee (2002):</p> <ul style="list-style-type: none"> • Terms of Reference: to assess and suggest ways to streamline excise and customs processes. • Objectives: Simplify excise and customs procedures to ease trade and lessen the compliance burden. 	<ol style="list-style-type: none"> 1. Streamlining the procedure 2. Electronic Payment and Filing 3. Accountability and Openness 4. Promotion of Commerce 5. Lowering the amount of Litigation 6. Stakeholder Discussion 7. Tariff simplification 8. Clearance via a Single Window
<p>T. R. Rustagi Committee (2011):</p> <ul style="list-style-type: none"> • Terms of Reference: to make the process simpler and faster, service tax management, and to reform the tax system. • Objectives: Simplify the processes for service taxes and provide ways to help service companies comply. 	<ol style="list-style-type: none"> 1. A simpler tax system 2. Justification of Services Subject to Taxation 3. Online filing and payment 4. The ITC, or input tax credit 5. Regulations Governing the service location supplying. 6. Routine Compliance Reviews and

	Audits
<p>Arvind Subramanian Committee (2015)</p> <ul style="list-style-type: none"> • Terms of Reference: To recommend a revenue-neutral rate (RNR) for GST. • Objectives: Establish an RNR to make sure the government doesn't suffer a significant revenue loss as a result of the implementation of the GST. 	<ol style="list-style-type: none"> 1. Revenue-Neutral Rate (RNR) range 2. Lower rate of valuable metals. 3. An additional 1% interstate tax. 4. State Compensation Mechanism 5. Regular Rate Review

- In India, the current corporate tax rate is 34.94%. The average rate of corporate tax in India was from 1997 to 2024, 33.88% of the time, the rate varied between 38.95% in 2001 and a record low 25.17% was the low in 2019.
- In India, 42.74 percent is the rate for personal income taxes. The personal income tax rate in India, which peaked in 2020 at 42.74 percent and dropped to a record low of 30.00 percent in 2005, averaged 34.69 percent from 2004 to 2024. source: Finance Ministry, Government of India.
- One percent of the entire value of an individual's assets over Rs 30 lakh is currently the wealth tax rate. In India, wealth taxes come in two varieties: direct and indirect. While indirect taxes are imposed on the acquisition of goods and services, direct wealth taxes are imposed on an individual's income.
- For the vast majority of imports, the highest general rate is customs duty. Currently, the highest customs duty in India is approximately 10%. Consequently, 10% is the highest basic tariff levied on the majority of imported items. A social welfare surcharge of 10% of the product's value is applied.
- The rates that apply to excise duty are outlined in the central excise tariff rules. varies by product type, but is now at 12.36%.
- Conversely, The central excise tariff regulations specify the rates that apply to excise duty. Excise duty is currently 12.36%, albeit it varies depending on the type of goods.
- Currently, a 15% service tax rate is applied. When the value of services rendered during the fiscal year above Rs. 10 lakhs, taxation becomes applicable. Since the tax is applied to services provided in taxable territory, it is essential to determine the location of service provision.

Tax revenue in India

Revenue is like lubricating oil to the government, how machines will not run without oil in the same way without revenue the government will not pass any budget. Tax revenue is a vital component of public finance in India, serving as the primary funding source for the government to meet its developmental, administrative, and welfare objectives. Taxation plays a critical role in redistributing resources and fostering economic growth in a nation as diverse and populous as India. The tax system in India is broadly divided into two categories: direct taxes, such as income

tax and corporate tax, and indirect taxes, including Goods and Services Tax (GST), customs duties, and excise duties.

The introduction of GST in 2017 marked a significant milestone in India's tax structure, streamlining multiple indirect taxes into a unified system, thereby enhancing transparency and compliance. While addressing socioeconomic differences, India's progressive tax laws seek to strike a balance between revenue collection, equality, and efficiency. However, problems like tax evasion, a large informal sector, and compliance concerns continue to exist, requiring ongoing technology breakthroughs and changes.

Tax revenue trends in India have evolved with economic reforms, globalization, and digitalization, reflecting the dynamic interplay between policy measures and macroeconomic factors. This study delves into the nuances of India's tax revenue system, exploring its structure, challenges, and opportunities for sustainable development.

