



## Macro and Fiscal Landscape of the State of Karnataka



#### Macro and Fiscal Brief: Karnataka March 2025

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# 1. Summary and Overview of the State of Karnataka

#### **Demography and Employment**

- Karnataka has a population of 67.6 million, which is about 5 percent of India's total population. The State's projected population growth rate is lower than the national average as of 2022-23.
- As per 2021 projections, Karnataka's population density and dependency ratio are both below their respective national averages. The share of population living in urban areas at 45 percent is much higher compared to the national average (35.1 percent). As per Census 2011, sex ratio in Karnataka has been higher than the national average.
- The Sex Ratio at Birth (female births per 1000 male births) and the Sex Ratio of the child population in 0-6 age group in the State are better than their respective national estimates, as of 2011.
- As of 2022-23, the annual unemployment rate in the State at 2.4 per cent is below the national average of 3.2 per cent, and the Female Labour Force Participation Rate is slightly above the national estimates.
- > The working population in the State is predominantly concentrated in Agriculture, Forestry, and Fishing (45.8 percent); Services (33.9 percent); Manufacturing (10.4 percent); and Construction (9.3 percent) sectors, as of 2022-23.

#### **Economic Structure (Growth and Sectoral Composition)**

- ➤ Karnataka's real GSDP has grown at an average rate of 7.4 percent during the period from 2012-13 and 2021-22, higher than the national average growth of 5.6 percent .
- > Its share in the national GDP has increased from 6.6 percent in the early 1990s to 8.4 percent in 2021-22. And, nominal per capita income in the State is 70 percent higher than the national per capita income as of 2021-22.
- ➤ The service sector contributes 63.2 percent share to the State's GSVA followed by industry sector (21.5 percent share) and agriculture sector (15.4 percent of share) in that order. its GSVA, lower than the national average of 19.7 percent.
- During the past ten years (2013-14 to 2022-23), the services, manufacturing, and agriculture sectors have grown by 8.3 per cent, 6.8 percent, and 6.4 per cent, respectively\*.

#### Socio-Economic Indicators (Health and Education)

- ➤ Karnataka's literacy rate at 75.4 percent is slightly above the national average of 73 percent, as of 2011.
- The State has higher school dropout rates for Classes VIII to X and lower pass percentage for class XII, respectively compared to their respective national estimates, as of 2016-17.
- The Gross Enrolment Ratio at the Higher Secondary level (39.9 percent in 2015-16) is below the national average, while at the Higher Education level, it is above the national average (36 percent in 2021).
- For people aged between 18 to 23 years, the Gender Parity Index in higher education (the ratio of girls to boys enrolled in higher education institutions) is higher than the national average as of 2021.
- As of 2020, life expectancy in Karnataka is nearly at par with the national average. Infant mortality and total fertility rates have always been below the national averages and stood at 19 deaths per 1000 live births (2020) and 1.7 children per woman (2019-21), respectively. The percentage of fully immunized children is higher than the national average as of 2019-21.
- > The State has better access to basic amenities the households' access to electricity and sanitation is above the respective national averages, while access to drinking water is almost at par with the national average, as of 2019-21.

#### **State of Public Finances and Tax Devolutions**

- ➤ Karnataka's debt-to-GSDP ratio at 23.9 percent in 2022-23, is lower than that of a median State. Its contingent liabilities at 1.7 percent of GSDP are at par with those of a median State as of 2022-23. The primary and fiscal deficit levels at 1.4 percent and 2.7 percent of GSDP, respectively are lower than those of the median State as of 2022-23. The State ran a revenue deficit of 0.3 percent of GSDP in 2022-23 lower than that of a median State's deficit of 0.4 percent.
- The State's Own-Tax Revenue constitutes about 6.4 percent of the GSDP is close to a median State's own tax revenues. The other revenues and transfers from the centre together are of the order of 3.1 per cent of GSDP, much lower than that of a median State in 2022-23. Its expenditure-to-GSDP ratio at 12. 2 percent of GSDP about half the Expenditure of a median State.
- Debt Sustainability Analysis shows a declining trajectory for debt to GSDP ratio in most of the scenarios. If the State continues to perform at the 10-year average (as in our baseline scenario where debt level, primary deficit, real GDP growth, real effective interest rate remain as they are), it's debt to GSDP ratio is projected to increase only by 0.3 percentage points and if it absorbs the outstanding contingent liabilities, this ratio is projected to increase by nearly 2 percentage points by the end of 2026-27
- The State's share in taxes from Centre, as per the FC recommendations, decreased from 4.7 percent under 14th Finance Commission to 3.6 percent under 15th FC recommendations. And, the share in total grants-in-aid increased by 0.7 percentage points under the 15th FC, compared to the level of 3.8 per cent under 14th FC.

Source: Reserve Bank of India, State Finances Report 2022-23.

Note: For calculation of median State, variable as a percentage of GSDP was computed for each State, with the median across 22 major States shown (excluding all Union Territories and North Eastern States, except Assam).

#### **Fiscal Rules**

- Fiscal Responsibility Act (FRA), 2002. It has been amended five times since then in 2009, 2011, 2014, 2021, and 2022.
- **Revenue Deficit:** The original MTFP and FRA 2002 mandated the State to eliminate revenue deficit over a period from 200102 to 2004-05.
- **Fiscal Deficit:** Contain fiscal deficit to 3 percent of GSDP by 2006 as per MTFP and FRA 2002. In 2009, the fiscal deficit limit was raised to 3.5 per cent for the year 2008-09 and 4 percent of GSDP for the year 2009-10 as a one-time relaxation. In 2011, the original 3 percent limit was raised to 3.44 percent, which continued until 2020. The 2021 amendment raised this limit further to 5 per cent due to the pandemic and in 2021-22 it was lowered to a level of 4 percent.
- **Debt:** Reduce total liabilities in a period of 15 years starting from 1st April, 2002 such that total liabilities do not exceed 25 percent of GSDP by 31st March, 2015. The 2011 amendment fixed it at a level of 25.2 percent by 2014-15.
- **Fiscal Discipline:** As per the State Finances Audit Report of the Comptroller and Auditor General of India (CAG), during the period from 2017-18 to 2021-22, Karnataka achieved a revenue surplus in 3 out of 5 years with the exceptions of 2020-21 and 2021-22. The State was able to maintain fiscal deficit targets with the specified limits for all 5 years. And, debt to GDP ratio exceeded the specified limit only once in 2021-22.

## 2. Demography and Employment

- Population data covers the Census period 1951 2011;
- Population Projections cover the period 2012 2023;
- Employment data covers the period 2017-18 to 2022-23.

Table 1: Area and Demography of Karnataka

Indicator	Most Recent Value	As of Year	Decadal Change (b/w 2011 and 2021)	India's estimates for benchmark (iii)
Area (i)	1,91,791 sq. km.	2011	-	5.8% of national total
Forest Cover	38,730 sq. km	2021	+ 0.2% points	3.0% of national total
<b>Total Population</b>	67.6 million persons	2023*	-	4.9% of national total
Population Growth Rate	0.6%	2023*	- 0.4% points (b/w 2012 and 2021)	1.3% (India)
Population Density (ii)	349 persons per sq. km.	2021*	-	415 persons per sq. km. (India)
Dependency Ratio	50.4%	2021*	- 5.2% points	55.7 % (India)
Sex Ratio of child population in 0-6 age group	943 females per 1000 males	2011	-	914 females per 1000 males (India)
Urban Population	44.4 % of State population	2023*	+ 4.8% points	35.1% of total population (India)
Rural Population	55.6 % of State population	2023*	- 4.8% points	64.9% of total population (India)
Urbanization Rate	3.5%	2023*	-8.6% (b/w 2011 and 2021)	3.7% (India)

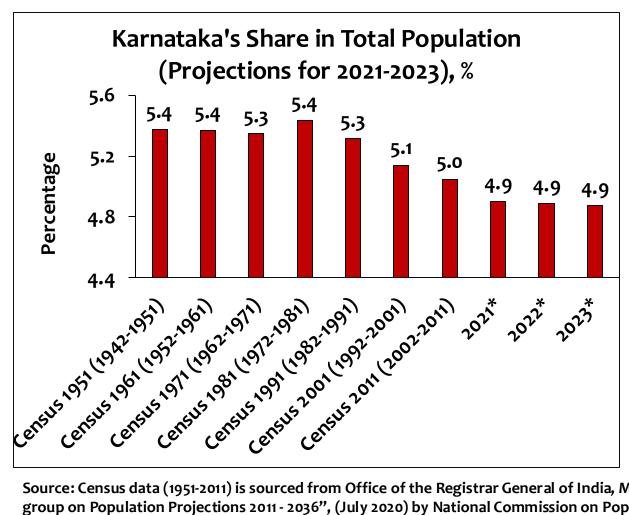
<sup>\*</sup> Projected

Source: Census, Forest Survey of India, Ministry of Environment, Forest and Climate Change, and "Population Projections for Indian States 2011-2036" by the Technical Group on Population Projections, National Commission on Population Ministry of Health and Family Welfare, Government of India.

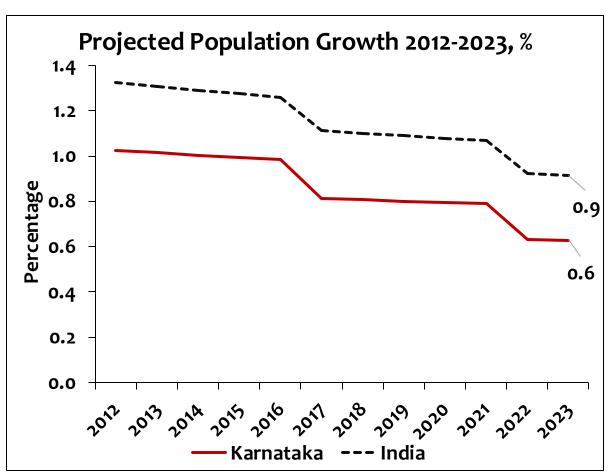
#### Note:

- i. Area figure for India (national total) includes the area under unlawful occupation of Pakistan and China. The area includes 78,114 Sq.km under illegal occupation of Pakistan, 5,180 sq.km illegally handed over by Pakistan to China and 37,555 Sq.km under illegal occupation of China.
- ii. For working out the density of India, the entire area and population of those portions of Jammu & Kashmir which are under illegal occupation of Pakistan and China have not been taken into account, except for 2011 census.
- iii. India's estimates for benchmark pertain to the actual data for India (except for Area, Forest Cover, and Total Population where the State's share in India's estimates have been shown).

## Karnataka has a share of 4.9 percent of national population and its population growth rate is lower than the national average



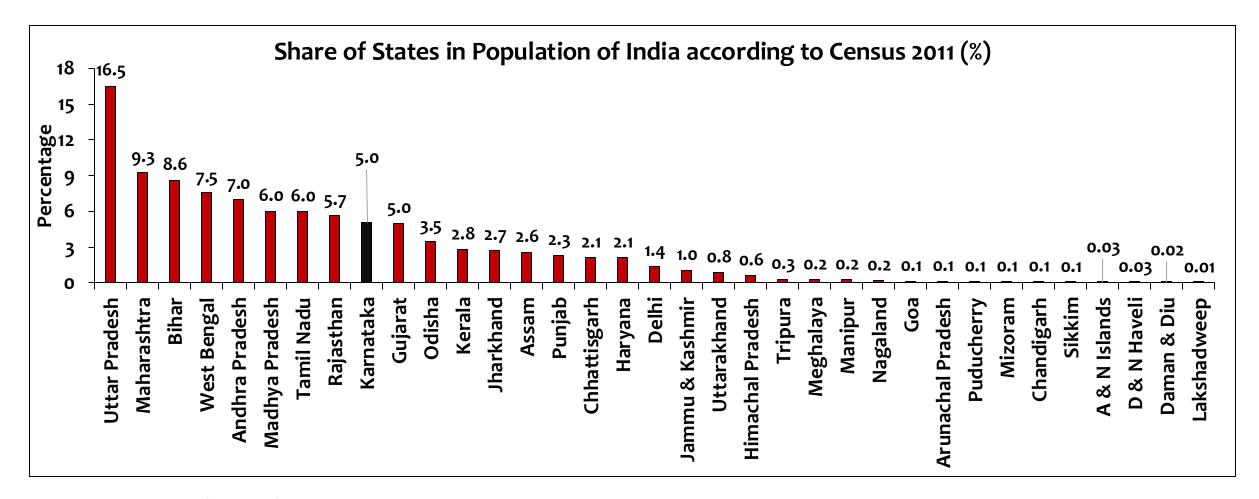
Chapter 2, Population Projection Report 2011-2036.



Source: Census data (1951-2011) is sourced from Office of the Registrar General of India, Ministry of Home Affairs. Projections are sourced from the "Report of the Technical group on Population Projections 2011 - 2036", (July 2020) by National Commission on Population and Ministry of Health and Family Welfare.

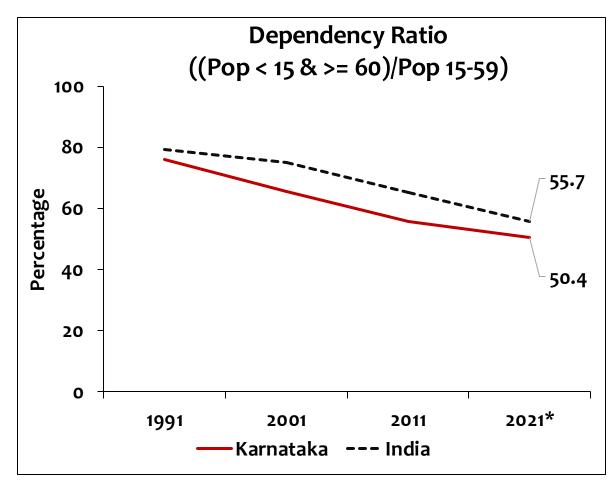
Note: Census Population Projections are constructed using the Cohort Component Method, where the components of population change (fertility, mortality and net migration) are used to project the base population each year separately for each birth cohort (persons born in a given year). The detailed methodology can be found in

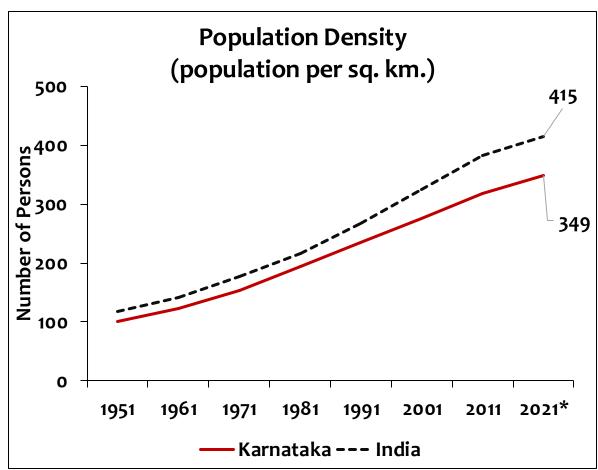
## As per the Census of 2011, Karnataka ranked as the ninth-largest State in terms of its share in the total population



Source: Census data (1951-2011) is sourced from Office of the Registrar General of India, Ministry of Home Affairs.

Dependency Ratio in Karnataka consistently remained below national estimates until 2011 and it is expected to remain below the national estimate in 2021. Population Density has increased over the decades, while consistently remaining below national estimates

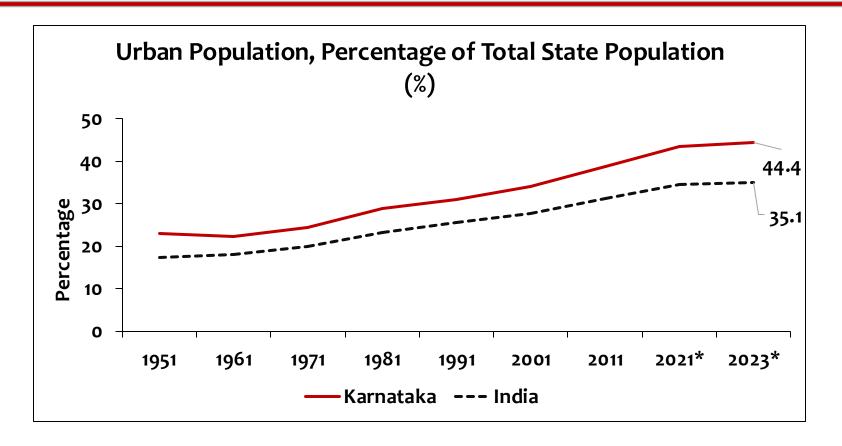




Source: Census data and "Population Projections for Indian States 2011 - 2036" by the Technical Group on Population Projections, National Commission on Population Ministry of Health and Family Welfare, Government of India.

Note: Number for India has been taken directly from the source.

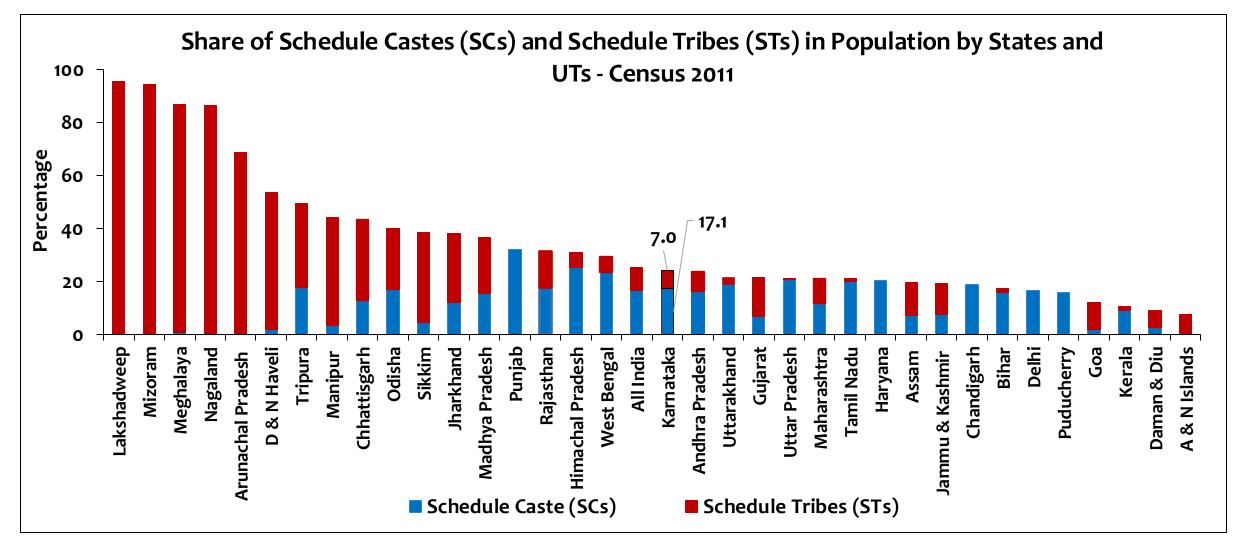
### Urban Population in Karnataka has consistently exceeded the national estimates, and the gap between the two has widened particularly over the past two decades



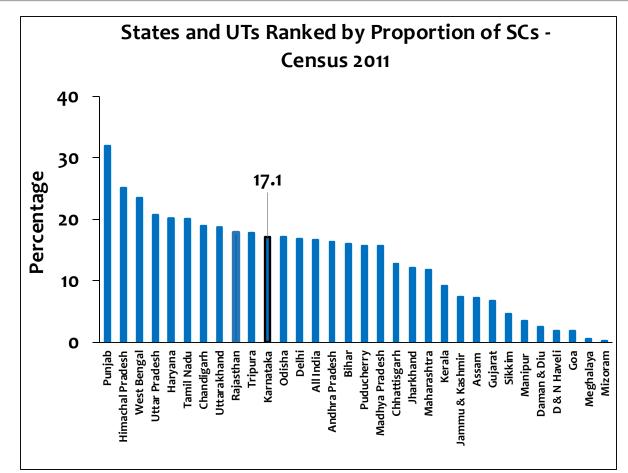
Source: Census data and "Population Projections for Indian States 2011 - 2036" by the Technical Group on Population Projections, National Commission on Population Ministry of Health and Family Welfare, Government of India.

Note: Number for India has been taken directly from the source.

### In Karnataka, Scheduled Castes (SCs) constituted 17.1 percent of its total population while Scheduled Tribes constituted 7 percent of its total population as per the 2011 Census

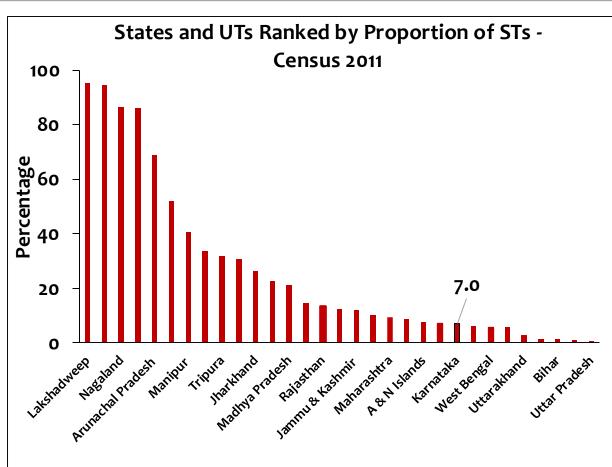


## Karnataka ranked among the top eleven States with regard to the percentage of SC population. It is ranked among bottom nine States with regard to the percentage of ST population



Source: Census data for 2011 is sourced from Office of the Registrar General of India, Ministry of Home Affairs.

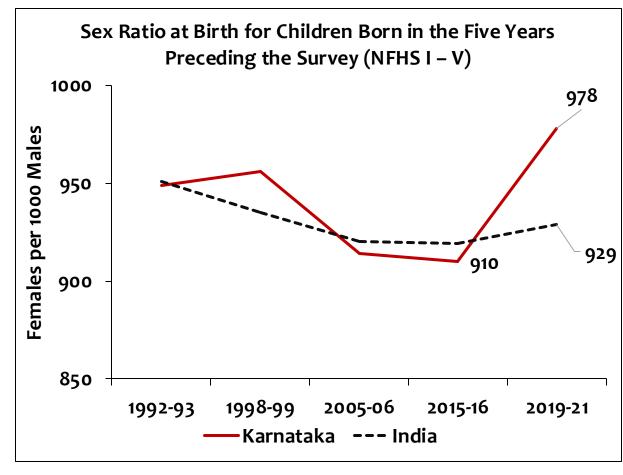
Note: As per the census data, Lakshadweep, Nagaland, Arunachal Pradesh, and Andaman & Nicobar Islands do not report any SC Population.

