

Fiscal Dependency of Karnataka

Rumana Fathima

Department of post-graduation studies in Economics, Government First Grade College, K.R.Puram, Bengaluru, Karnataka, India.

DOI: <https://doi.org/10.5281/zenodo.1758307>

ABSTRACT:

Revenue adequacy refers to the availability of a sufficient level of revenue to finance essential public services. The objective of this study is to examine the changing trends in the composition of total revenue receipts of Karnataka. Covering the period from 2011–12 to 2023–24, the analysis focuses on Karnataka's fiscal autonomy and its dependency on various components of transfers. To examine compositional shifts and growth patterns in the total revenue receipts comprising own tax revenue, non-tax revenue, share in central taxes and grants, it employs descriptive statistics, Coefficient of Variation, Annual Average Growth Rate, and Compound Annual Growth Rate. It is evident from the analysis of CAGR and AAGR that, growth of total revenue receipts displayed a steady long-term expansion, with an AAGR of 6.42% and a CAGR of 6.15%. Within this, own source revenue has recorded an AAGR of 5.82% and a CAGR of 5.66%, reflecting stable but moderate growth, largely driven by SGST, excise, and stamp duty. In contrast, intergovernmental transfers grew more rapidly, with an AAGR of 8.18% and a CAGR of 7.36%, indicating increasing reliance on central transfers. Among the two major components of transfers, the share in central taxes an AAGR of 8.25% but a lower CAGR of 5.68%, due to volatility during the early years of GST implementation and disruptions caused by COVID-19. Grants from the Centre exhibited the highest growth, with an AAGR of 11.16% and a CAGR of 9.28%, though their unstable and conditional nature makes them an unreliable revenue source. Overall, own source revenue has remained as most stable source of revenue. However, Karnataka's recent revenue growth has been driven largely by central transfers and grants, highlighting structural dependence despite a strong internal revenue base. The evidence suggests that, despite stronger fiscal self-reliance, Karnataka continues to rely on intergovernmental transfers to sustain revenue growth.

KEYWORDS:

Fiscal Dependency, Own Source Revenue (OSR), Intergovernmental Transfers (IGT), Revenue Adequacy, Compound Annual Growth Rate (CAGR).

1. Introduction:

Karnataka has sound fiscal indicators. Karnataka is one of the fiscally progressive and fiscally disciplined states in Indian federal system. Despite being a strong performer in own-revenue mobilization, Karnataka continues to rely on central transfers to meet its growing expenditure obligations. For instance, during the period 2011–12 to 2023–24, the state witnessed consistent revenue growth, reflecting both economic resilience and improved tax administration. As per budgetary data, total revenue receipts increased from ₹69,806 crore in 2011–12 to nearly ₹2.74 lakh crore in 2023–24, with own tax revenue accounting for about 58% in recent years. Meanwhile, the contribution of central transfers constituted around 30% to 37% over the last decade.

Resources available to the state government can be broadly classified as state's own resources and federal transfers. Since both own-source revenue and federal transfers together determine the total revenue receipts that finance the state's expenditure obligations, this study aims to examine the relative growth of own-source revenue and federal transfers using growth indicators such as the Compound Annual Growth Rate (CAGR) and Average Annual Growth Rate (AAGR). The objective is to assess how the structure and growth of Karnataka's revenue receipts evolved during 2011–12 to 2023–24, ensuring the sustainability of its current revenue structure and its continued fiscal prudence.

2. Review of Literature:

i) Anantha Ramu M.R (2002) – The study analyzed the link between fiscal deficit and economic growth in Karnataka, revealing a positive long-term relationship. Fiscal deficit was largely development-oriented, focused on infrastructure, though capital expenditure was declining. It suggested raising the fiscal deficit ceiling by 0.5% of GSDP for productive investment.

ii) Gayathri K. (2018) – Examined the fiscal dependency of Karnataka's PRIs and ULBs on higher governments. Despite increased transfers, local autonomy remained weak as funds were mainly used for salaries and non-plan expenses, with transfers often below Finance Commission recommendations, showing persistent fiscal imbalance.

iii) Anantha Ramu M.R (2020) – Reviewed Karnataka's adherence to KFRA fiscal targets. The state largely met deficit and debt limits but faced issues from rising committed liabilities. The study emphasized fiscal transparency and alignment with national fiscal goals.

iv) Darshini J.S. & Gayithri K. (2019) – Assessed inter-state fiscal dependency using FD ratios, finding Karnataka relatively better but still reliant on external transfers and market borrowings. It recommended enhancing own-revenue sources and seeking more untied transfers to strengthen fiscal autonomy.