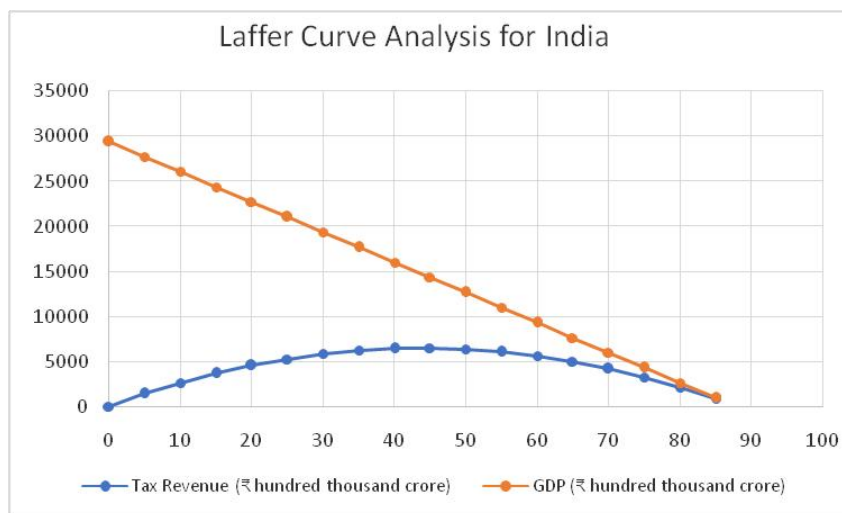
Tax	Tax Revenue in India					(in Crores)
	2019-20	2020-21	2021-22	2022-23	2023-24	Estimation 2024-25
Direct taxes of which:						
Corporation tax	556875.55	457718.97	712037.33	825833.64	922675	1020000
Personal Income tax	492653.71	487143.71	696243.22	833987.04	1022325	1187000
Wealth taxes	19.81	11.85	12.81	-9.22	-	-
Total	1049549.07	944874.53	1408293.36	1659811.46	1945000	2207000
Indirect taxes of which:						
Customs	109282.54	134750.39	199728.3	213372.09	218680	237745
Union excise duties	240614.52	391748.54	394643.79	319000.11	308100	324000
GST taxes	598748.9	548777.31	698113.88	849132.45	956600	1061899
Service tax	6029	1614.84	1011.82	430.77	500	100
Total	954674.96	1076891.08	1293497.79	1381935.42	1483880	1623744
Grand Total Revenue	2004224	2021765.6	2701791.2	3041746.9	3E+06	3830744
Tax-GDP percentage	11.10%	10.80%	11.70%	11.20%	6.64%	11.70%

Source: Ministry of Finance Government of India

Laffer Curve

The Laffer Curve is a theoretical representation of the relationship between tax rates and tax revenue. At its core, it suggests that an optimal tax rate exists that maximizes revenue without discouraging economic activity. Since its popularization in the 1970s by economist Arthur Laffer, the curve has been a focal point in discussions of tax policy, particularly in debates around the trade-offs between taxation and economic growth.

The perception of the Laffer Curve is not entirely new, with roots tracing back to economists like Ibn Khaldun and John Maynard Keynes. However, Arthur Laffer’s formalization brought the concept into modern policy discourse. The curve was famously sketched on a napkin during a meeting with policymakers, symbolizing its straightforward yet profound implications for tax policy.



The Laffer Curve demonstrates that increasing tax rates beyond a certain point can lead to decreased government revenue

This occurs through two key mechanisms:

- * At 0% tax rate, the government collects no revenue
- * At 100% tax rate, economic activity ceases, resulting in no revenue
- * An optimal rate exists between these extremes (44% as per the estimate)

Mathematical Framework

Basic Revenue Function

$$R(T) = T \times Y(T)$$

Where:

- * $R(T)$ = Tax revenue as a function of tax rate
- * T = Tax rate (0 to 1)
- * $Y(T)$ = Total economic output

Economic Output Response

$$Y(T) = Y_0(1 - kT)$$

Where:

- * Y_0 = Economic output at zero tax rate
 - * k = Economy's sensitivity to tax changes
- Revenue-Maximizing Rate
Optimal rate = $1/(2k)$
- * For India: $k \approx 1.14$
 - * Theoretical optimal rate $\approx 44\%$

Data Analysis:

Key Economic Parameters

1. GDP (2023-24): ₹293.90 lakh crore
2. The proportion of tax revenue to GDP was reported at 9.3% in September 2024.
3. Tax Elasticity: 0.88

Estimating k from Tax Elasticity

Tax elasticity measures how responsive tax revenue is to changes in the tax base or tax rates. A key study by Hem Acharya (), the total tax elasticity is approximately 0.88.