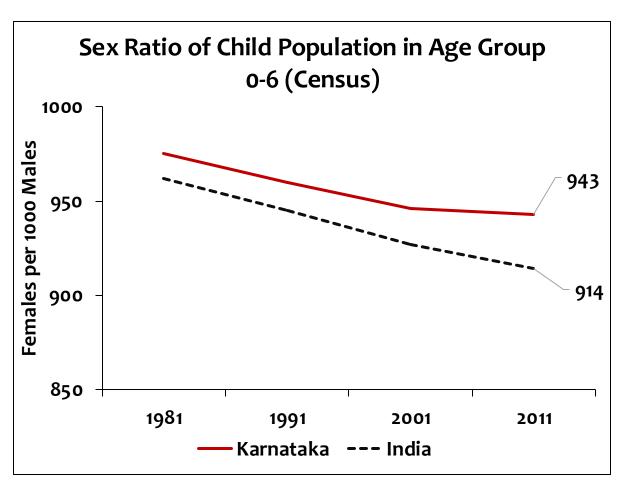


Source: Census data for 2011 is sourced from Office of the Registrar General of India, Ministry of Home Affairs.

Note: As per the Census data, Punjab, Haryana, Chandigarh, Delhi, and Puducherry do not report any ST population.

Sex Ratio at Birth (female births per 1000 male births in a given population), as per the National Family Health Survey (NFHS) and the Census Sex Ratio of the child population in 0-6 age group, both indicate that Karnataka's Sex Ratio is higher than the national estimates

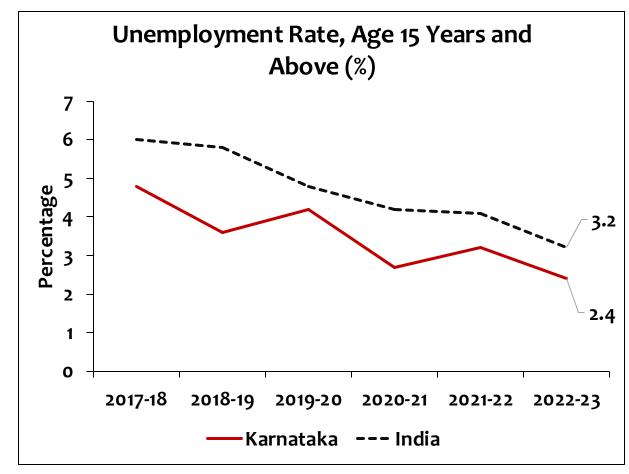


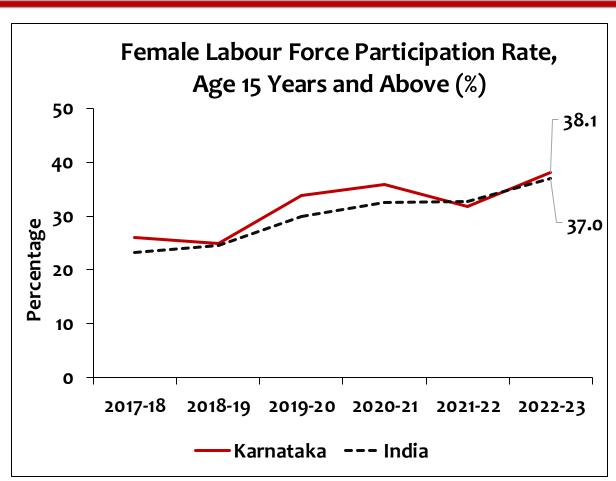


Source: NFHS I - V

Source: Census of India

## Annual Unemployment Rate for Karnataka decelerated to 2.4 percent in 2022-23 and it has consistently stayed below the national estimates. Female Labour Force Participation has improved and surpassed national estimates as of 2022-23

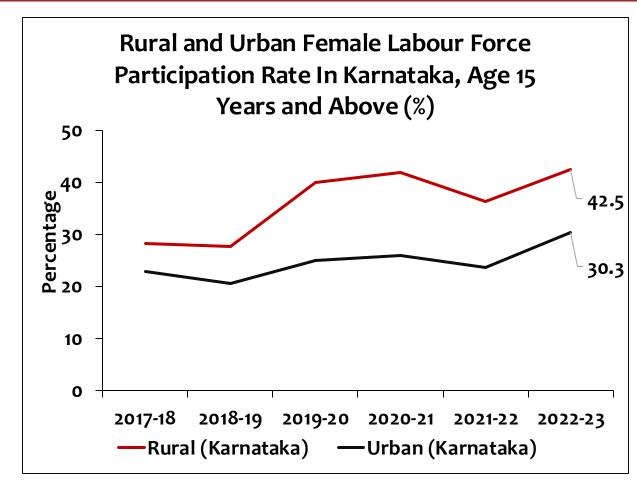


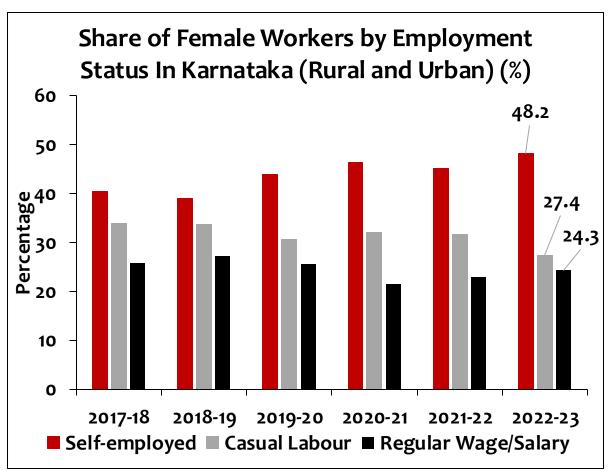


Source: Periodic Labour Force Survey (PLFS) Annual Report 2022-2023.

Note: i. Number for India has been taken directly from the source; ii. The Rural and Urban Female Labour Force Participation Rate (FLFPR) and Distribution of Female Workers by Employment Status, is as per the Usual Status (PS+SS) approach, considering both Rural and Urban labour force for the agegroup 15 years and above. The PLFS uses two reference periods for measuring employment status, Principal Status (PS) and Subsidiary Status (SS). The PS+SS category combines information from both reference periods to determine the usual status of employment.

## In Karnataka, Female Labour Force Participation is predominantly higher in rural areas. Additionally, the majority of the female workforce comprises of self-employed workers

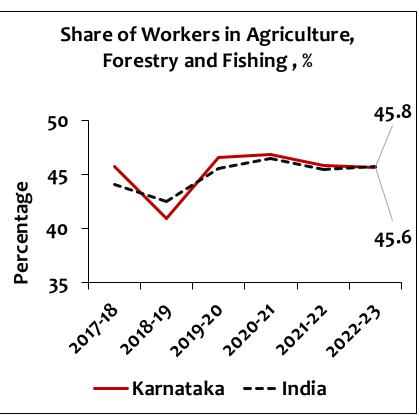


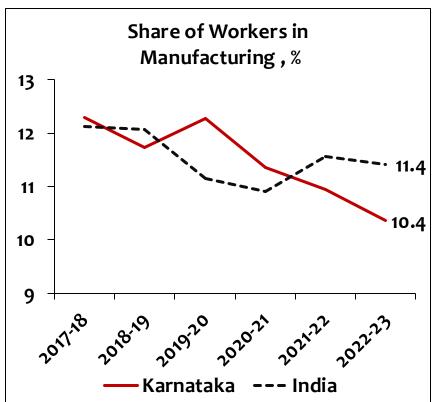


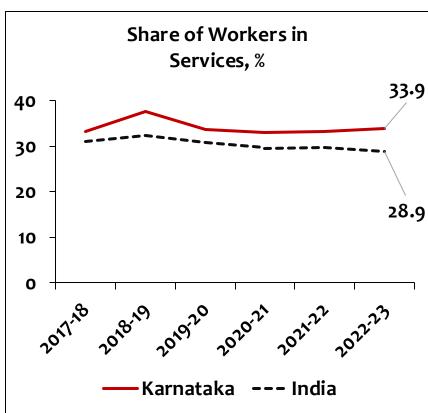
Source: Periodic Labour Force Survey (PLFS) Annual Report 2022-2023.

Note: i. Number for India has been taken directly from the source; ii. The Rural and Urban Female Labour Force Participation Rate (FLFPR) and Distribution of Female Workers by Employment Status, is as per the Usual Status (PS+SS) approach, considering both Rural and Urban labour force for the agegroup 15 years and above. The PLFS uses two reference periods for measuring employment status, Principal Status (PS) and Subsidiary Status (SS). The PS+SS category combines information from both reference periods to determine the usual status of employment.

Working population in Karnataka is predominantly concentrated in Agriculture, Forestry, and Fishing, Services, Manufacturing, and Construction sectors. Manufacturing constitutes 10.4 percent of the total share of workers in 2022-23. The proportion of workers involved in Mining and Quarrying and in other industries remain in line with the national estimates



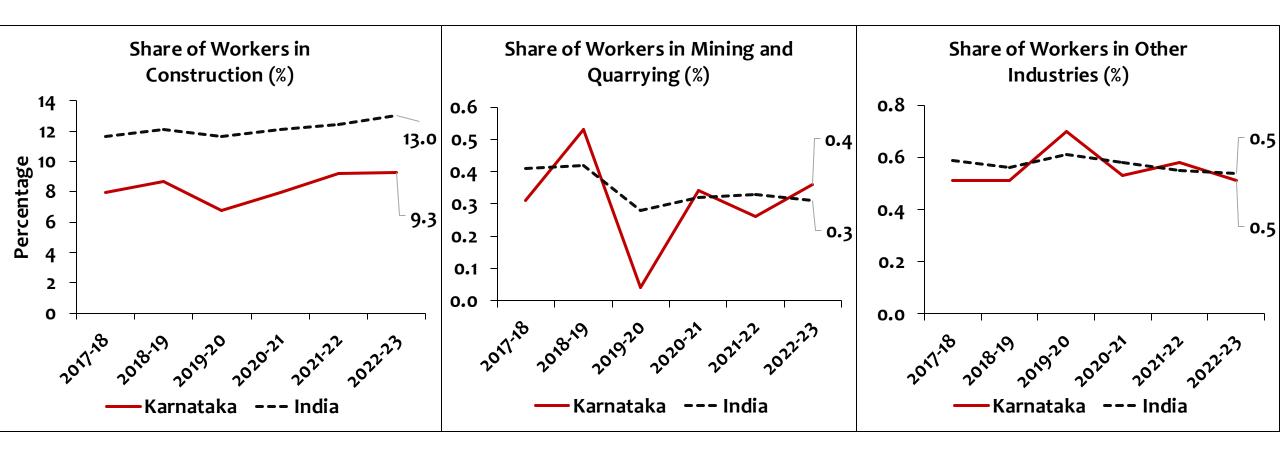




Source: Periodic Labour Force Survey (PLFS) Annual Report 2022-2023.

Note: i. Number for India has been taken directly from the source; ii. Services includes Transportation and Storage; Accommodation and Food Service Activities; Information and Communication; Financial and Insurance Activities; Real Estate Activities; Professional, Scientific and Technical Activities; Administrative and Support Service Activities; Public Administration and Defense; Compulsory Social Security; Education; Human Health and Social Work Activities; Arts, Entertainment and Recreation; Activities of Households as Employers; Undifferentiated Goods and Services Producing Activities of Households for Own Use; Activities of Extraterritorial Organizations and Bodies; Wholesale and Retail Trade, Repair of Motor Vehicles and Motorcycles; and other Services.

Working population in Karnataka is predominantly concentrated in Agriculture, Forestry, and Fishing, Services, Manufacturing, and Construction sectors. Manufacturing constitutes 10.4 percent of the total share of workers in 2022-23. The proportion of workers involved in Mining and Quarrying and in other industries remain in line with the national estimates



Source: Periodic Labour Force Survey (PLFS) Annual Report 2022-2023.

Note: i. Number for India has been taken directly from the source; ii. Other industries include Electricity, Gas, Steam and Air Conditioning Supply; and Water Supply, Sewerage, Waste Management and Remediation Activities.

# 3. Economic Structure (Growth and Sectoral Composition)

Income data covers the fiscal period 1990-91 – 2021-22

Table 2A: State Domestic Product, Per Capita Income, Sectoral Shares, Inflation, FDI inflow and Exports for Karnataka

Indicator	Most Recent Value	States' Average	Decadal Change, % points (b/w 2012-13 and 2021-22)	Source
Nominal Gross State Domestic Product (GSDP)	Rs. 1,962,72,542 (Lakh) (FY 2021-22)	Rs. 2347101,174 (Lakh; India) (FY 2021-22)	+182.2% growth	MoSPI; EPWRF
Nominal GSDP share in India's Nominal Gross Domestic Product (GDP), %	8.4% (FY 2021-22)	-	+1.4% points	MoSPI; EPWRF
Real Gross State Domestic Product Growth Rate,%	7.4% (Decadal avg. b/w 2012-13 and 2021-22)	5.6% (Decadal avg. b/w 2012- 13 and 2021-22 for India)	+4.9% points	MoSPI; EPWRF
Nominal Per Capita GSDP	Rs. 292,542 (FY 2021-2022)	Rs. 171,498 (India) (FY 2021-22)	+161.5% growth	MoSPI; EPWRF
Nominal Per Capita GSDP in India's Nominal Per Capita GSDP (Ratio)	1.7 (FY 2021-22)	-	+0.3	MoSPI; EPWRF
Share of Agricultural Sector to Total Gross State Value Added (GSVA) (Nominal), %	15.4% (FY 2021-22)	19.7% (FY 2021-22)	+2.4% points	MoSPI; EPWRF
Share of Industry Sector to Total GSVA (Nominal), %	21.5% (FY 2021-2022)	29.3% (FY 2021-22)	-6.5% points	MoSPI; EPWRF
Within Industry: Share of Manufacturing Sector to Total GSVA (Nominal), %	13.7% (FY 2021-22)	14.8% (FY 2021-22)	-3.4% points	MoSPI; EPWRF
Within Industry: Share of Construction Sector to Total GSVA (Nominal), %	5.2% (FY 2021-22)	7.7% (FY 2021-22)	-3.0% points	MoSPI; EPWRF
Share of Services Sector to Total GSVA (Nominal), %	63.2% (FY 2021-2022)	51.0% (FY 2021-22)	+4.0% points	MoSPI; EPWRF
Within Services: Share of Real Estate and Business Services Sector to Total GSVA (Nominal),%	34.4% (FY 2021-2022)	11.4% (FY 2021-22)	+6.3% points	MoSPI; EPWRF
Within Services: Share of Trade and Hospitality Sector to Total GSVA (Nominal), %	9.9% (FY 2021-2022)	11.3% (FY 2021-22)	-1.1% points	MoSPI; EPWRF

Source: Data is taken from MOSPI, as of August 2023.

Note: i. States' Average for shares are simple averages of each State's/UT's share for that year; ii. States' average growth rates are calculated as the simple average of each State/UT's growth rate for that year.

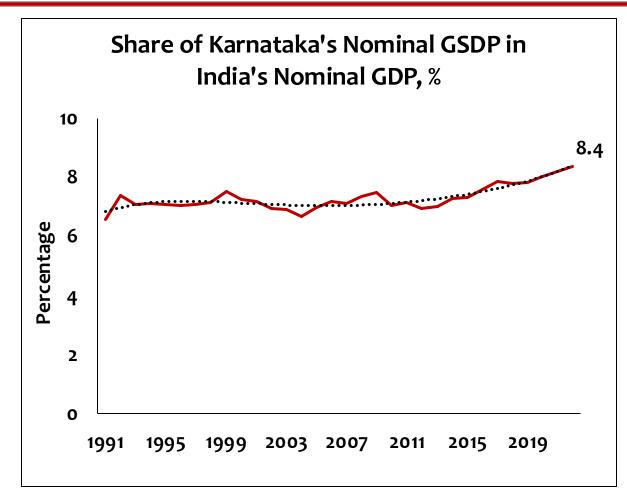
Table 3B: State Domestic Product, Per Capita Income, Sectoral Shares, Inflation, FDI inflow and Exports for Karnataka

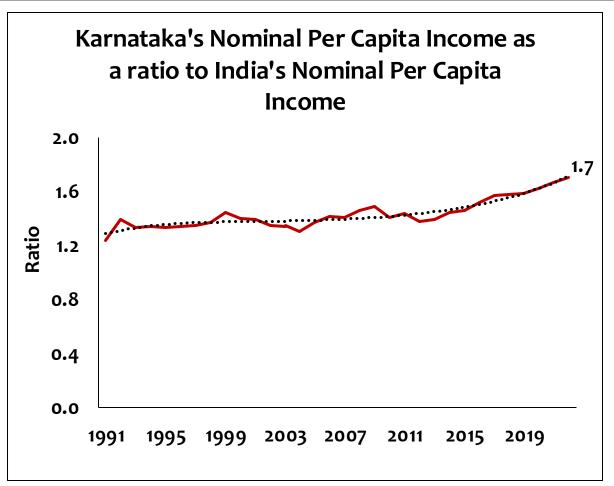
Indicator	Most Recent Value	States' Average	Decadal Change, % (b/w 2013-14 to 2022-23)	Source
Share of Agricultural Sector to Total GSDP (Nominal), %	12.5% (FY 2022-23)	15.8% (FY 2022-23)	1.1% points	MoSPI, EPWRF
Share of Industry Sector to Total GSDP (Nominal), %	19.1% (FY 2022-23)	25.3% (FY 2022-23)	-o.8% points	MoSPI, EPWRF
Within Industry: Share of Manufacturing Sector to Total GSDP (Nominal), %	11.9% (FY 2022-23)	13.1% (FY 2022-23)	-0.5% points	MoSPI, EPWRF
Share of Services Sector to Total GSDP (Nominal), %	59.8% (FY 2022-23)	42.6% (FY 2022-23)	+1.2% points	MoSPI, EPWRF
Inflation Rate	+5.8% (FY 2022-23)	+ 5.5 % (FY 2022-23)	-1.2% points	MoSPI, EPWRF
FDI Inflow	14.8 % of India FDI Inflow (2023-24)	3% of India FDI Inflow	1.9 % of India FDI Inflow (b/w 2020- 21 and 2023-24)	DPIIT
Exports	27938 Million \$ (2022-23)	15,346 Million \$	10,117 Million \$ (b/w 2013-14 and 2022-23)	Multiple Sources*

Source: i. Data on sectoral shares to GSDP is taken from MOSPI, as of March 2024; ii. (\*)Multiple sources for exports are various Issues of Economic Survey, Department of Economic Affairs, (data.gov.in); Various Issues of Bulletin on Foreign Trade Statistics, Directorate General of Foreign Trade (DGFT); iii. FDI data is available State-wise in a cumulative format with the starting date as December 2019 till the month and year of the DPIIT publication.

Note: i. The State average for FDI has been calculated as the sum of all States/region divided by the number of States/regions, and this is divided by India's FDI inflow, multiplied by 100; ii. Benchmark number for exports is an average of all States/UT number.

## Karnataka's share in India's Nominal GDP has risen in 2022 compared to 1991, and its Nominal Per Capita Income as a ratio to India's Nominal Per Capita Income has increased over the same period





Source: The Ministry of Statistics and Programme Implementation (MoSPI), as of August 2023. Back series with 2011-12 base has been taken from Economic and Political Weekly Research Foundation (EPWRF).

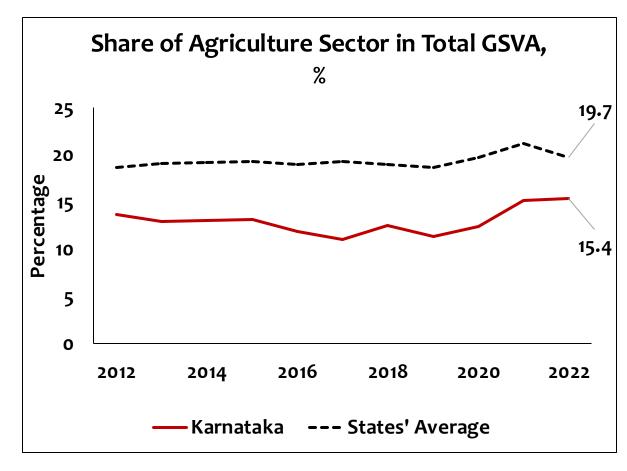
Note: i. GSDP refers to Gross State Domestic Product at current market prices; ii. As per EPWRF, this series is spliced with earlier GSDP series to generate the long time series; iii. National GDP is the National Gross Domestic Product of India at current market prices; iv. This series has been spliced with earlier GDP series to generate the long time series.

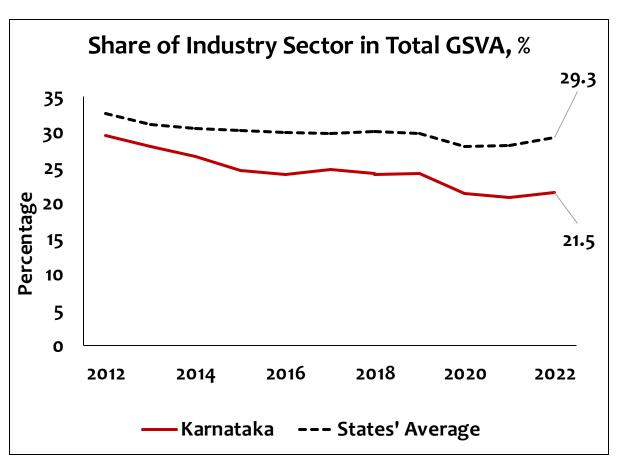
#### Sectoral Gross State Value Added (GSVA): Karnataka vis-à-vis rest of India (FY 2021-22)

- According to official estimates for FY 2021-22, Service sector contributes 63.2 percent share to the GSVA in Karnataka, while stands at 51 percent. Within the services sector, largest contributors are Real Estate, Ownership of Dwellings and Business Services (34.4 percent) and Trade, Hotels, and Restaurants (9.9 percent).
- For FY 2021-22, the Industry sector has a 21.5 percent share of Karnataka's GSVA, whereas the share of the average State stands higher at 29.3 percent. This sector is driven primarily by Manufacturing (13.7 percent) and Construction (5.2 percent) of total GSVA with minor contributions from Electricity (1.4 percent) and Mining (1.1 percent).
- For FY 2021-22, Karnataka's Agriculture sector is 15.4 percent of its GSVA, lower than the States' average of 19.7 percent.
- For FY 2021-22, Karnataka ranks 6<sup>th</sup> out of 33 States and UTs in terms of share of GSVA contributed by the Service sector (63.2 percent) but ranks 23<sup>rd</sup> in terms of share of GSVA contributed by the Industry Sector (21.5 percent).

Note: Gross State Value Added (GSVA) is defined as the sum of the value added by each of the sectors under agriculture, industry, and services. This series currently is available at basic prices with 2011-12 base and it can be spliced with the earlier GSVA series to obtain the long-time series for this variable.