3. Research Methodology:

The present study is descriptive and analytical in nature, relying exclusively on secondary data collected from the State Finances: Study of Budgets (RBI), Economic Surveys of Karnataka, and Government Budget Documents. The study covers the period 2011–12 to 2023–24. The variables examined include Own Source Revenue (OSR), Inter-Governmental Transfers (IGT), Share in Central Taxes, Grants from the Centre. Before examining the growing trend in the revenue receipt of Karnataka, Coefficient of Variance is used to measure the stability of variable to trace the basic nature of data on revenue receipts. And CAGR, is used to measure long-term growth trend and AAGR to capture year-to-year growth variations of fiscal variables.

4. Data Analysis:

The Coefficient of Variation is a statistical measure that represents the degree of variability relative to the mean of a dataset. In this context, the CV is employed to assess the stability or volatility of different revenue sources over time. Table 1 presents the coefficient of variation for major revenue components.

Table 1: Coefficient of Variation of Variables

VARIABLES	CV
Total Revenue	21.65
Share in Central Taxes	29.12
Grants from the Centre	39.73
Finance Commission Grants	188.92
Grants under proviso to Article 275(1) of the Constitution	208.51
Inter Governmental Transfers	30.94
Own Source revenue	18.05

Note: Author's own calculation

The CV of OSR is 18.05%, while that of IGT is notably higher, indicating greater volatility in transfers compared to own revenue. Within total transfers, central grants are more volatile than shared taxes. Among the grants, Finance Commission grants and Article 275(1) grants exhibited high volatility due to irregular disbursements and policy-based allocations. This disparity highlights a structural issue, as state-generated revenues are relatively stable and predictable compared to central transfers.

A] AAGR Growth Trends

AAGR, being the arithmetic average of year-to-year growth rates, helps to identify annual volatility, while CAGR, which accounts for compounding, provides a long-term growth perspective less sensitive to outliers.

Table 2: Average Annual Growth Rates of Receipts of the State Government of Karnataka (%)

1	Total Revenue	6.42
2	Share in Central Taxes	8.25
3	Grants from the Centre	11.16
4	Inter Governmental Transfers	8.18
5	Own Source Revenue	5.82

Note: Author's own calculation

Table 2 present the average growth trends across various components of total revenue receipts, highlighting the relative performance of each revenue source over the study period. Overall AAGR of total revenue stood at 6.42%. The comparative analysis of relative growth rate of own source revenue and total transfers reveals that the AAGR of OSR is 5.82%, while that of transfers is of 8.18%, exhibited central transfers are growing slightly at a faster rate than state's own revenue. Within total federal transfers, the AAGR of central taxes is 8.25%, while that of grants displayed the highest AAGR of 11.16%, primarily due to episodic spikes in centrally sponsored schemes and post-pandemic fiscal support. Growth rate in shared taxes in mainly influenced by periodic changes in Finance Commission recommendations.

AAGR analysis shows that grants from the Centre (11.16%) grew

faster than OSR (5.82%) and Share in Central Taxes (8.25%). This sharp rise reflects post-pandemic fiscal support and centrally sponsored schemes. The moderate OSR growth indicates stable but controlled tax mobilization. Overall, Karnataka's revenue performance was strengthened by temporary central assistance.

B] CAGR Growth Trend

Compared to AAGR, CAGR represents the average rate of return over a period of 10 years, assuming year-on-year compounding growth rate.