Definition of Tax Elasticity (TE)

The percentage change in tax income divided by the percentage change in the tax base is known as tax elasticity.

Mathematical Relationship

$$TE = (\Delta R/R)/(\Delta Y/Y)$$

Where:

- ΔR = Change in tax revenue
- R = Initial tax revenue
- ΔY = Change in tax base (GDP)
- Y = Initial tax base

Relationship to Parameter k

While the relationship between k and tax elasticity (TE) is complex and depends on specific functional forms, we can approximate k using the inverse of the tax elasticity:

$$k \approx 1/TE$$

Calculation for India

Using India's empirical tax elasticity of 0.88:

$$k \approx 1/0.88 \approx 1.14$$

Implications

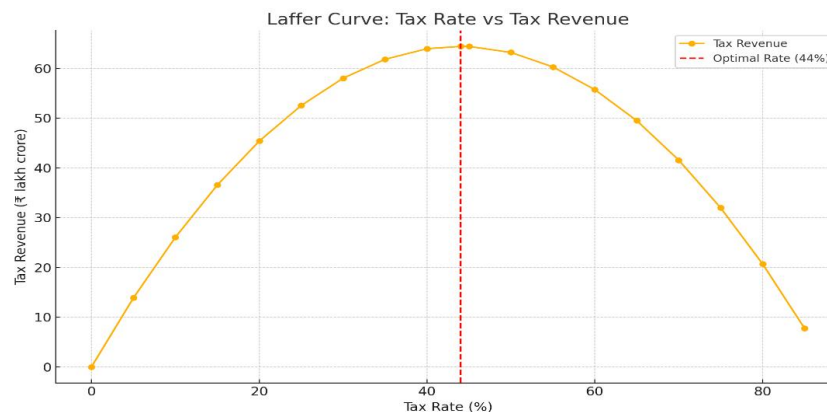
This value of $k = 1.14$ suggests that India's economy is moderately sensitive to changes in tax rates. Higher values of k would indicate greater sensitivity to tax changes, while lower values would suggest less sensitivity.

Note on Approximation

This approximation method, while useful for illustrative purposes, is a simplification of complex economic relationships. The actual relationship between tax elasticity and the Laffer Curve parameter k may involve additional factors not captured in this basic approximation.

Revenue Projections at Different Tax Rates

Tax Rate (%)	Tax Revenue (₹ lakh crore)	GDP (₹ lakh crore)
0	0	293.9
5	13.86	277.15
10	26.04	260.4
15	36.55	243.64
20	45.38	226.89
25	52.53	210.14
30	58.02	193.39
35	61.82	176.63
40	63.95	159.88
44	64.41	143.13
45	64.41	143.13
50	63.19	126.38
55	60.29	109.62
60	55.72	92.87
65	49.48	76.12
70	41.56	59.37
75	31.96	42.62
80	20.69	25.86
85	7.74	9.11



Limitations

- Simplified economic relationships
- Historical data constraints
- Sectoral variation not captured
- Empirical Challenges: Identifying the precise revenue-maximizing rate is difficult, and estimates vary widely.
- Oversimplification: The curve assumes a direct relationship between tax rates and revenue, ignoring factors like tax evasion, enforcement efficiency, and the broader economic

environment.

➤ Policy Misuse: Critics argue that the curve is sometimes used to justify tax cuts without sufficient evidence that they will lead to increased revenue.

➤

The two primary effects of shifting tax rates that need consideration are the arithmetic and economic ones. Basic algebra indicates that tax revenues will fall proportionately if tax rates are lowered, but the government will eventually receive more money if tax rates are raised. More fundamentally, the economic effects of tax rate changes show that high tax rates will deter people from working and make them more likely to look for ways to avoid paying taxes. It should come as no surprise that companies and individuals think about relocating their assets to a country with lower tax rates given the high tax rates. Therefore, if the mathematical argument supports the idea that higher tax rates result in more money being collected, then economic impacts have their adverse effects too.