Share of the Agriculture sector in GSVA has increased after 2019, while the Industry sector's share has been declining since 2012 but share of both sectors have consistently remained below an average State since 2012

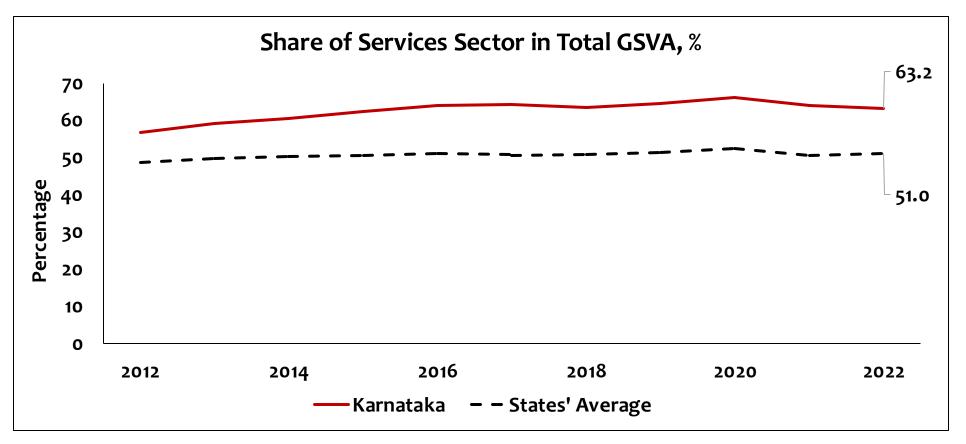




Source: MoSPI, as of August 2023.

Note: i. States' average refers to a simple average of the shares of 33 States and UTs; ii. Nominal variables have been used to calculate the shares; iii. Agriculture refers to Agriculture and its allied activities such as fishing, animal husbandry, crops etc.; iv. Industry includes Mining & Quarrying, Manufacturing, Construction, and Supply of Electricity & Water.

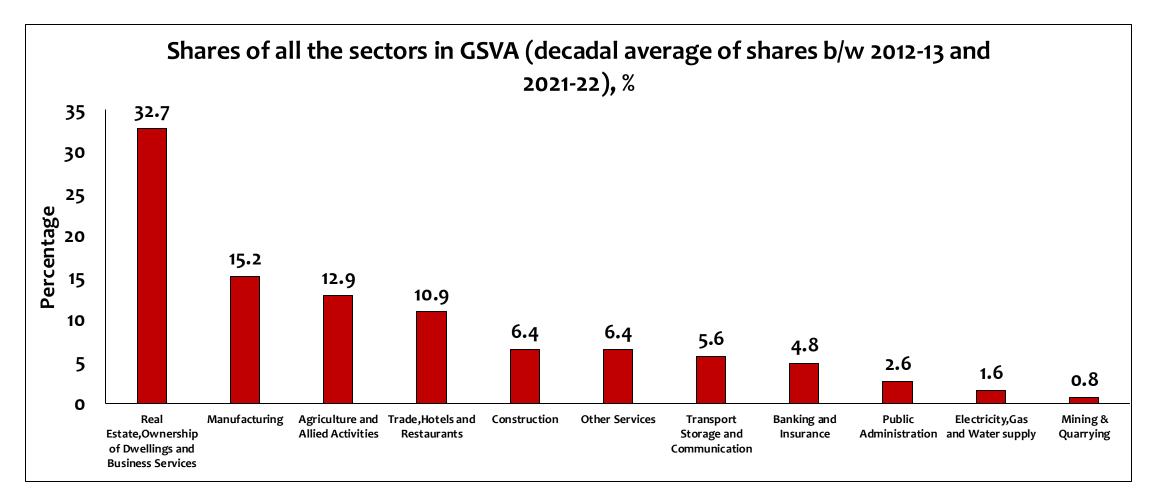
Karnataka's share of the Services sector accounts for nearly two-thirds of its total GSVA and has consistently been higher than an average State since 2012; although, there has been a decreasing trend in its share after 2020



Source: MoSPI, as of August 2023.

Note: i. States' average refers to a simple average of the shares of 33 States and UTs; ii. Nominal variables have been used to calculate the shares; iii. Services includes Transport, Storage & Communications, Trade, Hotels and Restaurants, Real Estate, Banking and Financial Services, Public Administration and some other miscellaneous services.

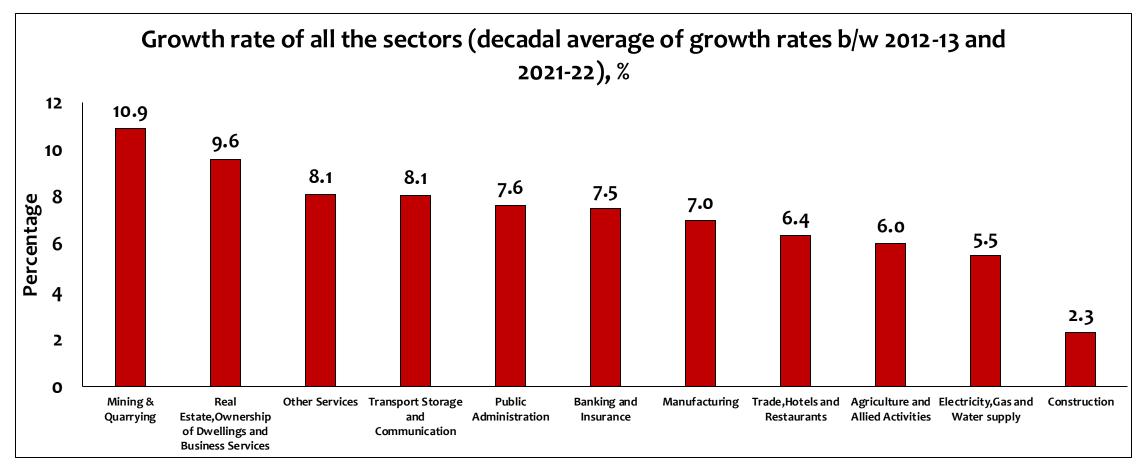
## Among all the major sectors, Real Estate and Business Services sector has had the largest share in GSVA in the past 10 years



Source: MoSPI, as of August 2023.

Note: i. Nominal variables have been used to calculate the shares; ii. Agriculture refers to Agriculture and its allied activities such as fishing, animal husbandry, crops etc.; iii. Industry includes Mining & Quarrying, Manufacturing, Construction, and Supply of Electricity & Water; iv. Services includes Transport, Storage & Communications, Trade, Hotels and Restaurants, Real Estate, Banking and Financial Services, Public Administration and some other miscellaneous services.

### Out of all the major sectors, Mining and Quarrying and Real Estate, Ownership of Dwellings and Business Services sector has shown the highest growth over the last decade



Source: MoSPI, as of August 2023.

Note: i. Real variables have been used to calculate the shares; ii. Agriculture refers to Agriculture and its allied activities such as fishing, animal husbandry, crops etc.; iii. Industry includes Mining & Quarrying, Manufacturing, Construction, and Supply of Electricity & Water; iv. Services includes Transport, Storage & Communications, Trade, Hotels and Restaurants, Real Estate, Banking and Financial Services, Public Administration and some other miscellaneous services.

#### Table 2C: Karnataka's Sectoral Growth Rates and Decadal Averages

Sector	Latest Annual Growth Rate (2019-20)	Decadal Average of Growth rates (b/w 2010-11 and 2019-20)	Decadal Average of Growth rates for India (b/w 2010-11 and 2019- 20)
Agriculture	18.1%	4.6%	4.4%
Industry	-3.3%	5.9%	5.3%
Manufacturing	-5.6%	7.2%	6.0%
Services	9.5%	9.4%	7.7%
GSVA	6.8%	7 <b>.</b> 8%	6.4%
GSDP	5.9%	8.1%	6.6%

Source: MoSPI, as of August 2023. Back series with 2011-12 base has been taken from EPWRF

Note: i. Real variables have been used to calculate the growth rate; ii. Agriculture refers to Agriculture and its allied activities such as fishing, animal husbandry, crops etc.; iii. Industry includes Mining & Quarrying, Manufacturing, Construction, and Supply of Electricity & Water; iv. Services include Transport, Storage & Communications, Trade, Hotels and Restaurants, Real Estate, Banking and Financial Services, Public Administration and some other miscellaneous services.

Table 2D: Karnataka's Sectoral Growth Rates and Decadal Averages

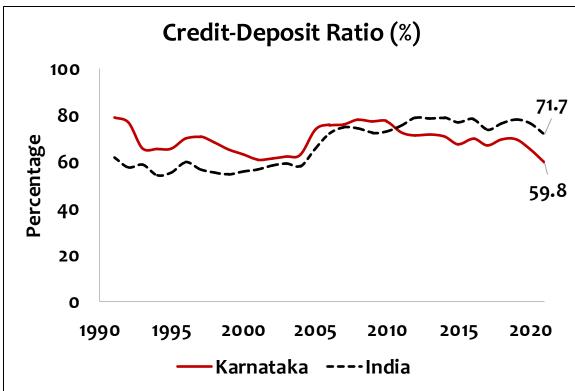
Sector	Latest Annual Growth Rate (2022-23)	Average of Growth rates (b/w 2018-19 and 2022-23)	Decadal Average of Growth rates (b/w 2013-14 and 2022- 23)	Decadal Average of Growth rate for India (b/w 2013-14 and 2022-23)
Agriculture	2.8%	7.5%	6.4%	4.1%
Industry	3.8%	3.6%	6.2%	5.2%
Manufacturing	2.1%	2.5%	6.8%	5.5%
Services	9.9%	6.6%	8.3%	6.6%
GSVA	7.6%	5.8%	7.4%	5.7%
GSDP	8.1%	5.6%	7.7%	5.8%

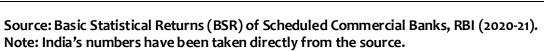
Source: MoSPI, as of March 2024. Back series with 2011-12 base has been taken from EPWRF.

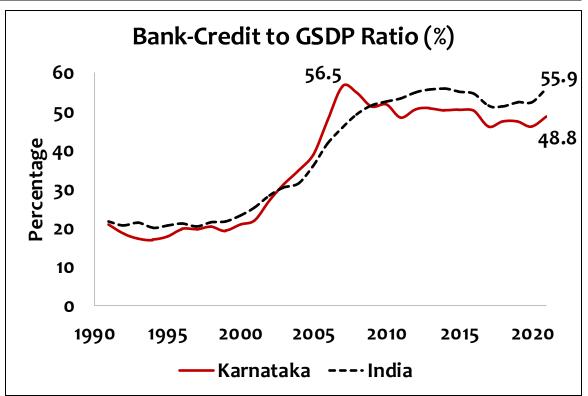
Note: i. India's GVA has been calculated taking a simple sum of the three sectors; ii. Real variables have been used to calculate the growth rate; iii. Agriculture refers to Agriculture and its allied activities such as fishing, animal husbandry, crops etc.; iv. Industry includes Mining & Quarrying, Manufacturing, Construction, and Supply of Electricity & Water; v. Services includes Transport, Storage & Communications, Trade, Hotels and Restaurants, Real Estate, Banking and Financial Services, Public Administration and some other miscellaneous services.

Karnataka's Credit-Deposit Ratio closely follows the all-India figure, but has an over 10 percentage point difference with it as of 2021. Karnataka also closely follows the India estimate in Credit to GSDP Ratio but has an over 5 percent point gap with it as of 2021. Both measures have declined in the last decade

Indicators	Most Recent Value	Year	Decadal Change (b/w 2011-12 & 2020-21)	India
Credit - Deposit Ratio (%)	59.8%	2020-21	-11.6% points	71.7%
Credit - GSDP Ratio (%)	48.8%	2020-21	-1.8% points	55.9%

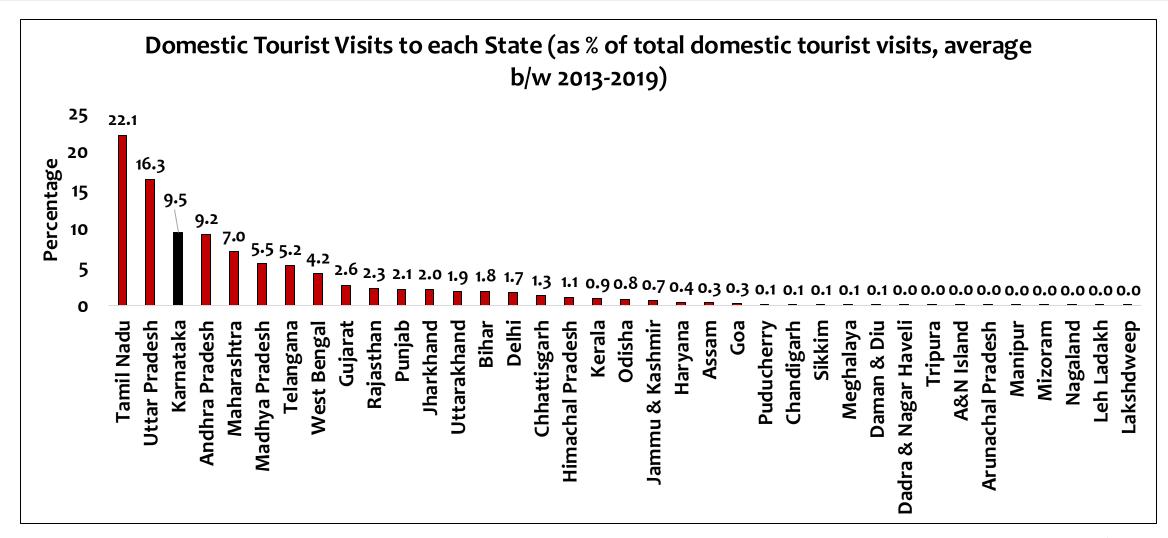






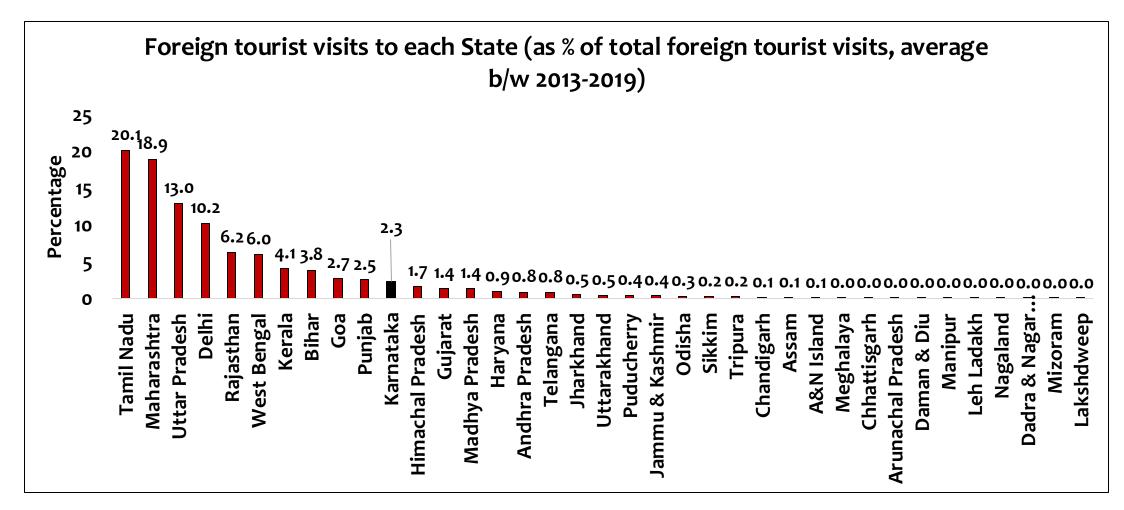
Source: i. Bank-Credit: Basic Statistical Returns (BSR) of Scheduled Commercial Banks, RBI (2020-21); ii. GSDP: MOSPI (2020-21). Back series with 2011-12 base has been taken from EPWRF. Note: The Credit variable used is Credit Outstanding to calculate the GSDP Ratio.

## Karnataka holds an average 9.5 percent share of total Domestic Tourist Visits between 2013 - 2019



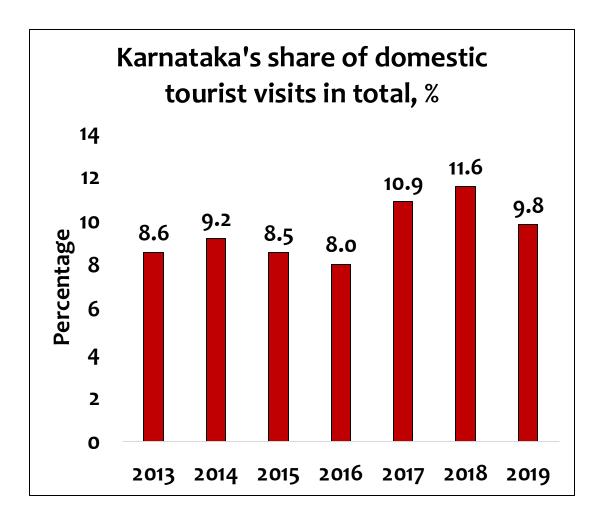
Source: Data on tourist visits have been compiled from multiple issues of India Tourism Statistics published by the Ministry of Tourism (2013 – 2019).

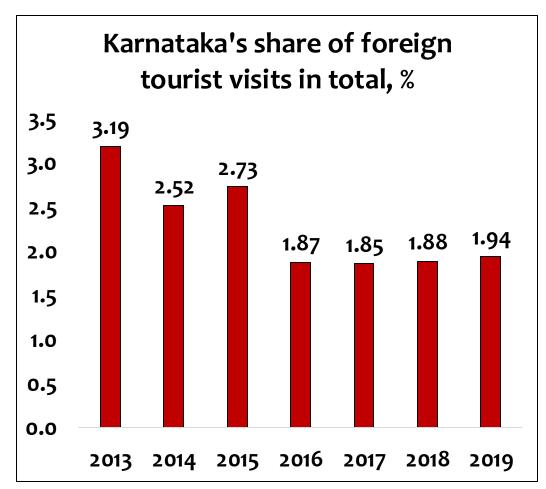
## Karnataka holds an average 2.3 percent share of total Foreign Tourist Visits between 2013 - 2019



Source: Data on tourist visits have been compiled from multiple issues of India Tourism Statistics published by the Ministry of Tourism (2013 – 2019).

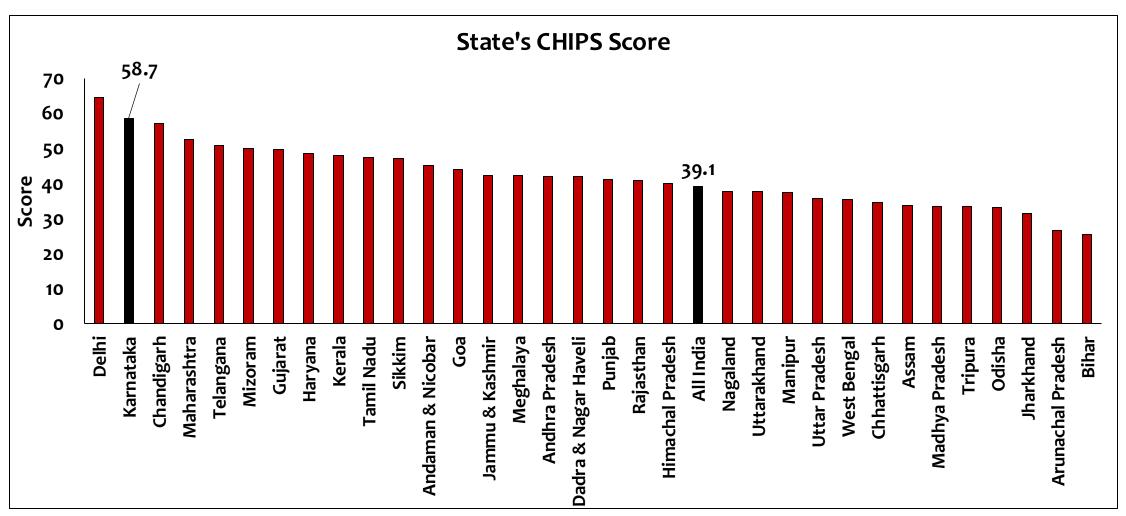
#### Domestic and Foreign Tourist Visits over the years in Karnataka





Source: Data on tourist visits have been compiled from multiple issues of India Tourism Statistics published by the Ministry of Tourism (2013 – 2019).

## Karnataka's CHIPS (Connect, Harness, Innovate, Protect, and Sustain) score is among the top two States



Source: The State of India's Digital Economy Report 2024 by Indian Council for Research on International Economic Relations (ICRIER). Note: 50 indicators have been used to measure the CHIPS score.

## 4. Socio-Economic Indicators(Education and Health)

- School Education data covers the period 2012-13 to 2016-17;
  - Higher Education data covers the period 2012 to 2021;
- Health data covers the period 2011 2020 (SRS) and 1992-93 to 2019-21 (NFHS)

#### **Table 3A: Education Indicators for Karnataka**

Indicator	Most Recent Value	India Value	Decadal Change (% points)	Source
Literacy Rate	75.4% (2011)	73.0%	+8.8% points (b/w 2001 & 2011)	Census of India
Drop-Out Rates (Class VIII-X)	48.1% (2016-17)	21.1%	+8.2% points (b/w 2013-14 & 2016-17 )	U-DISE
Students passing Board Examinations (Class X)	88.6% (2016-17)	86.1%	+1.0% points (b/w 2012-13 & 2016-17)	U-DISE
Student passing Board Examinations (Class XII)	85.1% (2016-17)	87.3%	+5.0% points (b/w 2012-13 & 2016-17 )	U-DISE
Gross Enrolment Ratio (Higher Secondary)	39.9% (2015-16)	56.2%	+22.9% points (b/w 2012-13 & 2015-16)	U-DISE
Gross Enrolment Ratio (Higher Education)	36.0% (2021)	27.3%	+12.2% points (b/w 2012 & 2021)	AISHE
Gender Parity Index (Higher Education)	1.07 (2021)	1.05	+0.16 points (b/w 2012 & 2021)	AISHE
Colleges per 100,000 population	62 (2021)	31	+20.5 points (b/w 2012 & 2021)	AISHE

Note: i. Indicators for Higher Education are based on the population of the age group 18-23 years; ii. India number has been taken directly from the source; iii. Decadal changes are across a period of 10 years unless data is available for a lesser period.