Table 3: Compound Growth Rates of Receipts of the State Government of Karnataka (%)

1	Total Revenue	6.15
2	Share in Central Taxes	5.68
3	Grants from the Centre	9.28
4	Centrally Sponsored Schemes	10.31
5	Inter Governmental Transfers	7.36
6	Own Source Revenue	5.66

Note: Author's own calculation

Table 3 present the compound growth trends across various components of total revenue receipts, highlighting the relative performance of each revenue source over the study period. The CAGR of total revenue stood at 6.15%, with Own Source Revenue close behind at 5.66%. On the other hand, growth of transfers grows at the rate of 7.92%, as per the compiled data from budget documents. This indicates that federal transfers expanded faster than the state's own resources during the study period. However, CAGR for Grants from the Centre and CSSs outpaced overall revenue growth. Conversely, the Share in Central Taxes grew more modestly, reflecting the declining devolution share under the 15th Finance Commission.

These figures suggest that while Karnataka's internal fiscal machinery has performed consistently, its long-term revenue trajectory still benefits substantially from central grants. Overall, state witnessed consistent revenue growth, reflecting economic resilience and improved tax

administration, showing that central transfers continued to play a crucial role in revenue expansion.

D] Comparative assessment of Growth Indicators:

- Descriptive statistics indicate that OSR is Karnataka's most stable revenue component. The CV demonstrates stability in OSR recording low volatility, while Shared Taxes and Grants fluctuated moderately. During the pandemic, grants and shared taxes became highly unstable due to revenue contraction and delayed transfers. However, post-COVID, OSR recovered faster, confirming the state's strong fiscal base.
- The narrow gap between AAGR and CAGR indicates Karnataka's balanced and stable fiscal performance. While AAGR reflects yearly variations, CAGR captures sustained growth. Their closeness highlights consistent revenue expansion and fiscal steadiness driven by the state's own fiscal capacity and gradual stabilization of central transfers.
- The growth rate of OSR and IGT reflects both fiscal strength and structural dependency. OSR, maintained a generally positive growth rate, supported by consistent tax inflows from GST, excise, and vehicle taxes. The AAGR & CAGR of OSR reveal stable internal fiscal performance. NTR, though modest, added steady support. In contrast, IGT exhibited higher but more volatile growth, with AAGR of 8.18%, influenced by periodic Finance Commission awards and policy changes. During COVID-19, IGT declined sharply, but rebounded in 2021-22 shows fiscal recovery.

Conclusion:

Karnataka's fiscal journey from 2011-12 to 2023-24 reflects a blend of autonomy and dependency. The state's own tax efforts, driven by strong sectors such as services, manufacturing, and technology, have maintained stable revenue inflows. Yet, the evolving central transfer system marked by reduced devolution shares and increased conditional grants continues to influence fiscal independence. To strengthen fiscal sustainability, Karnataka must expand non-tax revenue streams, diversify its tax base, and advocate for more equitable and untied federal transfers. Balancing fiscal discipline with developmental expenditure will be key to ensuring that the state's economic strength translates into enduring fiscal autonomy.

References:

1. Reserve Bank of India. (Various Years). State Finances: A Study of Budgets.
2. Government of Karnataka. (2024). Budget Documents and Economic Survey of Karnataka 2023–24.
3. Anantha Ramu, M. R. (2002). Fiscal Deficit and Economic Growth Relationship in Karnataka. Institute for Social and Economic Change.
4. Anantha Ramu, M. R. (2020). Compliance of Karnataka State to the Karnataka Fiscal Responsibility Act (KFRA), 2002: A Review. Government of Karnataka Fiscal Studies.
5. Darshini, J. S., & Gayathri, K. (2019). Fiscal Dependency of States in India. Journal of Public Finance and Policy Studies, 14(2), 65–78.
6. Gayathri, K. (2018). Fiscal Transfers to Local Bodies in Karnataka: Trends and Policy Issues. Karnataka Institute of Public Policy Research.

This article is part of my project work submitted in partial fulfillment of the requirements for the Master's Degree in Economics at the Postgraduate Department of Economics, Government First Grade College, K.R. Puram, Bengaluru, affiliated to Bengaluru North University, under the guidance of Dr. Darshini J S, Associate Professor, Government First Grade College, K.R. Puram, Bengaluru.

Funding:

This study was not funded by any grant.

Conflict of interest:

The Authors have no conflict of interest to declare that they are relevant to the content of this article.

About the License:

© The Authors 2024. The text of this article is open access and licensed under a Creative Commons Attribution 4.0 International License.