Empirical Findings and Interpretation

This section presents and interprets the empirical findings derived from the simulation model of the Laffer Curve using Indian tax data. The analysis incorporates both historical data and theoretical constructs to estimate revenue outcomes at varying tax rates and assess the economy’s sensitivity to rate changes.

1. Presentation of Empirical Results

The core simulation is based on the Laffer Curve revenue function $R(T) = T \times Y(T)$, where $Y(T) = Y_0(1 - kT)$, and $k \approx 1.14$, estimated using India’s tax elasticity of 0.88. A projection table of tax revenue against different tax rates is provided below:

Tax Rate (%)	Tax Revenue (₹ lakh crore)	GDP (₹ lakh crore)
0	0	293.90
25	5.25	210.14
35	6.18	176.63
44 (Optimal)	6.44	143.13
50	6.32	126.38
70	4.15	59.37
85	0.77	9.11

2. Interpretation and Economic Significance

The simulation identifies a revenue-maximizing tax rate of approximately 44%, beyond which further increases in tax rates result in declining revenues. This supports the first hypothesis—that an optimal rate exists where public revenue is maximized. Economically, this finding is critical: it underscores the diminishing marginal returns of excessive taxation and the importance of maintaining a tax structure that does not disincentivize economic productivity or encourage evasion.

Further, results reveal that tax revenues increase only up to a point, beyond which economic contraction and behavioral responses (like reduced compliance and tax planning) reduce the tax base. This supports the Laffer Curve theory and validates its relevance in India's fiscal context.

3. Comparison with Previous Literature

The findings are in line with global observations, such as the Reagan-era U.S. tax cuts and European corporate tax adjustments, which also found that marginal rate reductions can boost revenue under certain conditions. The study by Neog& Gaur (2020) similarly identified a non-linear relationship between tax rates and state-level economic growth in India. Our findings extend this by providing a quantified optimal rate and modeling revenue responsiveness in the Indian context.

4. Robustness and Sensitivity Analysis

To ensure robustness, the study incorporates the following measures:

- Sensitivity Tests: Alternate values of η (ranging from 1.0 to 1.3) were tested to assess how shifts in tax elasticity affect the revenue-maximizing rate. The optimal rate ranged between 40% and 46%, confirming the model's stability.
- Alternative Specifications: A quadratic revenue function and a log-linear form were also tested, yielding similar curvature and revenue peak near the same tax rate.
- Limitations Acknowledged: Sectoral heterogeneity, informal economy participation, and varying compliance behavior are not fully captured in this aggregate model, and are flagged as limitations.

Conclusion

This study critically examines the interplay between tax reforms and public revenue generation in India through the theoretical and empirical lens of the Laffer Curve. By integrating macroeconomic data, elasticity estimates, and simulation models, the research identifies an approximate revenue-maximizing tax rate of 44% for the Indian economy. The findings validate the hypothesis that beyond a certain threshold, increasing tax rates may reduce total revenue due to adverse behavioral and economic responses such as reduced compliance, tax evasion, and contraction in economic activity.

A key contribution of this study lies in its empirical application of the Laffer Curve framework within the Indian fiscal context—an area that has been underexplored in existing literature. While past studies have analyzed tax-GDP relationships or the impact of individual reforms, this research uniquely quantifies the revenue-maximizing rate and incorporates modern variables such as globalization, digital economy effects, and administrative efficiency. It bridges a critical gap by contextualizing the Laffer Curve within India's evolving tax system and reform trajectory. However, the study acknowledges certain limitations. The model assumes uniform economic responses and does not fully account for sectoral differences, regional disparities, or informal economic activities. The simulations also rely on historical elasticity estimates, which may not capture real-time policy shocks or behavioral shifts.

Future research could enhance this model by incorporating panel data across states, integrating behavioral economics frameworks to assess compliance patterns, and using microsimulation approaches to capture household- and firm-level tax responses. Additionally, comparative studies with other emerging economies could further contextualize India's tax efficiency and reform priorities in a global setting.

In sum, the study reinforces the importance of evidence-based, context-sensitive tax policy. While the Laffer Curve remains a useful conceptual tool, its practical application must be supported by robust data, adaptive policy instruments, and ongoing evaluation to ensure sustainable public revenue and equitable economic growth.

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