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#### Table 3B: Health Indicators for Karnataka

Indicator	Most Recent Value	India Value	Decadal Change (% points)	Source
Infant Mortality Rate	19 deaths per 1000 live births (2020)	28 deaths per 1000 live births	35 deaths per 1000 live births (2011)	Sample Registration System
Total Fertility Rate	1.7 children per woman (2019-21)	2 children per woman	2.7 children per woman (2005-06)	NFHS
Life Expectancy	69.8 years (2020)	70 years	+2.3 years	Sample Registration System
Children Fully Immunized	84.1% (2019-21)	76.4%	+29.1% points	NFHS
Households with Access to Improved Drinking Water Source	95.6% (2019-21)	95.9%	+9.4% points	NFHS
Households with Access to Electricity	98.8% (2019-21)	96.5%	+9.5% points	NFHS
Households with Access to Sanitation Facilities	75.1% (2019-21)	69.3%	+41.6% points	NFHS

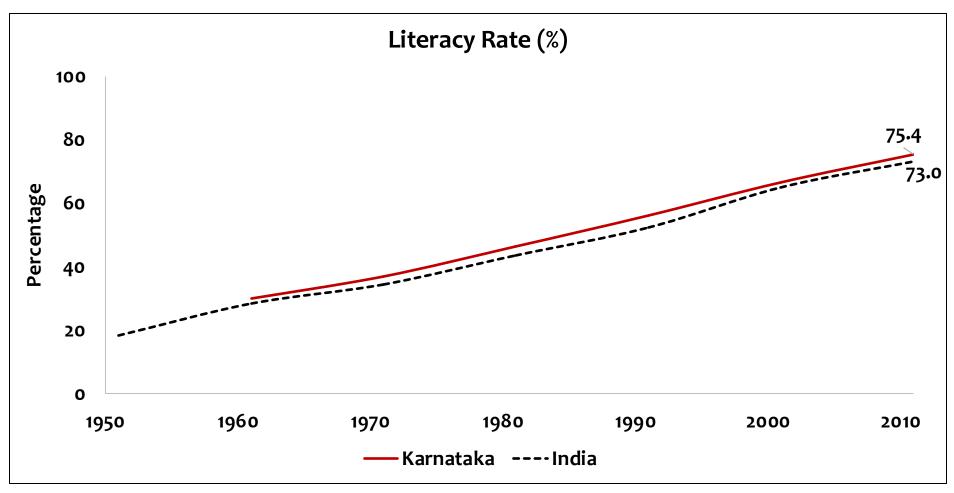
Note: i. Decadal change for NFHS variables taken from NFHS-V (2019-21) to NFHS-III (2005-06); ii. The number for India has been taken directly from the source. 40

#### Table 3C: Other Socio-Economic Indicators for Karnataka

Indicator	Most Recent Value	India Value	Decadal Change	Source
Pupil-Teacher Ratio: Elementary	17 (2016-17)	25	-8 points (b/w 2006-07 & 2016-17)	U-DISE
Pupil-Teacher Ratio: Higher Secondary	29 (2015-16)	31	-6 points (b/w 2012-13 & 2015-16)	U-DISE
Pupil-Teacher Ratio: Higher Education	14 (2018-19)	24	-4 points (b/w 2008-09 & 2018-19)	AISHE
Underweight Children	32.9 % (2019-21)	32.1%	-4.7 % points (b/w 2005-06 and 2019-21)	NFHS
Stunting Among Children	35.4 % (2019-21)	35.5%	-8.3 % points (b/w 2005-06 and 2019-21)	NFHS
Anaemia Among Children	65.5 % (2019-21)	67.1%	-4.9 % points (b/w 2005-06 and 2019-21)	NFHS
Anaemia Among Women	47.8 % (2019-21)	57.0%	-3.7 % points (b/w 2005-06 and 2019-21)	NFHS
Under 5 Mortality Rate	29.5 deaths per 1000 live births	41.9 deaths per 1000 live births	-25.2 deaths per 1000 live births (b/w 2005-06 and 2019-21)	NFHS
Infant Mortality Rate	25.4 deaths per 1000 live births	35.2 deaths per 1000 live births	-17.8 deaths per 1000 live births (b/w 2005-06 and 2019-21)	NFHS
Multidimensional Poverty Index (MPI)	0.03 (2019-21)	0.07	-0.02 points (b/w 2015-16 & 2019-21)	NFHS
Sustainable Development Goals (SDG) Index	75 (2023-24)	71	+11 points (b/w 2018-19 & 2023-24)	NITI Aayog

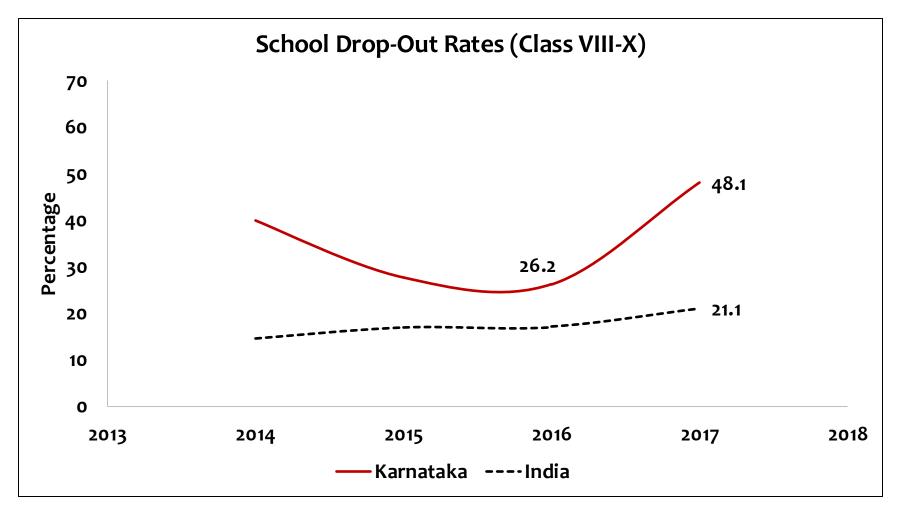
Note: i. Indicators for Higher Education are based on the population of the age group 18-23 years; ii. India number has been taken directly from the source; iii. Decadal change for NFHS variables taken from NFHS-III (2005-06) to NFHS-V (2019-21); iv. Infant Mortality Rate in Table 3B was defined using the SRS data and the Infant Mortality Rate defined here is based on the NFHS data; v. All years represent corresponding survey years.

## Karnataka's Literacy Rate has increased rapidly over the decades and remains marginally above the national estimate



Source: Office of the Registrar General and Census Commissioner, Ministry of Home Affairs (1951 – 2011). Note: i. India number has been taken directly from the source; ii. Census Literacy Rate relates to population aged seven years and above from 1981.

## Karnataka's School Dropout Rates for the Secondary (Class VIII-X) Level are higher than the national figures for the period 2013-14 to 2016-17

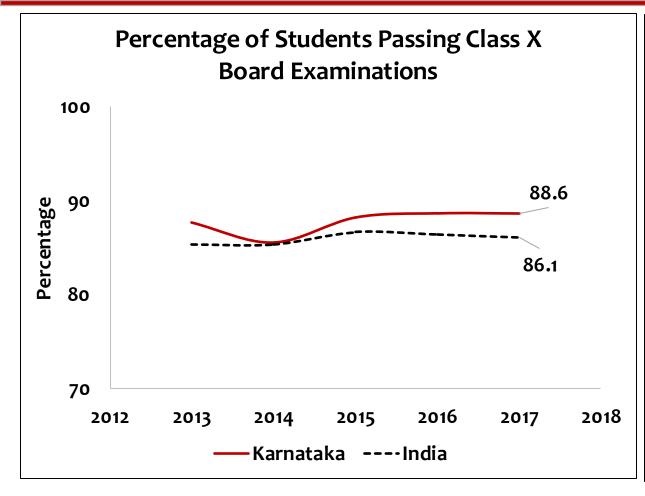


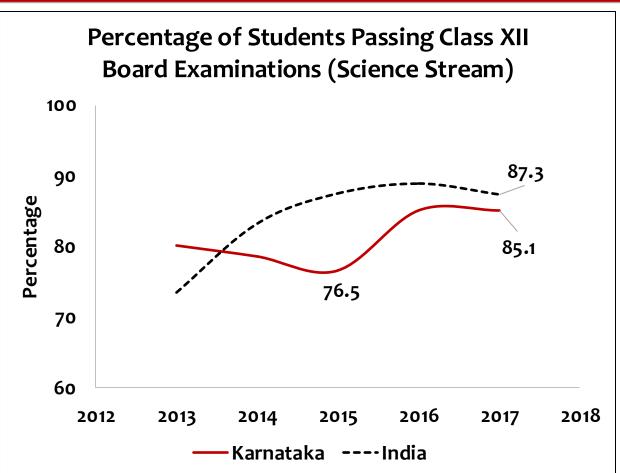
Source: Unified District Information System for Education (U-DISE), 2015-16.

Note: i. Drop-Out Rate is defined as the proportion of pupils from a cohort enrolled in a given stage in a school year who are no longer enrolled in the following school year; ii. India number has been taken directly from the source; iii. Karnataka had a dramatic one-off increase in the drop-out rate in 2016-17 (Link).

The students who pass the Secondary (Class X) Level Examinations is at 88 percent in Karnataka which is close to the national average over the period 2012-13 to 2016-17. The students who pass the Secondary Higher Secondary (Class XII)

Level Examinations is at 85 percent which is below the national average in 2016-17

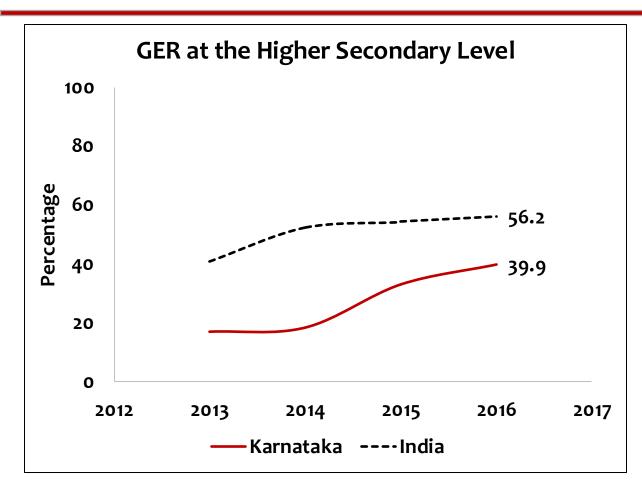


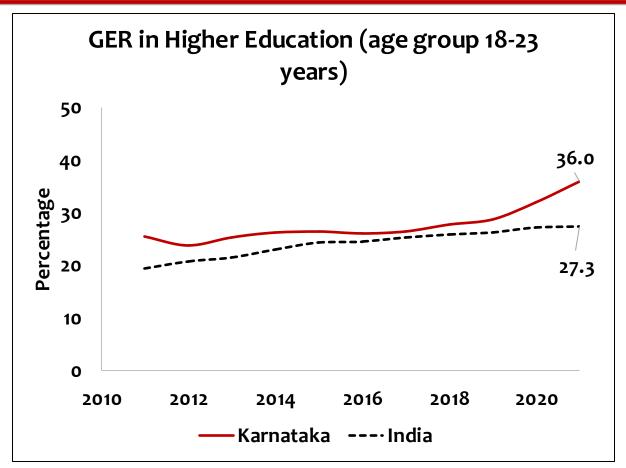


Source: Unified District Information System for Education (U-DISE), 2015-16.

Note: i. Percentages are a simple average of the pass percentages for boys and girls as reported separately; ii. India number has been taken directly from the source; iii. Pass percentages for Higher Secondary Level are reported separately by Stream (Science, Arts, Humanities, Vocational, Others).

Karnataka's Gross Enrolment Ratio (GER) at the Higher Secondary (Class XII) Level was below the national figures over the period 2012-13 to 2015-16, while the Higher Education (in the age group 18-23 years) Level was marginally above the national figure in the last decade

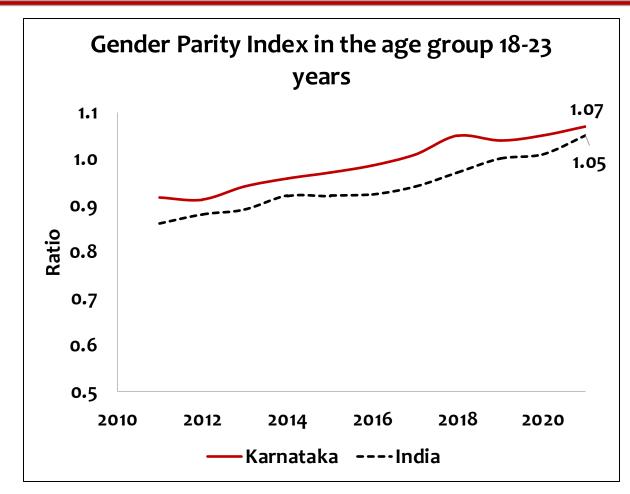


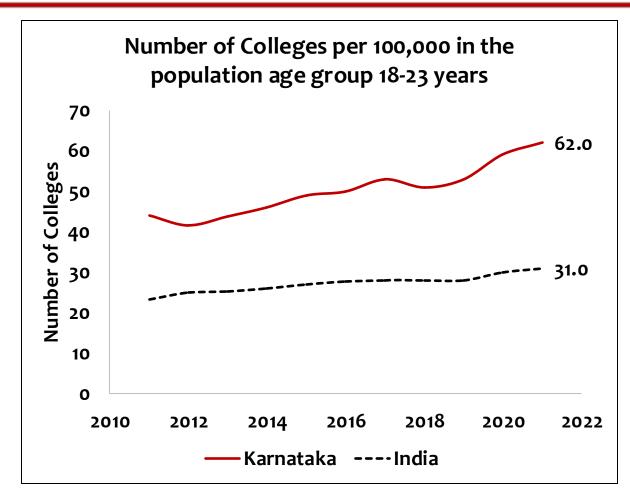


Source: i. Unified District Information System for Education (U-DISE), 2015-16; ii. All India Survey on Higher Education (AISHE), 2020-21. Note: i. GER is the total enrolment in a particular stage of education, regardless of age, expressed as a percentage of the official age-group of the population which corresponds to the given stage of education in a given year. It is the general level of participation per stage of education; ii. The Higher Education GER represents share of enrollees to the total population in the age group 18-23 years; iii. India number has been taken directly from the source.

In terms of Gender Parity Index (the share of girls to boys enrolled at Higher Education institutions in the age group 18-23 years), Karnataka is slightly above the national benchmark across the last decade.

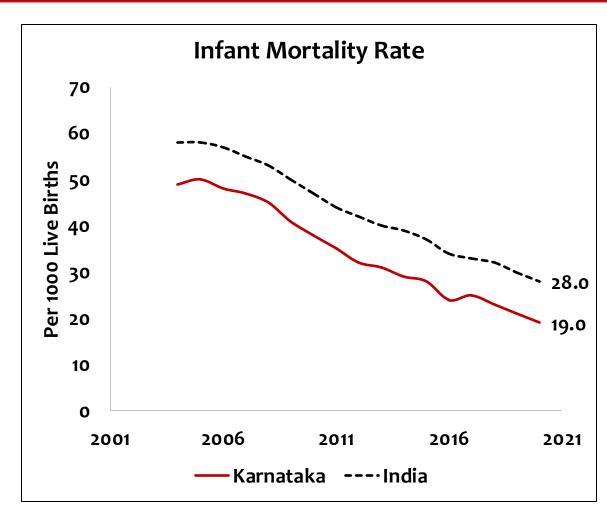
Karnataka also has double the average number of colleges (62) per 100,000 people in the age-group 18-23 years compared to the national average (31)





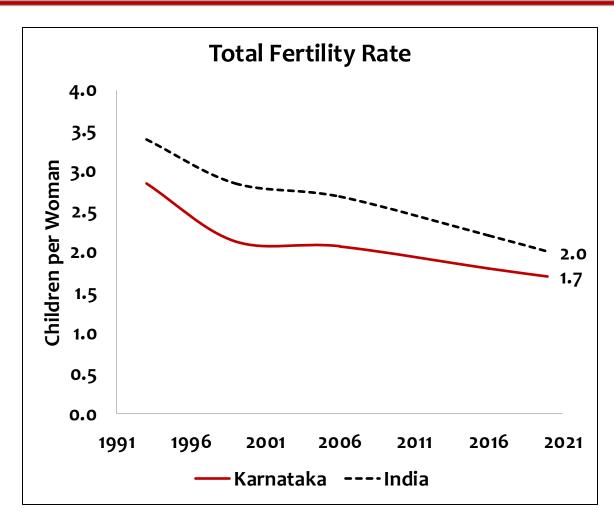
Source: All India Survey on Higher Education (AISHE), 2020-21 Note: The number for India has been taken directly from the source.

## Karnataka has seen a decline in Infant Mortality and Total Fertility Rate over their respective decades and is in a better position than the national benchmark



Source: Sample Registration System (SRS) Bulletin, Ministry of Home Affairs, 2020.

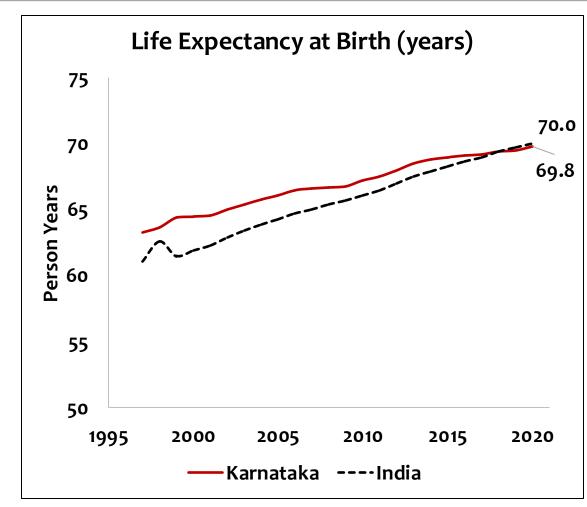
Note: India Number has been taken directly from the source



Source: National Family Health Survey (I - V).

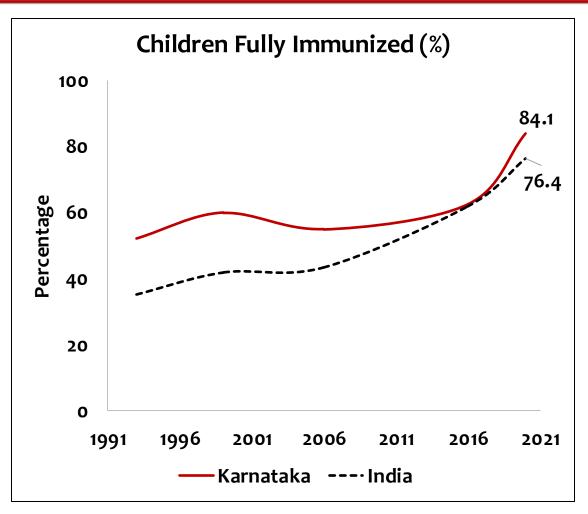
Note: India Number has been taken directly from the source

Life expectancy in Karnataka was higher than that of an average Indian but fell marginally below that average as of 2020. For children (12-23 months) fully immunized with all basic vaccinations, Karnataka is placed above the national average as of 2019-21



Source: Sample Registration System Bulletin, Ministry of Home Affairs, 2020.

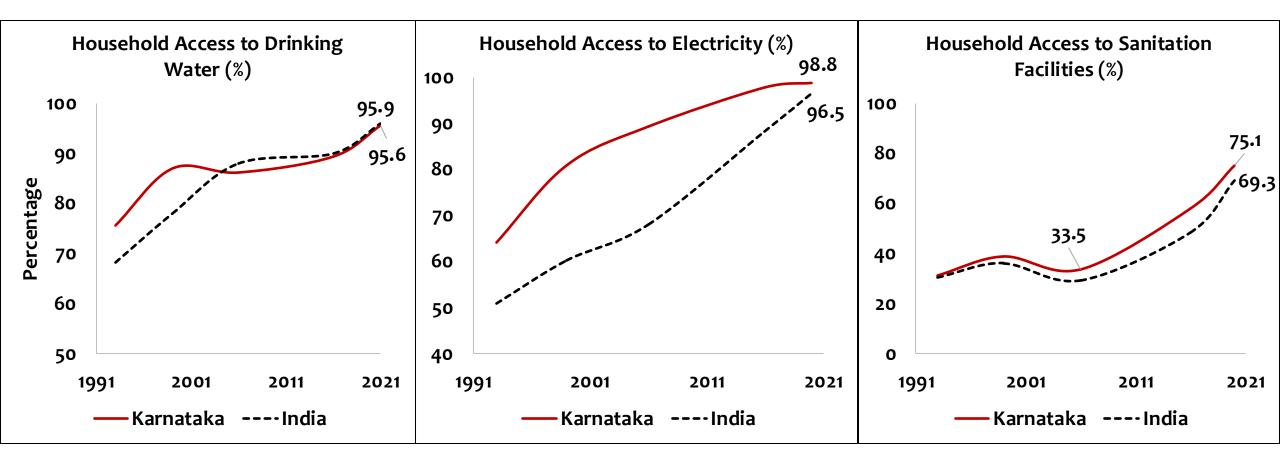
Note: India number has been taken directly from the source.



Source: National Family Health Survey (I - V).

Note: India number has been taken directly from the source.

Karnataka has improved on basic "quality of life" indicators. Nearly all households have access to electricity and percentage of households with access to drinking water is the same as the national average as of 2019-21



Source: National Family Health Survey (I – V).

Note: i. India number has been taken directly from the source; ii. Drinking water and sanitation refers to improved sources and facilities respectively as defined in NFHS.

## 5. Fiscal Indicators

- Fiscal Data covers the fiscal period 1990-91 2022-23
- Benchmark includes all 29 States (all Union Territories are excluded)

Table 4A: Deficits, Revenue, Expenditure, and Debt for Karnataka

Indicators	Most Recent Value (% of GSDP)	For Year	Decadal Change (b/w 2013-14 & 2022-23)	States' Median (All States)	States' Median (Larger States)	States' Mean (All States and UTs)
Fiscal Deficit, % of GSDP	2.7 %	2022-23	+ 0.6 % points	3.8 %	3.6%	3.4 %
Primary Deficit, % of GSDP	1.4 %	2022-23	+ 0.3 % points	1.9 %	1.6%	1.7 %
Revenue Surplus (+)/Deficit (-), % of GSDP	- 0.3 %	2022-23	- 0.3 % points	0.3 %	-0.4%	- 0.5 %
Total Revenue Receipts, % of GSDP	9.5 %	2022-23	- 1.5 % points	19.9 %	15.3%	14.4 %
Own Tax Revenue, % of GSDP	6.4 %	2022-23	- 1.2 % points	6.3 %	6.4%	6.6 %
Own Non Tax Revenue, % of GSDP	0.5 %	2022-23	- 0.01 % points	1.2 %	1.1%	1.0 %
Total Expenditure, % of GSDP	12.2 %	2022-23	- 0.9 % points	24.0 %	19.3%	17.8 %
Revenue Expenditure, % of GSDP	9.7 %	2022-23	- 1.2 % points	18.8 %	16.9 %	14.8 %
Capital Expenditure, % of GSDP	2.5 %	2022-23	+ 0.3 % points	4.0 %	3.4%	3.0 %
Capital Expenditure, % of Total Exp	20.2 %	2022-23	+ 3.7 % points	17.6 %	16.1%	16.7 %
Total Public Debt, % of GSDP	23.9 %	2022-23	+ 6.9 % points	32.1%	30.7%	27.5 %
Contingent Liabilities, % of GSDP	1.7 %	2021-22	+ 0.7 % points	1.6 %	1.7%	3.8 %

Source: Data is taken from State Finances Report (SFR), Reserve Bank of India (RBI), as of December 2023.

Note: i. Median of All States includes all 29 States (all Union Territories are excluded); ii. Median of 22 States excludes the North Eastern States, except Assam; iii. All States/UTs shows the sum of 29 States, Delhi and Puducherry, expressed as a % of national gross domestic product; iv. Most Recent Values are the Revised Estimates for 2022-23 (except for Contingent Liabilities, for which the most recent value is for 2021-22).

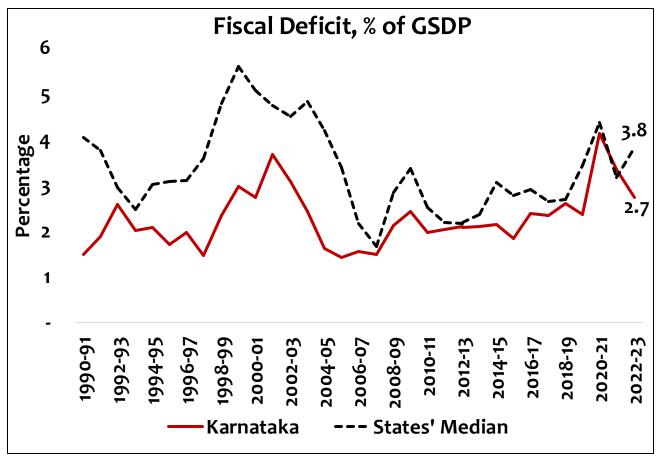
Table 4B: Deficits, Revenue, Expenditure, Debt, Subsidies and Off-Budget Borrowings for Karnataka

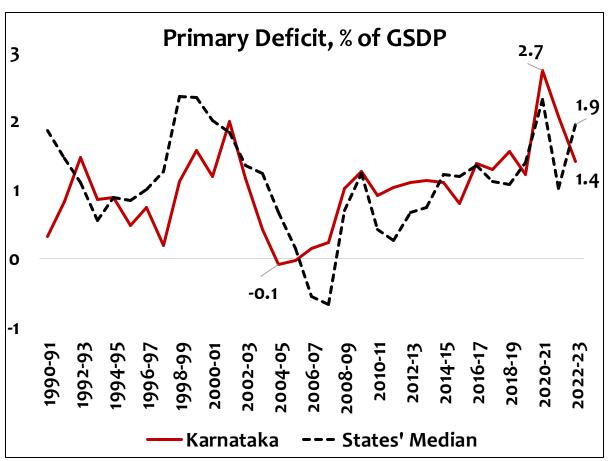
Indicators	Most Recent Value (% of GSDP)	For Year	Decadal Change (b/w 2013-14 & 2022-23)	States' Median (All States)	States' Median (Larger States)	All States/UT's (% of National GDP)
Committed Expenditure, % of GSDP	4.8%	2022-23	+0.5% points	9.2%	8.1%	6.9%
Committed Expenditure, % of Total Expenditure	39.5%	2022-23	+6.9% points	42.4%	40.9%	38.6%
Subsidies, % of GSDP	1.4%	2022-23	-0.2% points (b/w 2018-19 & 2022-23)	1.0%	1.1%	1.5%
Subsidies, % of Total Expenditure	11.3%	2022-23	-0.2% points (b/w 2018-19 & 2022-23)	3.7%	5.8%	8.2%
Off-Budget Borrowings, % of GSDP	0.2%	2022-23	-	0.2%	0.2%	0.1%
Per Capita Social Expenditure	Rs. 16,189	2022-23	+Rs. 9,570	Rs. 18,949	Rs. 2,606	Rs. 6,514
Per Capita Health Expenditure	Rs. 2,011	2022-23	+Rs. 1,289	Rs. 17,385	Rs. 2,494	Rs. 5,669
Per Capita Education Expenditure	Rs. 4,961	2022-23	+Rs. 2,326	Rs. 17,585	Rs. 2,421	Rs. 5,700
Social Expenditure, % of Total Expenditure	39.9%	2022-23	+1.0% points	43.9%	45.6%	45.3%
Health Expenditure, % of Total Expenditure	5.0%	2022-23	+0.7% points	6.3%	6.3%	6.2%
Education Expenditure, % of Total Expenditure	12.2%	2022-23	-3.3% points	14.6%	14.8%	14.7%
Buoyancy for Revenue Expenditure with GSDP - ratio	0.3%	2022-23	-0.7% points	1.8%	1.7%	1.5%

Source: i. Subsidies, Wage and Salaries, Pension, Social sector expenditure, Medical and Public Health, Family Welfare, Education expenditure, Total Expenditure data are from the RBI's State Finances Reports, as of December 2023; ii. Off-Budget Borrowing data is from Ministry of Expenditure (2021-22); iii. Data for Population and GSDP are taken from MoSPI.

Note: i. Median of All States includes all 29 States (all Union Territories are excluded); ii. Median of 22 States excludes the North Eastern States, except Assam; iii. All States/UTs shows the sum of 29 States, Delhi and Puducherry, expressed as a % of national gross domestic product; iv. Committed Expenditure is calculated as the sum of Wage, Salaries, and Pension; v. Health Expenditure is calculated as the sum of Medical and Public Health, Family Welfare; vi. Social, Health, and Education Expenditures are calculated as per capita values by dividing the respective expenditure by the population; vii. Total Expenditure is calculated as the sum of Revenue Expenditure (RevEx), Capital Outlay, and Loans and Advances; viii. The Buoyancy of RevEx is calculated as the ratio between the year-on-year growth rate of Revenue Expenditure and that of GSDP.

## As of 2022-23, Karnataka ran Fiscal deficit and Primary Deficit of 2.7 and 1.4 percent of its GSDP respectively, with both deficits lower than that of a median State



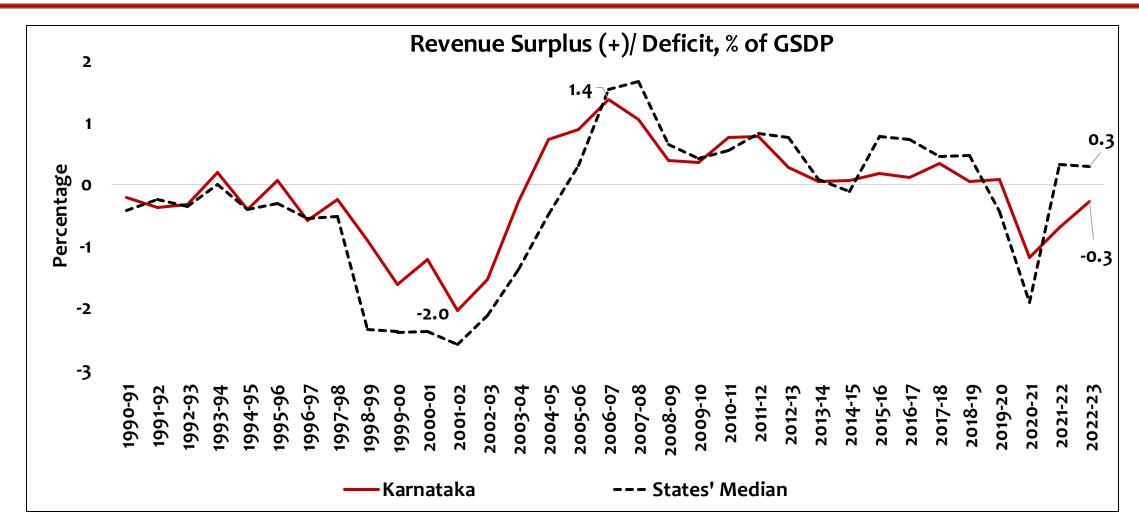


Source: i. Fiscal Deficit (FD) - RBI State Finances Report (SFR, 2022-23); ii. State GSDP - MoSPI (2022-23).

Note: i. Primary Deficit (PD) is calculated (Fiscal Deficit – Interest Payments). Interest Payments is sourced from RBI SFR; ii. The variable as a percent of GSDP has been calculated for each State, and its median across 29 States has been shown (all Union Territories are excluded).

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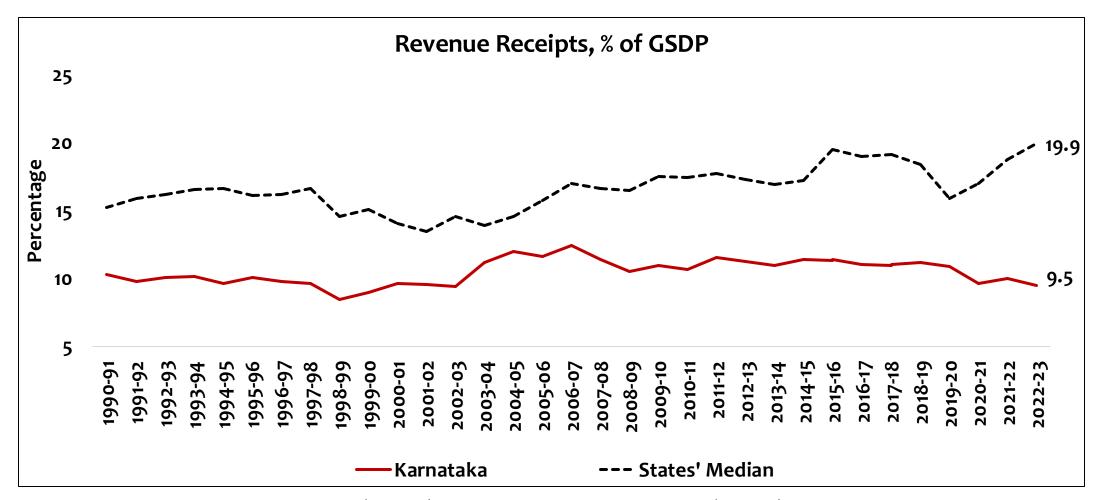
## Karnataka's Revenue Deficit was 0.3 percent of its GSDP in 2022-23, while a median State ran a Revenue Surplus of 0.3 percent of its GSDP in the same year



Source: i. Revenue Deficit is from RBI State Finances Report (SFR, 2022-23); ii. State GSDP data is from MoSPI (2022-23).

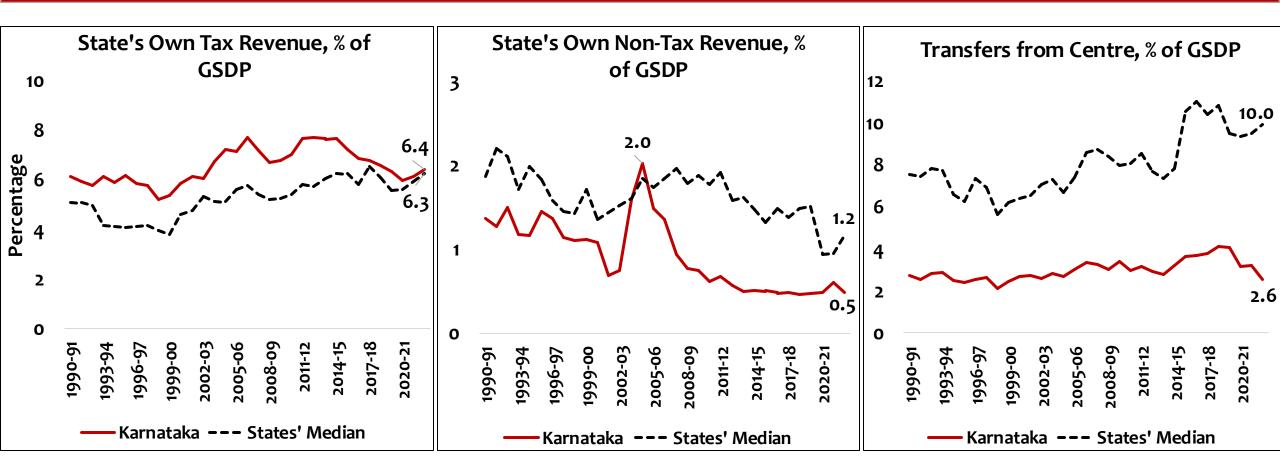
Note: The variable as a percent of GSDP has been calculated for each State, and its median across 29 States has been shown (all Union Territories are excluded).

## Karnataka's Total Revenue Receipts (own tax, own non-tax, and shared by the Centre), at 9.5 percent of its GSDP in 2022-23, was substantially lower than the median State's collections



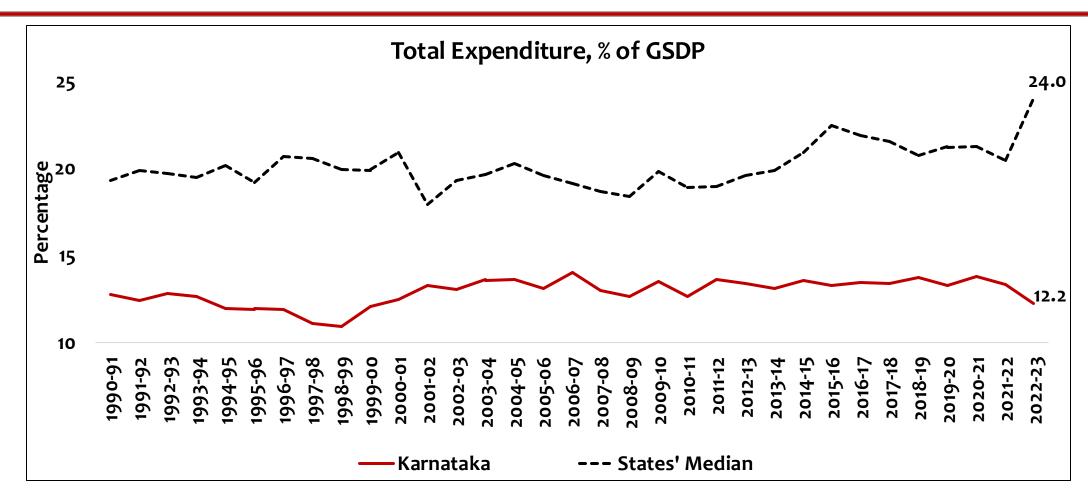
Source: i. Revenue Receipts from RBI SFR (2022-23); ii. State GSDP data is from MoSPI (2022-23). Note: The variable as a percent of GSDP has been calculated for each State, and its median across 29 States has been shown (all Union Territories are excluded).

#### Karnataka's Own-Tax Revenue constitutes 6.4 percent of the GSDP. Its Own Non-Tax Revenue and Transfers from Centre were both lower than that of a median State in 2022-23



Source: i. Own-Tax Revenue, Own Non-Tax Revenue, and Transfers from the Centre from RBI SFR (2022-23); ii. State GSDP data is from MoSPI (2022-23). Note: The variable as a percent of GSDP has been calculated for each State, and its median across 29 States has been shown (all Union Territories are excluded).

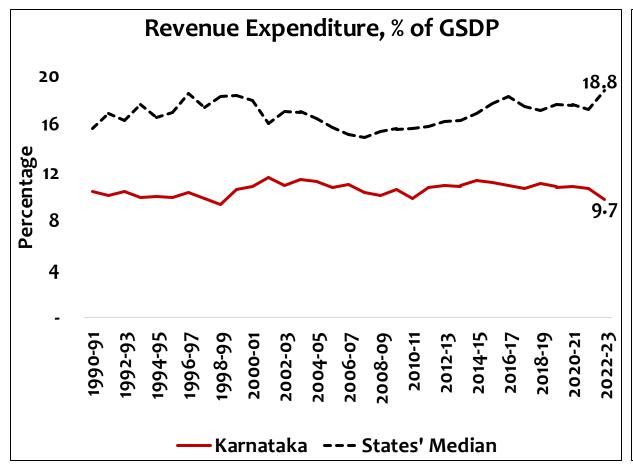
## In 2022-23, Karnataka's Total Expenditure at 12.2 percent of its GSDP was about half the Expenditure of a median State

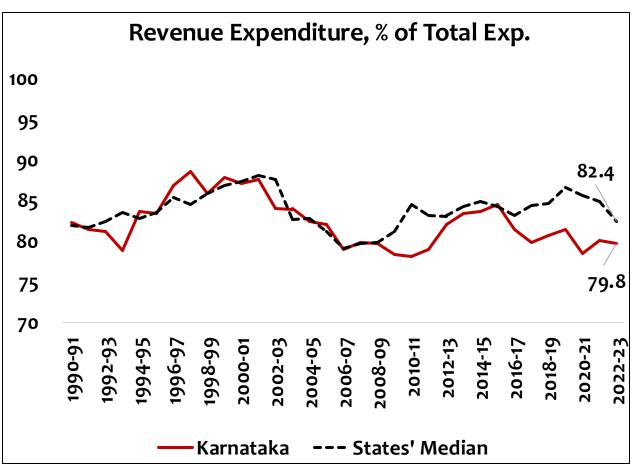


Source: i. Total Expenditure is from RBI SFR (2022-23); ii. State GSDP data is from MoSPI (2022-23).

Note: i. Total Expenditure is calculated as sum of revenue expenditure (RevEx) and capital expenditure (CapEx); ii. The variable as a percent of GSDP has been calculated for each State, and its median across 29 States has been shown (all Union Territories are excluded).

#### Karnataka's Revenue Expenditure is 9.7 percent of its GSDP, about 9 percentage points lower than a median State

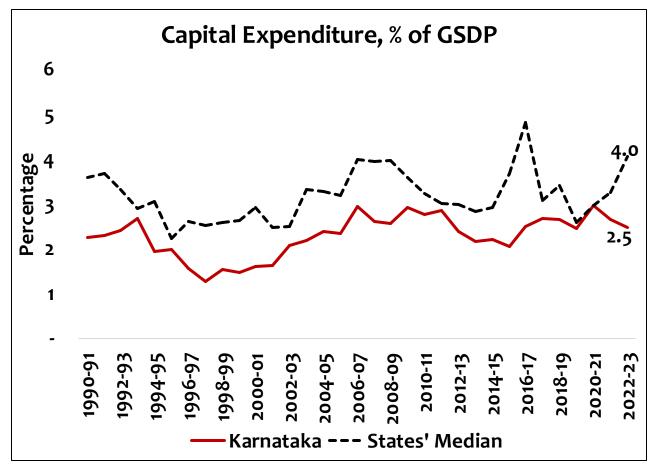


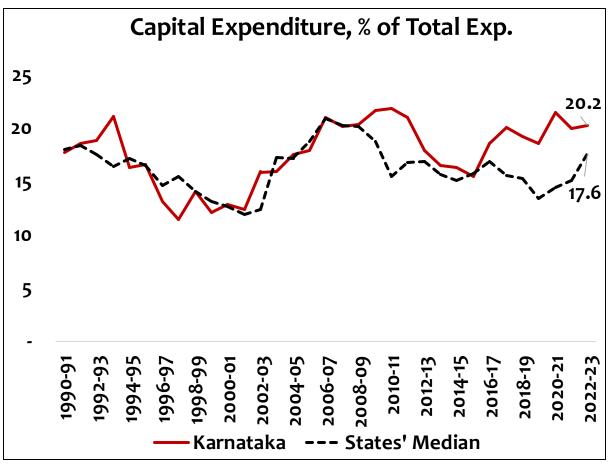


Source: i. Revenue Expenditure is from RBI SFR (2022-23); ii. State GSDP data is from MoSPI (2022-23).

Note: Total Expenditure is calculated as RevEx plus CapEx; ii. The variable as a percent of GSDP has been calculated for each State, and its median across 29 States has been shown (all Union Territories are excluded).

Karnataka's CapEx is 2.5 percent of its GSDP, lower than the median State's CapEx (as % of the GSDP). The CapEx as percent of total expenditure was higher than what a median State spent in 2022-23

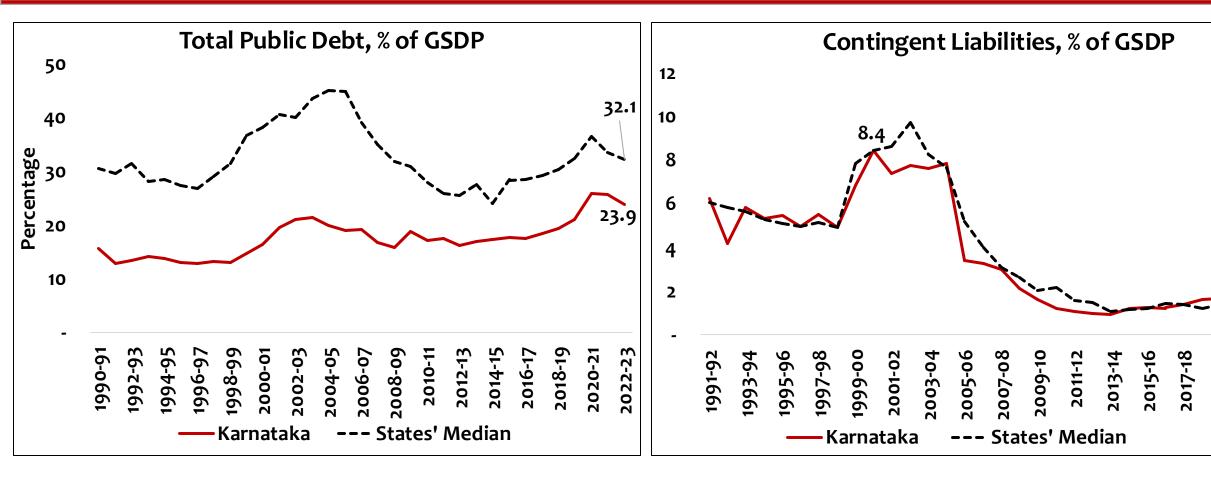




Source: i. CapEx is calculated as Capital Outlay + Loans and Advances given by the State government and the data for both is taken from RBI SFR (2022-23); ii. State GSDP data is from MoSPI (2022-23).

Note: i. Total Expenditure is calculated as RevEx plus CapEx; ii. The variable as a percent of GSDP has been calculated for each State, and its median across 29 States has been shown (all Union Territories are excluded).

Karnataka's Public Debt has seen a steady rise since 2016, and as of 2022-23 is 23.9 percent of its GSDP (over 9 percent lower than a median State). Its Contingent Liabilities are at par with a median State at 1.7 percent of its GSDP in 2021-22



Source: i. Public Debt and State-wise contingent liabilities data has been taken from RBI SFR (2022-23); ii. State GSDP data is from MoSPI (2022-23). Note: The variable as a percent of GSDP has been calculated for each State, and its median across 29 States has been shown (all Union Territories are excluded).

2019-20

#### **Debt Sustainability Assessment**

- Extrapolations of the debt-to-GSDP ratio are used as a way of thinking about debt sustainability, using the equation:  $\Delta b_t = \frac{b_{t-1}(r_t-g_t)}{1+g_t} + pd_t*$
- A baseline scenario assumes real GDP growth, the real effective interest rate and primary deficit will be at the same levels for the next five years as their respective averages from 2012-13 to 2021-22.
- Second scenario assumes faster GDP growth to the tune of half a standard deviation over the average growth between 2012-13 to 2021-22.
- Third scenario assumes a favorable change of half a standard deviation to the primary deficit over the average deficit between 2012-13 to 2021-22.
- Fourth scenario assumes baseline plus outstanding contingent liabilities in 2021-22 will be absorbed (by 20 percent) each year in the next five years.
- A fifth scenario, by combining scenarios two and three.

Note: i.  $b_t$  is the debt-to-GSDP ratio, pd<sub>t</sub> is the primary-deficit-to-GSDP ratio (deficit net of interest payment),  $g_t$  is growth of real GSDP, and  $r_t$  is the real effective interest rate on public debt; all in year t; ii.  $\Delta b_t$  is the change in debt-to-GSDP ratio between t and t-1; iii. The exercise is based on the assumption that  $g_t$ ,  $r_t$ , and  $pd_t$  are exogenous, that is, they are not impacted by the level of debt.

#### Karnataka Debt Evolution (2012-13 to 2021-22)

#### Averages and standard deviations of key parameters

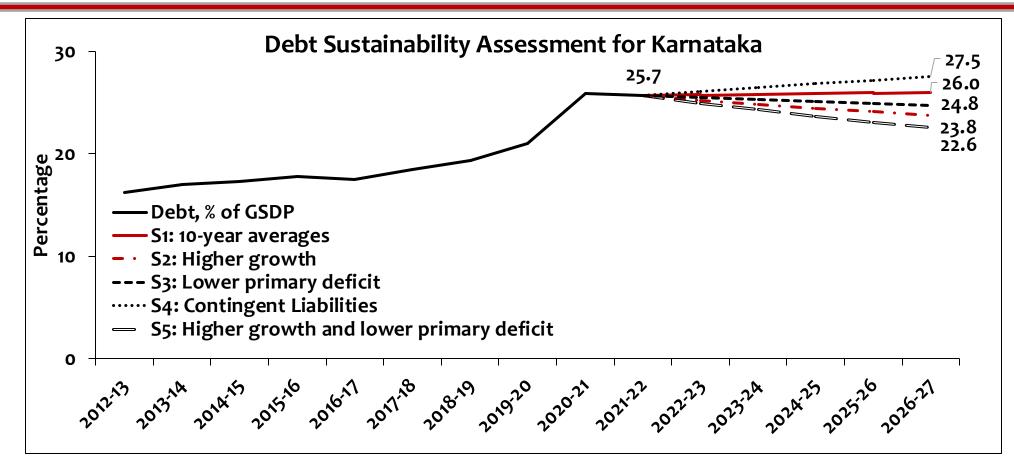
	_	erage and std. 012-13 to 2021-22)	Five-year average and std. deviations (2017-18 to 2021-22)		
	Mean	Std dev	Mean	Std dev	
Nominal GDP growth (γ)	12.6	5.4	10.4	7.1	
Deflator growth $(\pi)$	4.8	2.4	4.5	2.6	
Real GDP growth (g)	7.4	4.6	<b>5.</b> 6	5.5	
Effective interest rate (e)	6.5	0.3	6.4	0.3	
Real effective interest rate (ê)	1.7	2.5	1.9	2.9	
Primary deficit (pd)	1.4	0.6	1.8	0.6	
Growth-effective interest differential (g-ê)	5.7	5.2	3.7	7.0	
Contingent Liabilities (CL) as of 2021-22	1.7	-	-	-	
Percentage points of CL absorbed each year for 5 years	0.34	-	-	-	

#### Different scenarios for conducting debt sustainability assessments

Scenarios	Debt level in 2021-22 (bt-1)	,	Real GDP growth (g)	Real Effective Interest Rate (ê)	Change in Debt in first year (2022-23)	Cumulative change in Debt in next five years
Baseline (Scenario 1): 10-year averages (2012-13 to 2021-22)	25.7	1.4	7.4	1.7	0.08	0.35
Scenario 2: Higher growth (increasing growth by half a standard deviation over baseline)	25.7	1.4	9.7	1.7	-0.44	-1.89
Scenario 3: Lower Primary Deficit (reducing primary deficit by half a standard deviation over baseline)	25.7	1.2	7.4	1.7	-0.21	-0.92
Scenario 4: Contingent Liabilities in 2021-22 are absorbed 20% in each year	25.7	1.4	7.4	1.7	0.42	1.87
Scenario 5: Lower Primary Deficit and Higher Growth	25.7	1.2	9.7	1.7	-0.72	-3.11

Note: In Scenario 2, half a standard deviation of 10-year average of real GDP growth rate is added as a positive growth shock. In Scenario 3, half a standard deviation of 10-year average of primary deficit is removed as a positive fiscal shock. In Scenario 4, 0.34 percentage points of Contingent Liabilities are assumed to be taken on by the government in each fiscal year.

For Karnataka, the debt sustainability analysis predicts a declining trajectory for debt to GSDP ratio in most of the scenarios. If the State continues to perform at the 10-year average (as in our baseline scenario), it's debt to GSDP ratio is projected to increase only by 0.3 percentage points and if it absorbs the outstanding contingent liabilities, this ratio is projected to increase by nearly 2 percentage points by the end of 2026-27



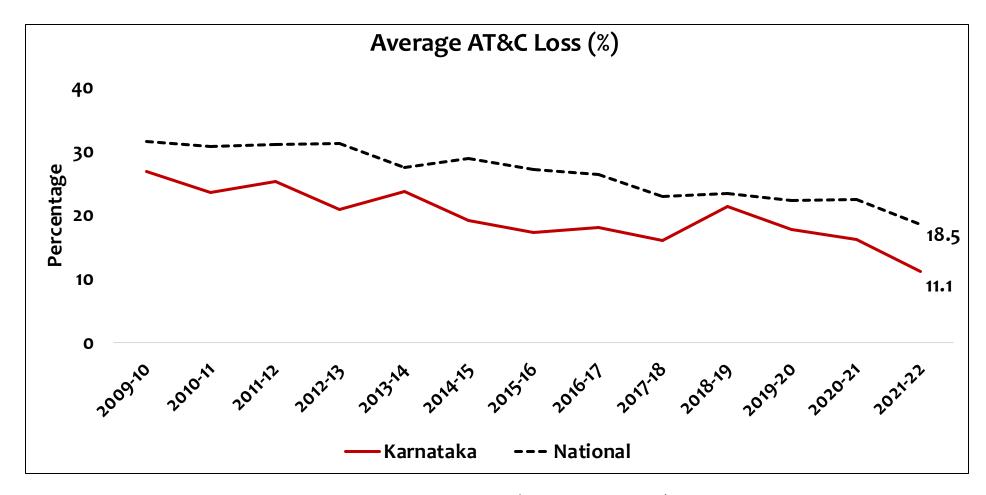
Note: Projection period is from 2022-23 till 2026-27. In Scenario 2, half a standard deviation of 10-year average of real GDP growth rate is added as a positive growth shock. In Scenario 3, half a standard deviation of 10-year average of primary deficit is removed as a positive fiscal shock. In Scenario 4, 0.34 percentage points of Contingent Liabilities are assumed to be taken on by the government in each fiscal year

#### **Karnataka: Power Sector**

- The State has five public (government-operated) distribution utility/companies (DISCOMs) classified by regions (Bengaluru, Mangalore, Hubballi, Kalaburagi and Mysuru Electricity Supply Companies) – BESCOM, MESCOM, HESCOM, GESCOM, CESC.
- Their Aggregate Technical & Commercial (AT&C) Losses have been declining consistently since 2013-14, and is at about 11 percent as of 2021-22. The low losses can be attributed to a corresponding increase in their billing and collection efficiency.
- While the Government of Karnataka has not taken over any debt of DISCOMs, it has
  undertaken the implementation of operational parameters under UDAY. [refer Report
  of the CAG on Public Sector Undertakings for the year ended March 2019, Pg. 51]
- The achievement of the State exceeded all targets set under UDAY, except the gap between the average cost of supply and the average realized revenue.

Source: Report of the CAG on Public Sector Undertakings for the year ended March 2019, 15<sup>th</sup> Finance Commission Volume-IV The States.

## AT&C of DISCOMs in Karnataka have been reducing since 2011-12 and are lower than the national average, standing at 11.1 percent in 2021-22



Source: PFC Report on Performance of State Power Utilities (2009-10 to 2021-22). The figure shows the average AT&C Loss across the 5 DISCOMs in the State. The National average is across all DISCOMs in the 29 States and 2 Union Territories (Delhi & Puducherry)

# 6. Devolution to Karnataka from Centre in the 14<sup>th</sup> and 15<sup>th</sup> Finance Commission (FC)

#### Tax Devolution Criteria of 14th and 15th FCs to all States

- The Net Proceeds of all taxes¹ collected by the Union are shareable with the States, and constitute the divisible pool of taxes.
- The 14<sup>th</sup> FC placed the States' share of tax devolution to 42 percent of the divisible pool, and the 15<sup>th</sup> FC adjusted it to 41 percent of the divisible pool due to the changed status of Jammu & Kashmir into the Union Territories of Ladakh and Jammu & Kashmir.
- Below table highlights the tax devolution matrix used by the two FCs, and the corresponding weights for each criteria.

Criteria	14th FC (2015-20)	15th FC (2021-26)
Income Distance	50	45
Area	15	15
Population (1971)	17.5	О
Population (2011) <sup>2</sup>	10	15
Demographic Performance	О	12.5
Forest Cover	7.5	О
Forest and Ecology	О	10
Tax and fiscal efforts <sup>3</sup>	О	2.5
Total	100	100

Source: 14<sup>th</sup> and 15<sup>th</sup> FC Reports.

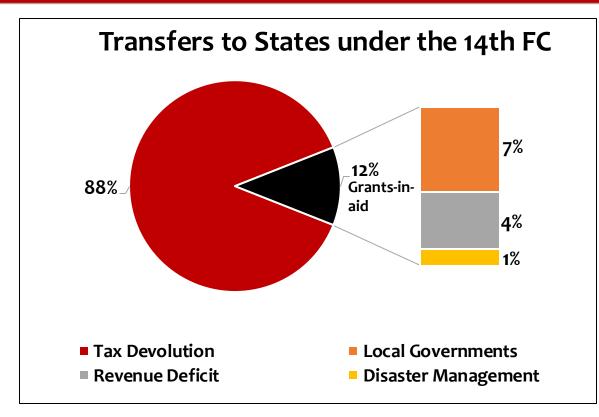
Note: i. Per Articles 270 and 279, Net Proceeds of taxes is defined as all the taxes, except cess and surcharges, reduced by the cost of collection; ii. 14th FC used the term "demographic change" which was defined as Population in 2011. The 15<sup>th</sup> FC reintroduced the "tax and fiscal efforts" criteria. The definitions of all criteria can be referred to from the 15<sup>th</sup> FC Report.

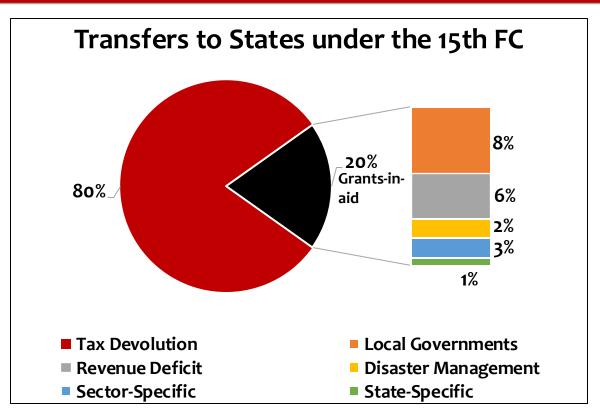
#### **Grants-in-Aid**

- ➤ There were three types of grants recommended by the 14<sup>th</sup> FC revenue deficit grants, grants for local governments, and grants for disaster management. The 15<sup>th</sup> FC, in addition to the three, also recommended sector-specific and State-specific grants.
  - 1. Revenue-deficit grants: Post tax devolution, those States which remain in a state of revenue deficit, are allocated this grant in the magnitude of their deficit (estimated for the award period based on the projected revenues and tax devolution).
  - 2. Grants for Local Governments: These are distributed between the rural and urban local bodies (65:35 ratio per the 15<sup>th</sup> FC). The States' shares are calculated with 90 percent weightage given to population and 10 percent to area.
  - **Grants for Disaster Management:** The corpus of the State Disaster Response Fund (envisaged under the Disaster Management Act, 2005, which covers both natural and man-made disasters) is recommended by the FC per Article 275 (1) of the Constitution. Under the 14<sup>th</sup> FC, it was recommended that Centre contribute 90 percent of the SDRF and States provide the remaining 10 percent. The 15<sup>th</sup> FC reinstated the previous sharing arrangement, wherein Centre's contribution to SDRF for General Category States is 75 percent contribution and it remains 90 percent for the North-Eastern and Himalayan States.
  - **Sector-Specific Grants:** The 15<sup>th</sup> FC reinstated recommendations for social sectors like health and education, rural economy (encouraging agricultural reforms and grants for the Pradhan Mantri Gram Sadak Yojana), administrative and governance reforms (for judiciary, improved statistics, and incentivizing aspirational districts and blocks).
  - 5. State-specific Grants: To help States address special needs and overcome cost disabilities, State-specific grants were recommended by the 15th Finance Commission. These span six broad areas: a) social needs, b) administrative governance and related infrastructure, c) conservation and sustainable use of water, drainage and sanitation, d) preserving culture and historical monuments, e) high-cost physical infrastructure, and f) tourism.

Source: 14th and 15th FC reports.

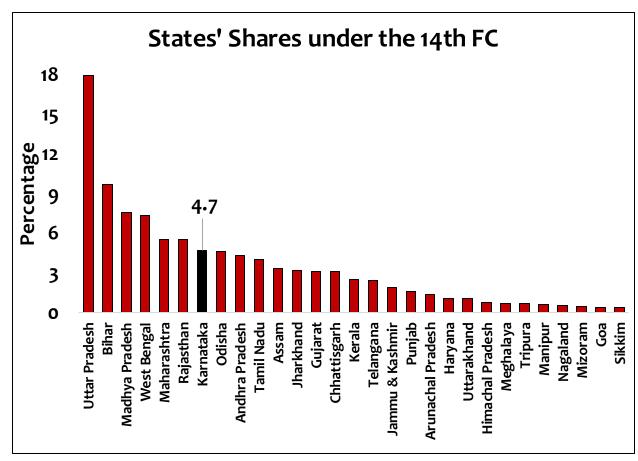
Proposed transfers from the Centre to all States: 15<sup>th</sup> Finance Commission reinstated recommendations on sector-specific and State-specific grants, which 14<sup>th</sup> Finance Commission had excluded from the grants-in-aid to States, thus increasing the share of grants in the total transfers recommended from Centre to States to 20 percent

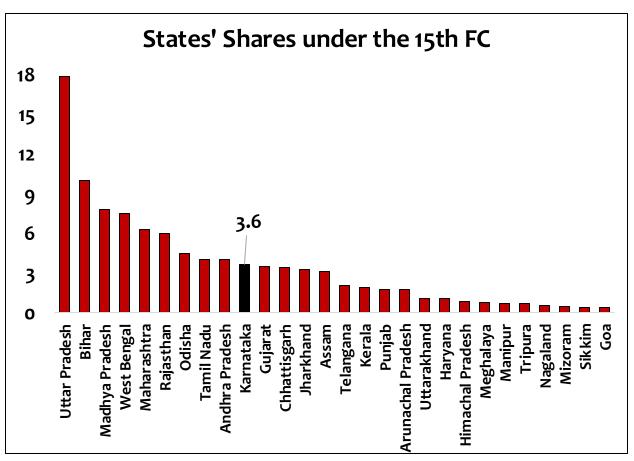




- Sector-Specific Grants are further divided into three categories:
  - Social Sector health and education
  - Rural Economy agriculture reforms, self reliance, export & sustainability, and PMGSY roads
  - Governance and Administrative Reforms judiciary, statistics, aspirational districts and blocks

#### Karnataka's share in taxes from Centre, as per the FC recommendations, decreased from 4.7 percent under 14<sup>th</sup> Finance Commission to 3.6 percent under 15<sup>th</sup> FC recommendations

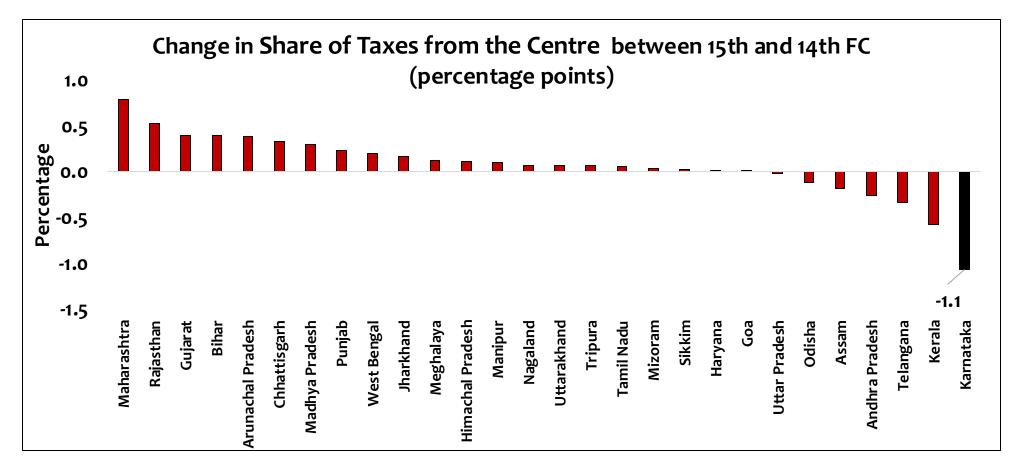




Source: 14th and 15th FC Reports.

Note: Due to the changed status of Jammu & Kashmir into the new Union Territories of Ladakh and Jammu and Kashmir, the 15<sup>th</sup> FC did not include it in the States' share of taxes from the Centre.

#### Karnataka has 1.1 percentage point decrease in Tax Devolution share between 14<sup>th</sup> and 15<sup>th</sup> Finance Commission recommendations



Source: 14th and 15th FC Reports.

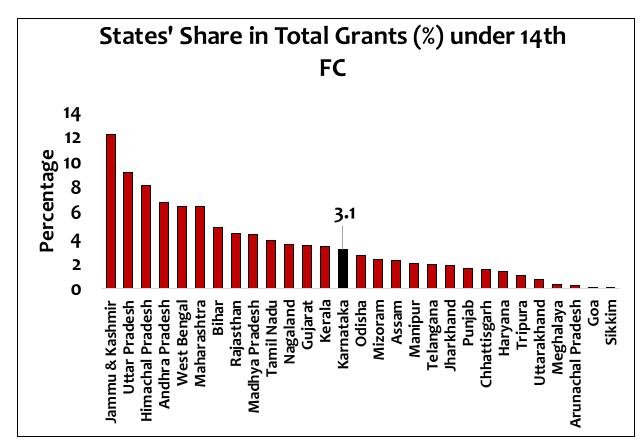
Note: Due to the changed status of Jammu & Kashmir into the new Union Territories of Ladakh and Jammu and Kashmir, the 15<sup>th</sup> FC did not include it in the States' share of taxes from the Centre, and it has been excluded from this chart.

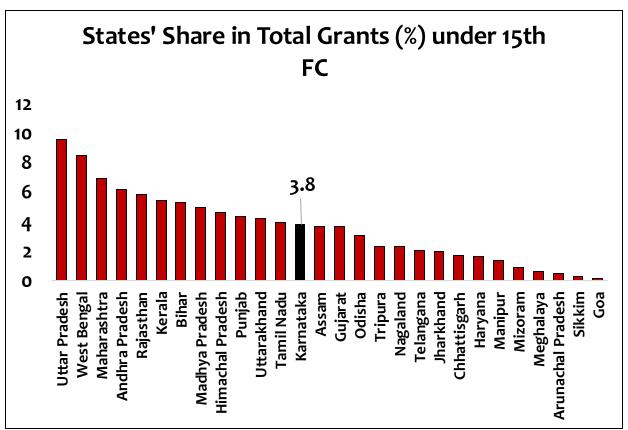
#### **Grants-in-Aid: Karnataka**

- There were three types of grants recommended by the 14<sup>th</sup> FC revenue deficit grants, grants for local governments, and grants for disaster management. The 15<sup>th</sup> FC, in addition to the three, also recommended sector-specific and State-specific grants.
- > Total: The State's share in the total grants-in-aid increased by 0.7 percentage points under the 15<sup>th</sup> FC, compared to the 14<sup>th</sup> FC, at 3.8 percent.
  - 1. Revenue-deficit grants: While no revenue-deficit grant was recommended for Karnataka by the 14th FC, it was allocated 0.6 percent of the total revenue deficit grants per the 15th FC recommendations.
  - **2. Grants for Local Governments:** Its shares in the grants for local governments has remained consistent between the 14<sup>th</sup> and 15<sup>th</sup> FC, standing at **5.1 percent under the 15<sup>th</sup> FC recommendations**.
  - 3. Grants for Disaster Management: Karnataka received 3.6 percent of the total grants for disaster management under the 15<sup>th</sup> FC recommendations, up by 1.1 percentage points from the 2.5 percent under the 14<sup>th</sup> FC recommendations.
  - **Sector-Specific Grants:** Per the 15<sup>th</sup> FC recommendations, it receives **3.7 percent of the total sectoral grants**, the largest component being grants for by agriculture at 5.1 percent (of the total agricultural grants), followed by health and education at 4 percent. Other sector-specific grants and the State's shares in each include grants for statistics (3.8 percent), grants for judiciary (2.8 percent), and maintenance of PMGSY roads (1.4 percent).
  - 5. State-specific Grants: . Karnataka was allocated Rs. 6,000 crore in State-specific grants (12.1 percent of the total), distributed equally between holistic improvement of water bodies (Rs. 3,000 crores), and the peripheral ring road to decongest Bengaluru (Rs. 3,000 crores).

Source: 14<sup>th</sup> and 15<sup>th</sup> FC reports.

### Karnataka noted an increase of 0.7 percentage points in its share of the Total Grants-in-Aid recommended between 14<sup>th</sup> and 15<sup>th</sup> Finance Commissions

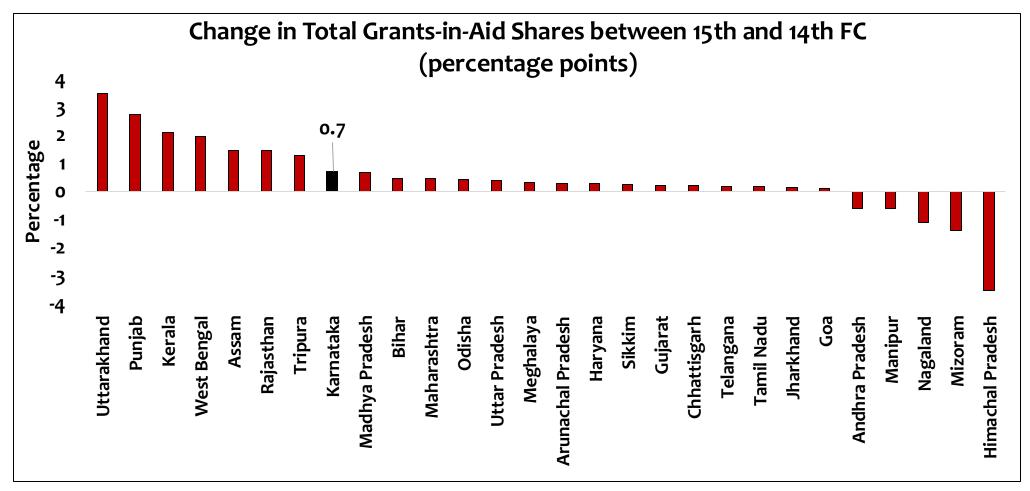




Source: 14th and 15th FC Reports.

Note: i. Due to the changed status of Jammu & Kashmir into the new Union Territories of Ladakh and Jammu and Kashmir, the 15th FC did not include it in the States' share of grants-in-aid from the Centre; ii. An amount of Rs.16,400 crore is not included in the total Grants-in-Aids figure for the 15th FC. This comprises of three grants (a) School Education (Rs. 4,800 crore), (b) Grants for aspirational districts and blocks (Rs. 3,150 crore) and (c) Local Bodies grants for (i) Incubation of new Cities (Rs. 8,000 Crore) and (ii) National Data Centre (Rs. 450 Crore). These were not included in the table which reports the State-wise shares in the 15th FC Report.

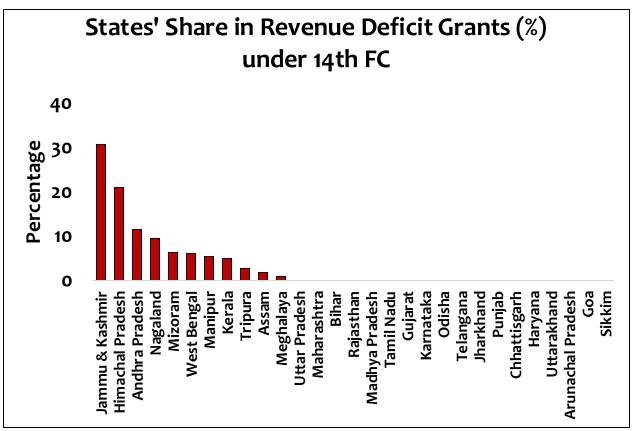
### Karnataka had a 0.7 percentage point rise in Total Grants-in-Aid shares between the 14<sup>th</sup> and 15<sup>th</sup> FC recommendations

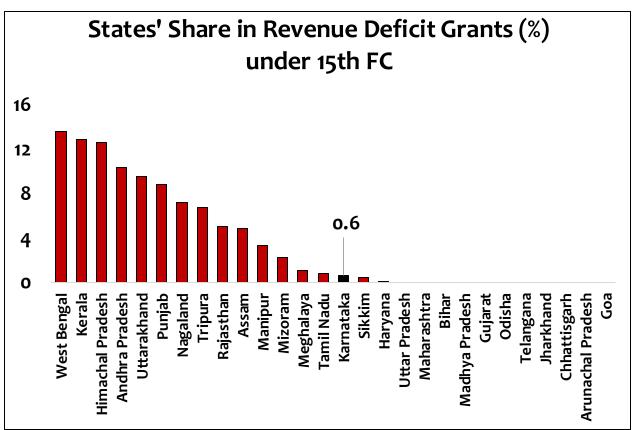


Source: 14th and 15th FC Reports.

Note: Due to the changed status of Jammu & Kashmir into the new Union Territories of Ladakh and Jammu and Kashmir, the 15th FC did not include it in the States' share of Grants-in-Aid from the Centre, and it has been excluded from this chart.

# No revenue-deficit grant was recommended for Karnataka by 14<sup>th</sup> FC, while it was allocated 0.6 percent of the total revenue deficit grants as per 15<sup>th</sup> FC recommendations

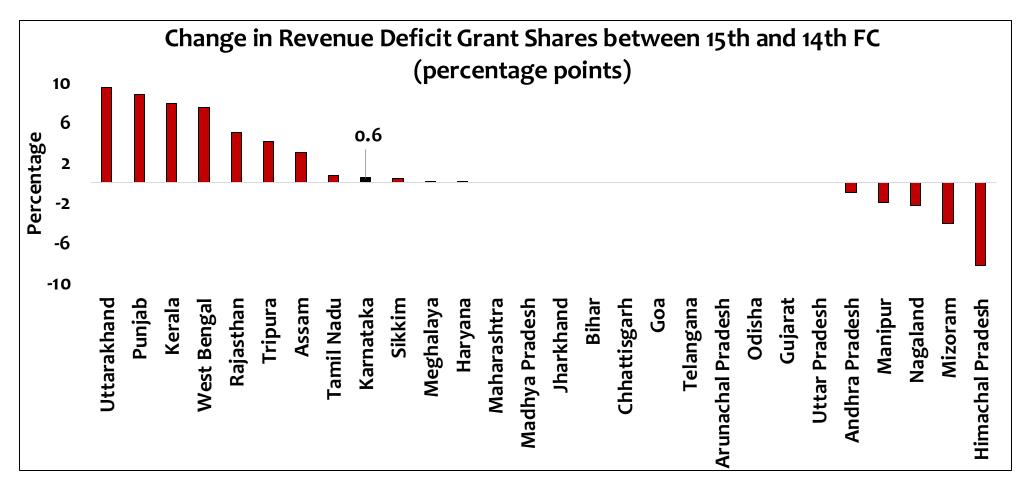




Source: 14th and 15th FC Reports.

Note: Due to the changed status of Jammu & Kashmir into the new Union Territories of Ladakh and Jammu and Kashmir, the 15th FC did not include it in the States' share of Revenue Deficit Grants from the Centre.

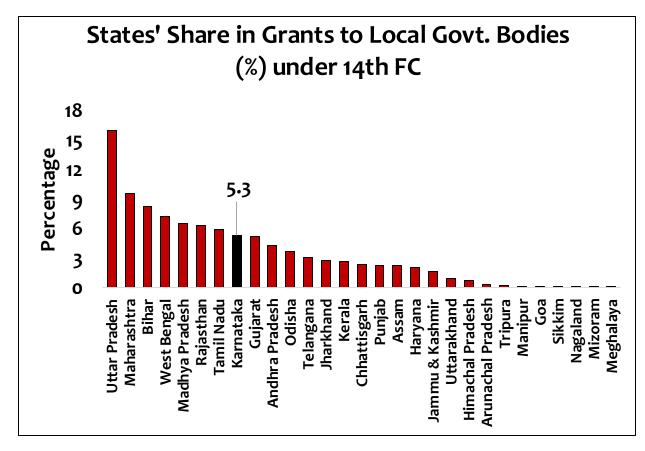
### Karnataka had a 0.6 percent point increase in Revenue Deficit Grants between the 14<sup>th</sup> and 15<sup>th</sup> FC recommendations

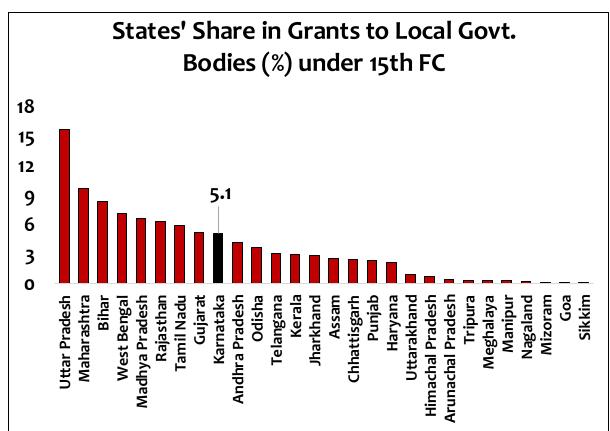


Source: 14th and 15th FC Reports.

Note: Due to the changed status of Jammu & Kashmir into the new Union Territories of Ladakh and Jammu and Kashmir, the 15th FC did not include it in the States' share of Revenue Deficit Grants from the Centre, and it has been excluded from this chart.

### Karnataka's recommended share in the grants to Local Government Bodies from the Centre decreased marginally from 5.3 to 5.1 percent between 14<sup>th</sup> and 15<sup>th</sup> FCs

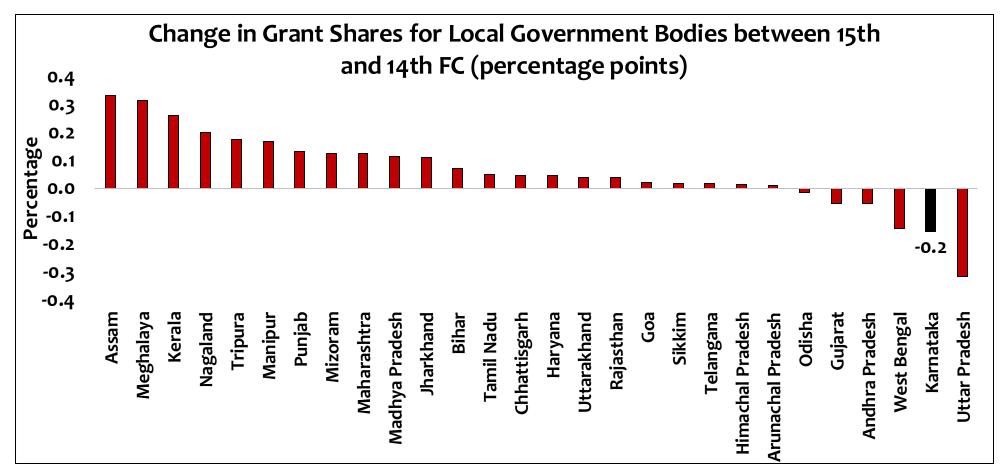




Source: 14th and 15th FC Reports.

Note: An amount of Rs. 8,450 crore is not included in the grants for Local Bodies, these include (i) Incubation of new Cities (Rs. 8,000 Crore) and (ii) National Data Centre (Rs. 450 Crore). These were not included in the table which reports the State-wise shares in the 15th FC Report.

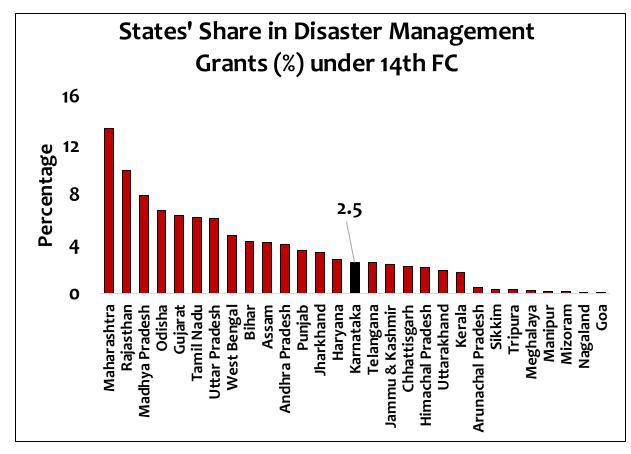
#### Karnataka had a 0.2 percent point fall in Local Government Bodies' Grants between the 14<sup>th</sup> and 15<sup>th</sup> FC recommendations

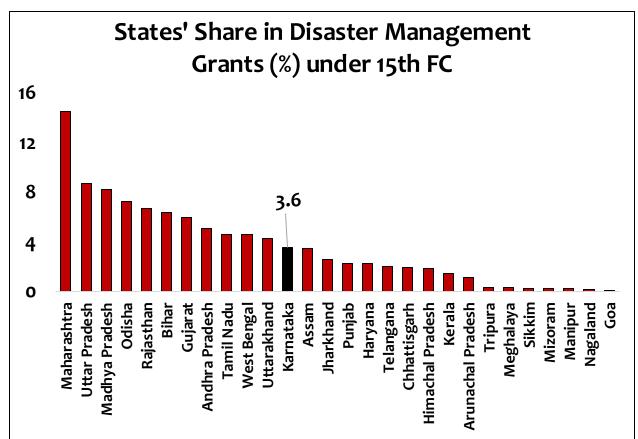


Source: 14th and 15th FC Reports.

Note: Due to the changed status of Jammu & Kashmir into the new Union Territories of Ladakh and Jammu and Kashmir, the 15th FC did not include it in the States' share of Local Government Bodies' Grants from the Centre, and it has been excluded from this chart.

### Karnataka's recommended share in the grants for disaster management from the Centre increased from 2.5 percent in the 14<sup>th</sup> FC recommendation to 3.6 percent by 15<sup>th</sup> FC

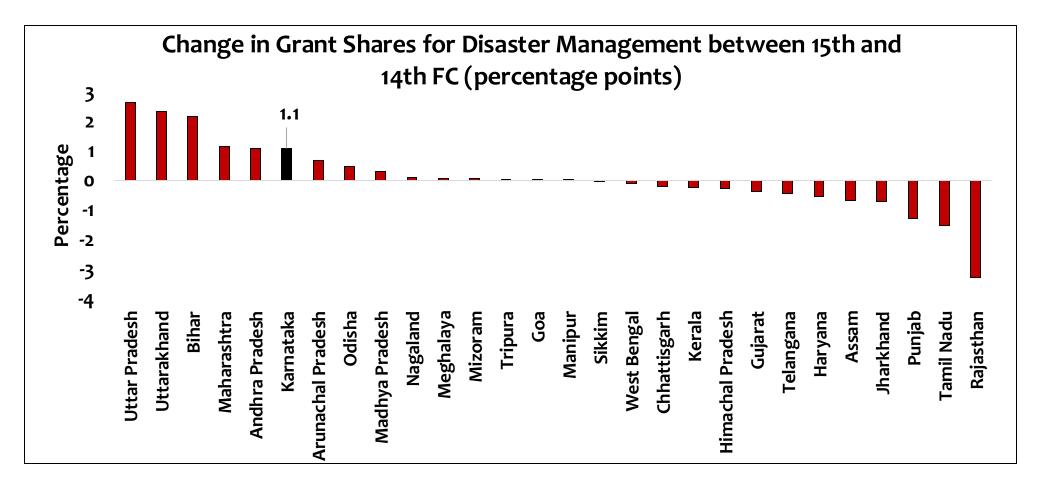




Source: 14th and 15th FC Reports.

Note: A Disaster Risk Index is calculated for all States, taking into consideration the natural calamities different States are prone to, poverty, and other factors. This index is then weighed by a factor accounting for the aggregate expenditure of States on disaster management, area and population, to calculate the States' shares in disaster management grants.

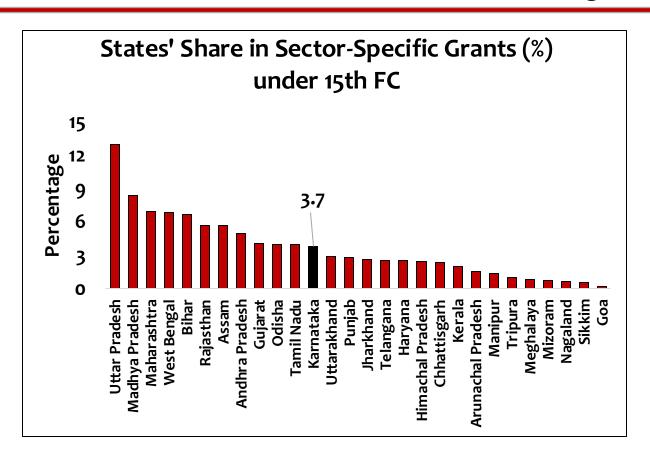
### Karnataka had a 1.1 percent point increase in Grants for Disaster Management between the 14<sup>th</sup> and 15<sup>th</sup> FC recommendations

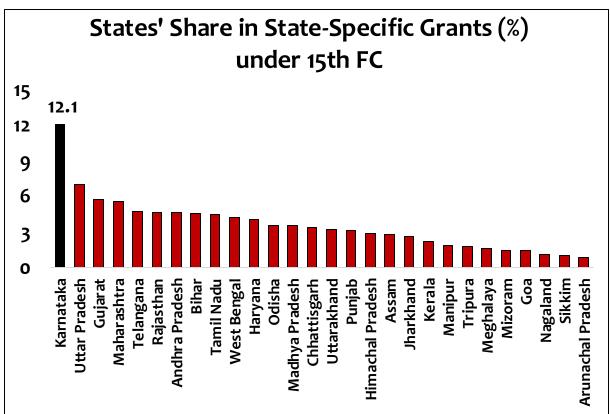


Source: 14<sup>th</sup> and 15<sup>th</sup> FC Reports.

Note: Due to the changed status of Jammu & Kashmir into the new Union Territories of Ladakh and Jammu and Kashmir, the 15th FC did not include it in the States' share of Disaster Management Grants from the Centre, and it has been excluded from this chart.

Karnataka's share in sector-specific grants is 3.7 percent of the total, the largest component being grants for agriculture at 5.1 percent (of the total agricultural grants), followed by health and education at 4 percent. A total of Rs. 6,000 crore was recommended in State-Specific Grants, half of which was for the holistic improvement of water bodies and the remaining for the construction of peripheral ring road to decongest Bengaluru





Source: 14<sup>th</sup> and 15<sup>th</sup> FC Reports.

Note: i. Other sector-specific grants and the State's shares in each include grants for statistics (3.8 percent), grants for judiciary (2.8 percent), and maintenance of PMGSY roads (1.4 percent); ii. Karnataka was allocated Rs. 6,000 crores in State-specific grants (12.1 percent of the total), distributed equally between holistic improvement of water bodies (Rs. 3,000 crores), and the peripheral ring road to decongest Bengaluru (Rs. 3,000 crores).

#### Climate Change under the FC

Looking at the last two decades, there has been a shift in how the issue of climate change has been addressed by different Finance Commissions.

#### > 12th and 13th Finance Commissions

- The 12<sup>th</sup> FC recommended grants worth Rs. 1,000 crore to be shared by States for the Maintenance of Forests, in addition to what the States were spending through their respective forest departments. The amount was distributed among the States based on their forest area, and it was to be spent for preservation of forest wealth. [refer to Chapter 10, pg. 175, 184-185]
- Expanding on the same, the 13<sup>th</sup> FC recommended Environment Grants worth Rs. 15,000 crores to States, which covered three areas: protection of forests, renewable energy, and water sector management (Rs. 5,000 crore each). [refer pg. 205 (table 12.1), pg. 210-217]

#### ➤ 14<sup>th</sup> and 15<sup>th</sup> Finance Commissions

- The 14<sup>th</sup> FC approached climate change and sustainable economic development from a fiscal perspective, and with the view that tax devolution should be the primary route of transfer of resources to States, increased the States' share in the divisible pool to 42 percent (from 32 percent under the 13<sup>th</sup> FC). [refer pg. 31 (point 2.33), pg. 103, 107 (point 8.27), pg. 180 (point 12.34-12.35]
- Forest cover was introduced as a criteria for tax devolution by the 14<sup>th</sup> FC, to continue accounting for concerns related to climate change and to encourage States to maintain higher forest covers. They assigned 7.5 percent weight to forest cover in the tax devolution matrix.
- The 15<sup>th</sup> FC maintained this recommendation, and assigned a higher weight of 10 percent to forest and ecology in the tax devolution matrix.
- The 15<sup>th</sup> FC also made State-specific grant recommendations (based on specific requests from States). Very few of them are categorized under climate-change, and some others align with one or more of the three environment goals specified by the 13<sup>th</sup> FC: Arunachal Pradesh (Rs. 355 crore, renewable energy), Goa (Rs. 500 crore, alternative power sources, waste management), Jharkhand (Rs. 700 crore, renewable energy), Kerala (Rs. 500 crore, forest conservation), Maharashtra (Rs. 500 crore, forest conservation), Punjab (Rs. 390 crore, includes support for reduction in environment pollution caused by stubble burning), Rajasthan (Rs. 400 crore, integrated water management), Tamil Nadu (Rs. 200 crore, revamping water bodies to adapt to climate change). [refer Annex 10.9, pg. 803-810 (summary), Annex 10.10, pg. 811-837]

# 7. Karnataka Fiscal Responsibility Act, 2002

- The Karnataka State Government enforced a Medium Term Fiscal Plan (MTFP) for 2001-02 to 2004-05 for the State following the Eleventh Finance Commission's recommendations for fiscal prudence. The State further enacted the Karnataka Fiscal Responsibility Act (FRA) in 2002 providing legislative support to the MTFP 2000-05, the first State to do so even before the Union Fiscal Responsibility and Budget Management Act, 2003.
- > The MTFP for 2001-02 to 2004-05 laid down the following fiscal parameters for Karnataka:
- 1. Eliminate revenue deficit
- 2. Contain fiscal deficit to 3 percent of GSDP
- 3. Maintain debt stock as a percentage of GSDP at a prudent level and maximise development budget
- The FRA, 2002 prescribed the following fiscal targets for the State Government:
- 1. Revenue Deficit: Reduce revenue deficit as a percentage of GSDP in each year from 1st April, 2002 to eliminate revenue deficit by 31st March, 2006 and maintain a surplus thereafter
- 2. Fiscal Deficit: Reduce fiscal deficit as a percentage of GSDP in each year such that fiscal deficit is not more than 3 percent of the GSDP by 31st March, 2006
- **Total Liabilities:** Reduce total liabilities in a period of 15 years starting from 1<sup>st</sup> April, 2002 such that total liabilities does not exceed 25 percent of GSDP by 31<sup>st</sup> March, 2015
- 4. Outstanding Guarantees: Not to give guarantee for any amount exceeding the limit stipulated under the Karnataka Ceiling to Government Guarantees Act, 1999 (Karnataka Act 11 of 1999)

Source: The Karnataka Government Gazette, State Finances Audit Reports of the CAG.

- The KFR Act, 2002 required the State Government to present before the both the Houses of the Legislature, the following statements of fiscal policy along with the budget:
  - The Medium Term Fiscal Plan
- ➤ In 2009, the fiscal deficit limit was raised to 3.5 percent of GSDP for the year 2008-09 as a one time relaxation and to meet capital expenditure as a part of economic stimulus package.

An additional amendment in 2009, further raised the fiscal deficit limit to 4 percent of GSDP for the year 2009-10 as a one time relaxation.

- ➤ In 2011, the State adopted the recommendations of the Thirteenth Finance Commission. Fiscal targets were modified as follows:
- **Fiscal deficit:** Limit for fiscal deficit as percentage of GSDP was raised to 3.44 % as a part of counter recessionary measures.
- **Total Liabilities**: Limit for outstanding debt at the end of financial year 2010-11, 2011-12, 2012-13, 2013-14 and 2014-15 was targeted at 26.2 percent, 26 percent, 25.7 percent, 25.4 percent and 25.2 percent respectively of the estimated GSDP for that year.
- As part of the amendment, a Fiscal Management Review Committee (FMRC), headed by Chief Secretary to Government was constituted in July, 2011 as well. The Committee inter alia recommended (July, 2018) that all departments should initiate measures to increase non-tax revenues.
- ➤ By an amendment to the Act in February 2014, the scope of the total liabilities as defined under Section-2(g) was amplified to include the borrowings by Public Sector Undertakings (PSU) and Special Purpose Vehicles (SPVs) and other equivalent instruments, where the principal and/or interest are to be serviced out of the State Budget.

Source: The Karnataka Government Gazette, State Finances Audit Reports of the CAG.

- ➤ However, Karnataka did not amend the FRA to incorporate the Fourteenth Finance Commission's recommendations. MTFP placed before the Legislature also did not contain the reasons behind the non-amendment.
- ➤ During the year 2020-21, the State Government amended the FRA to raise the fiscal deficit from three per cent to five per cent of the estimated Gross State Domestic Product as a onetime relaxation due to COVID-19 pandemic. In addition, the State envisaged revenue deficit due to reduction of receipts as a result of COVID-19 pandemic.
- During the year 2021-22, the State Government amended the FRA to raise the fiscal deficit from three per cent to four per cent of the estimated Gross State Domestic Product. In addition, the State envisaged revenue deficit due to slow recovery of the economy to the Pre-COVID level. It also envisaged total liabilities to exceed 25 per cent of the estimated GSDP.

Source: The Karnataka Government Gazette, State Finances Audit Reports of the CAG.

## State Finances Audit Report of the Comptroller and Auditor General of India (CAG) for Karnataka

Table 1.5: Compliance with targets of KFRA

Fiscal Parameters	KFRA target	Achievement					
riscai Parailleters		2017-18	2018-19	2019-20	2020-21	2021-22	
Revenue Surplus/Deficit (₹ in crore)	To maintain Revenue Surplus up to 2019-20.	4,518	679	1,185	(-)19,338	(-)13,666	
	Revenue Surplus may not be attained during	√	<b>V</b>	<b>V</b>	State saw Deficit	Revenue	
	2020-21 & 2021- 22 due to covid 19 and slow recovery of the economy respectively.						
Fiscal Deficit (as percentage of GSDP)	3.00 <i>per cent</i> (upto 2019-20)	31,101 (2.33)	38,442 (2.60)	38,166 (2.36)	67,098 (3.88)	66,036 (3.84)	
	5.00 <i>per cent</i> (2020-21 and 4.00 <i>per cent</i> (2021-22)	V	1	V	V	V	
Ratio of total outstanding debt to GSDP (in per cent)	25.00 per cent (up to 2021-22) Debt	18.47	19.32	20.89	24.03	26.71*	
	to GSDP ratio may increase (2021-22)	<b>V</b>	V	V	V	The Ratio exceeded	

<sup>\*</sup> The back-to-back Loan (₹30,516 crore) received from GoI during 2020-21 and 2021-22 in lieu of GST compensation has not been considered as Debt for working out the indicator.

Source: State Finances Audit Reports of the CAG from 2021-22.

- The State Government recorded revenue surplus from 2004-05 to 2019-20 and the fiscal deficit and debt-GSDP ratio was well within the limit of 3 percent (5 percent for 2020-21 and 4 percent for 2021-22) of GSDP as prescribed under the Act.
- During 2020-21 and 2021-22, the State witnessed Revenue deficit. The revenue deficit was met out of the borrowed funds.
- During 2020-21, while the fiscal deficit, debt-GSDP ratio were within the limit of five per cent and 25 per cent of GSDP respectively, the fiscal deficit was within the prescribed limit of four per cent during 2021-22. However, the debt/GSDP exceeded the 25 per cent of the estimated GSDP.
- Due to negative growth in GSDP when compared to previous year, the Fiscal deficit and total liabilities as a percentage of GSDP in the year 2021-22 has increased.

### Recommendations by the Comptroller and Auditor General of India (CAG) for Karnataka

The CAG has made the following recommendations:

- •The State Government should put a significant thrust through regular and periodical monitoring of the revenues which were either falling in full arrears or were short-realized thereby ensuring that the KFRA target of attaining Revenue Surplus can be achieved.
- •Since the costs of salary, pension and interest are inflexible, the expenditure on subsidies, Grants-in-aid other than to local bodies, which are increasing steadily, requires utmost attention from the State Government. It may look into rationalizing expenditure by implementing the recommendation of Karnataka Administrative Reform Commission 2.
- •The State Government should formulate guidelines for quick completion of incomplete projects and strictly monitor reasons for time and cost overrun with a view to take corrective action. In addition, it should give priority to works nearing completion. The State Government should review the working of State Public Sector Undertakings incurring huge losses and take appropriate action for disinvestment/revival/closure.
- •Rules with regard to administration and investment pattern of various reserve funds are required to be framed. In addition, action to initiate/maintain proper accounting of Compensatory Afforestation Fund should be put in place in Khajane -2 application so that the State's dues are retained in the State Government's Accounts only.
- •As reviewed by FMRC, the State Government needs to make medium term corrections on the expenditure side to moderate committed expenditure and simultaneously mobilize State revenues to bring down the debt level.
- Maintaining idle cash balance is not prudent cash management. Hence, Government needs to borrow based on its requirement.

Source: State Finances Audit Reports of the CAG from 2021-22.

- ➤ **Revenue deficit** is estimated to be 0.5 percent of GSDP in 2023-24. In 2022-23, the State's revenue deficit is estimated to be 0.3 percent of GSDP, lower than the budget estimate of 0.7 percent of GSDP.
- Fiscal deficit for 2023-24 is targeted at 2.6 percent of GSDP. In 2022-23, as per the revised estimates, fiscal deficit is expected to be 2.8 percent of GSDP, similar to the budget estimate.
- At the end of 2023-24, **outstanding liabilities** of the State are estimated to be 23 percent of GSDP. Outstanding liabilities are estimated to decrease from a high of 27.5 percent of GSDP in 2021-22.
- > Karnataka has **outstanding guarantees** of Rs 33,192 crore (1.9 percent of GSDP) as on March 31, 2022.

Source: Karnataka Government Budget, 2023-24, PRS Budget Analysis (https://prsindia.org/budgets/states/karnataka-budget-analysis-2023-24)

Table 5: Fiscal Parameters set in the FRBM Act in various years

Fig. and Downwood area	Fiscal Parameters set in the Act							
Fiscal Parameters	2003	2009	2011	2020-21	2021-22			
Revenue Deficit (Rs crore)	Reduce revenue deficit as a percentage of GSDP in each year from 1st April, 2002 to eliminate revenue deficit by 31st March, 2006 and maintain a surplus thereafter	Eliminate revenue deficit or generate revenue surplus thereafter	Eliminate revenue deficit or generate revenue surplus thereafter	Eliminate revenue deficit or generate revenue surplus thereafter	Eliminate revenue deficit or generate revenue surplus thereafter			
Fiscal Deficit  (as percentage of GSDP)	Reduce fiscal deficit as a percentage of GSDP in each year such that fiscal deficit is not more than 3 percent of the GSDP by 31st March, 2006	The fiscal deficit limit was raised to 3.5 percent of GSDP for 2008-09 and 4 percent of GSDP for 2009-10	Limit for fiscal deficit as percentage of GSDP was raised to 3.44 % as a part of counter recessionary measures	Limit fiscal deficit as percent of GSDP to 5 percent for 2020-21	Limit fiscal deficit as percent of GSDP to 4 percent for 2020- 21			
Total Debt Liabilities  (as percentage of GSDP)	Reduce total liabilities in a period of 15 years starting from 1 <sup>st</sup> April, 2002 such that total liabilities does not exceed 25 percent of GSDP by 31 <sup>st</sup> March, 2015	Reduce total liabilities in a period of 15 years starting from 1 <sup>st</sup> April, 2002 such that total liabilities does not exceed 25 percent of GSDP by 31 <sup>st</sup> March, 2015	Limit for outstanding debt at the end of financial year 2010- 11, 2011-12, 2012-13, 2013-14 and 2014-15 was targeted at 26.2 percent, 26 percent, 25.7 percent, 25.4 percent and 25.2 percent respectively of the estimated GSDP for that year	Reduce total liabilities (as percentage of GSDP) to 25 percent	Total Liabilities (as percentage of GSDP) could exceed 25 percent as a one time relaxation			

Source: The Karnataka Government Gazette, State Finances Audit Reports of the CAG.

#### 8. Extra Slides on Fiscal Variables

• Fiscal Data covers the fiscal period 1990-91 to 2022-23

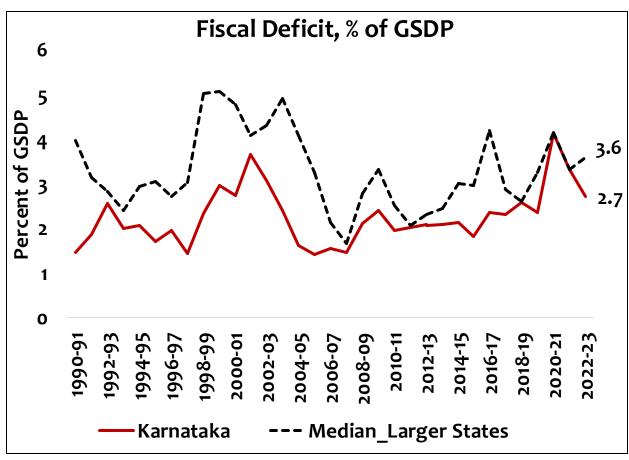
#### **Fiscal Indicators**

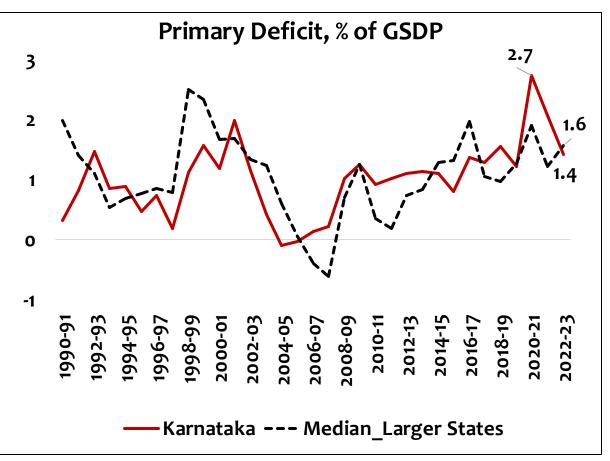
### (I) Benchmarked with respect to Median of Larger States

Note: In Section 5, the benchmark was defined as the median of all States. This variable was computed as a percentage of GSDP for each State, and the median was taken across 29 States (excluding all Union Territories).

In contrast, the benchmark in this section refers to the median of larger States only. This variable was computed as a percentage of GSDP for each State, and the median was taken across 22 major States (Andhra Pradesh, Assam, Bihar, Chhattisgarh, Goa, Gujarat, Haryana, Himachal Pradesh, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Odisha, Punjab, Rajasthan, Sikkim, Tamil Nadu, Telangana, Uttar Pradesh, Uttarakhand and West Bengal).

### As of 2022-23, Karnataka ran Fiscal deficit and Primary Deficit of 2.7 and 1.4 percent of its GSDP respectively, with both deficits lower than that of a median State

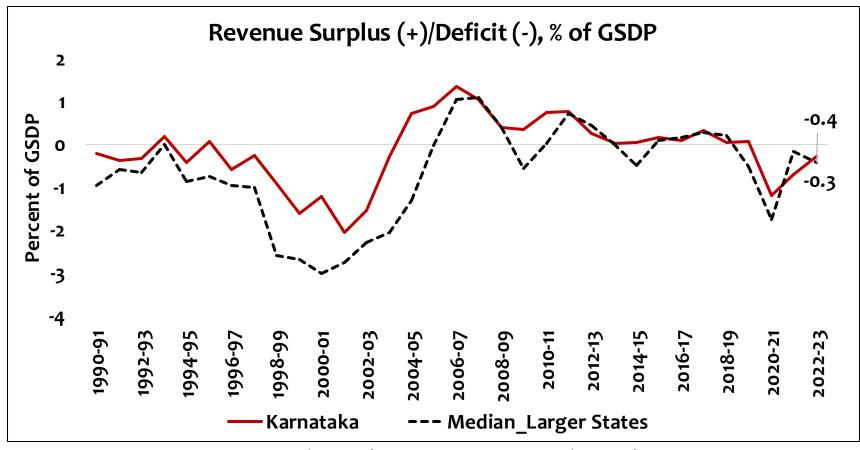




Source: i. Fiscal Deficit (FD) is from RBI SFR (2022-23); ii. Primary Deficit (PD) is calculated as Fiscal Deficit – Interest Payments; iii. Interest Payments - RBI SFR; iv. State GSDP data is from MoSPI (2022-23).

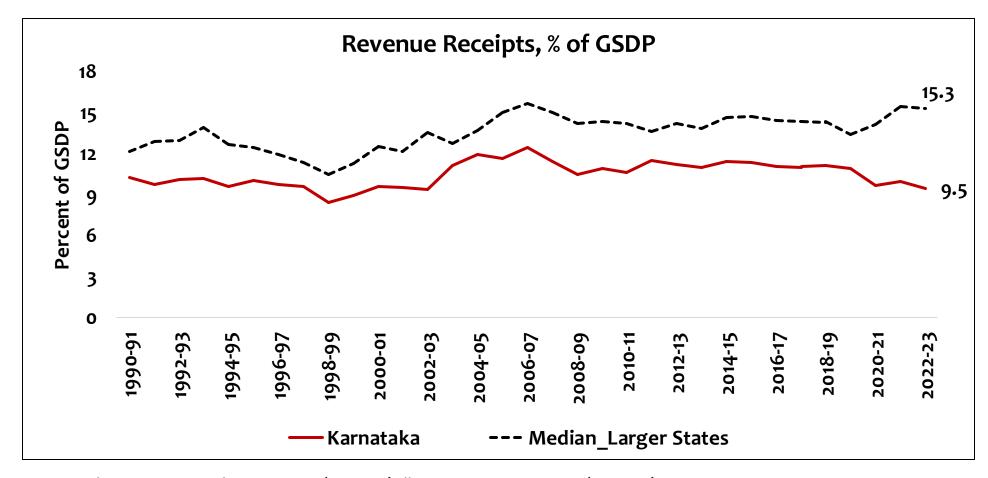
Note: The variable as a percent of GSDP has been calculated for each State, and its median across 22 major States has been shown (all Union Territories and North Eastern States, except Assam, are excluded).

### Karnataka's Revenue Deficit was 0.3 percent of its GSDP in 2022-23, while a median State ran a Revenue Deficit of 0.4 percent of its GSDP



Source: i. Revenue Deficit - RBI SFR (2022-23); ii. State GSDP – MoSPI (2022-23). Note: The variable as a percent of GSDP has been calculated for each State, and its median across 22 major States has been shown (all Union Territories and North Eastern States, except Assam, are excluded).

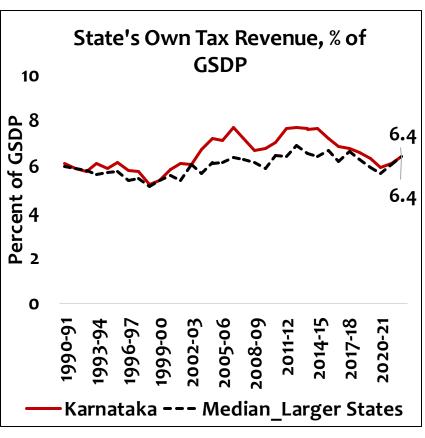
# Karnataka's Total Revenue Receipts (own tax, own non-tax, and shared by the Centre) was substantially lower than what a median State collects, at about 9.5 percent of its GSDP in 2022-23

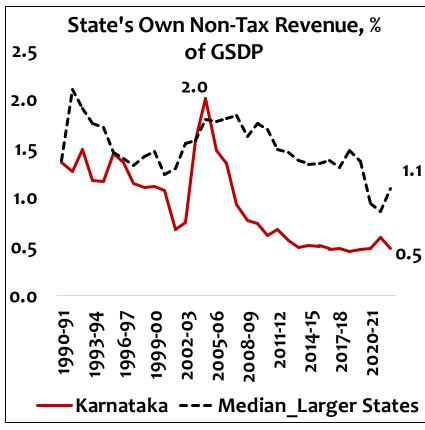


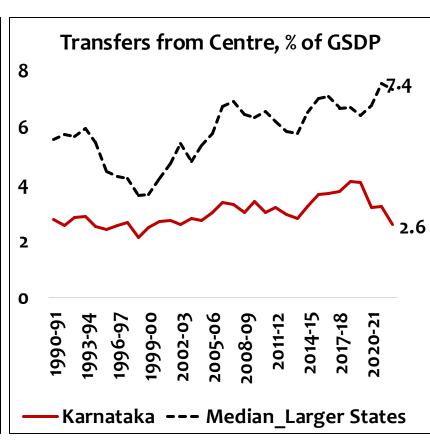
Source: i. Revenue Receipt - RBI SFR (2022-23); ii. State GSDP – MoSPI (2022-23).

Note: The variable as a percent of GSDP has been calculated for each State, and its median across 22 major States has been shown (all Union Territories and North Eastern States, except Assam, are excluded).

# Karnataka's Own-Tax Revenue is 6.4 percent of the GSDP which is at par with a median State. Its Own Non-Tax Revenue and Transfers from Centre were 0.6 and 4.8 percentage points lower than that of a median State as of 2022-23





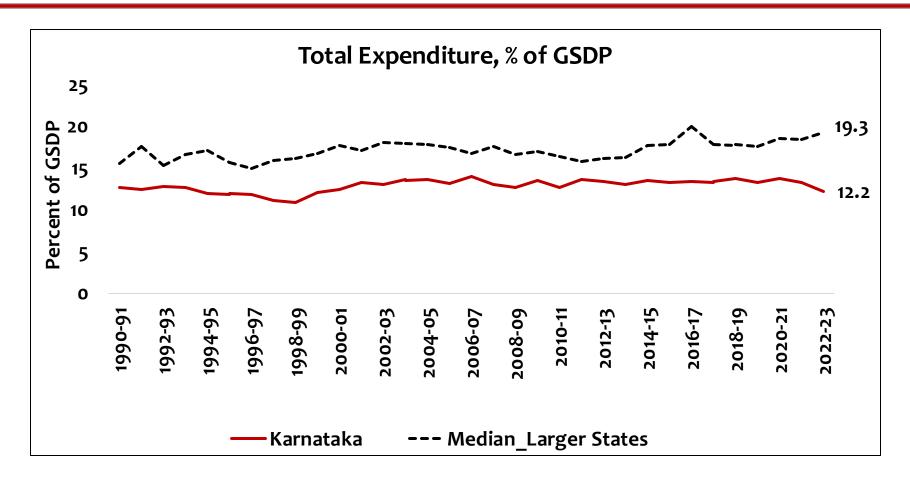


Source: i. Own-Tax Revenue, Own Non-Tax Revenue, and Transfers from the Centre - RBI SFR (2022-23); ii. State GSDP – MoSPI (2022-23).

Note: The variable as a percent of GSDP has been calculated for each State, and its median across 22 major States has been shown (all Union Territories and North Eastern States, except Assam, are excluded).

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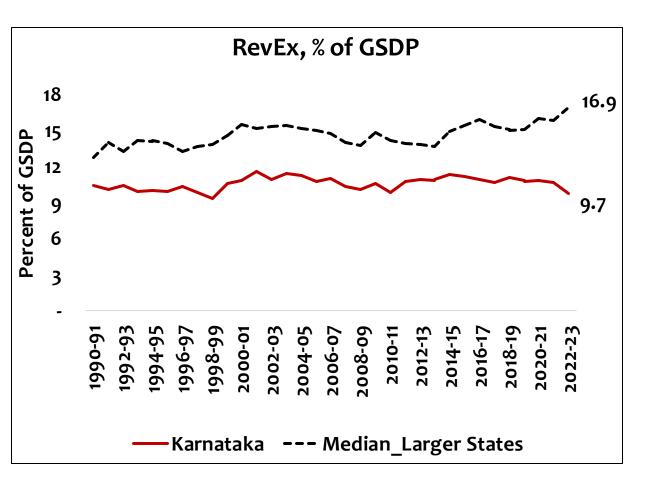
### In 2022-23, Karnataka's Total Expenditure at 12.2 percent of its GSDP was about 7.1 percentage points lower than the Expenditure of a median State

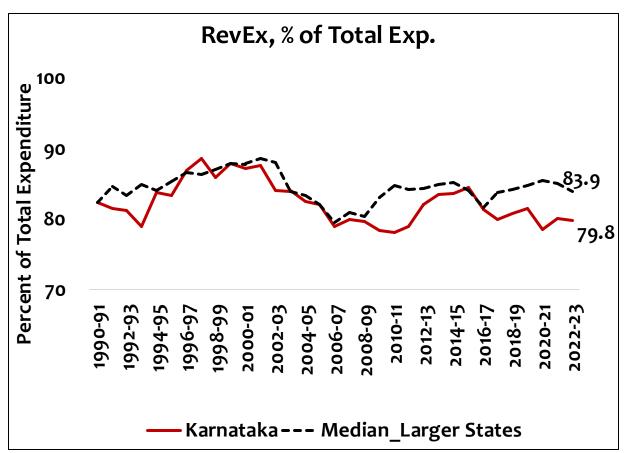


Source: i. Total Expenditure - RBI SFR (2022-23); ii. State GSDP - MoSPI (2022-23).

Note: i. Total Expenditure is calculated as RevEx plus CapEx; ii. The variable as a percent of GSDP has been calculated for each State, and its median across 22 States has been shown (all Union Territories and North Eastern States, except Assam, are excluded.

#### Karnataka's Revenue Expenditure is 9.7 percent of its GSDP, about 7.2 percentage points lower than a median State

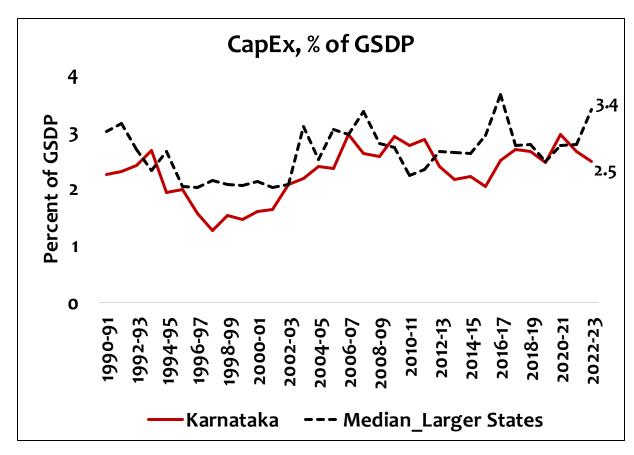


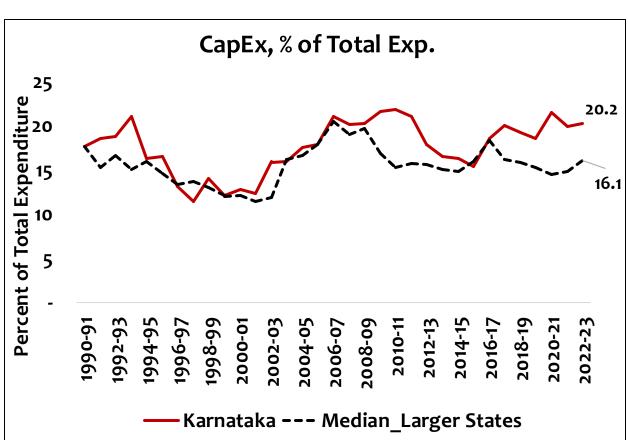


Source: i. RevEx - RBI SFR (2022-23); ii. State GSDP - MoSPI (2022-23).

Note: i. Total Expenditure is calculated as RevEx plus CapEx; ii. The variable as a percent of GSDP has been calculated for each State, and its median across 22 major States has been shown (all Union Territories and North Eastern States, except Assam, are excluded).

Karnataka's CapEx is 2.5 percent of its GSDP, lower than what a median State spends on CapEx (as percent of the GSDP). The CapEx as percent of total expenditure was 4.1 percentage points higher than what a median State spent in 2022-23

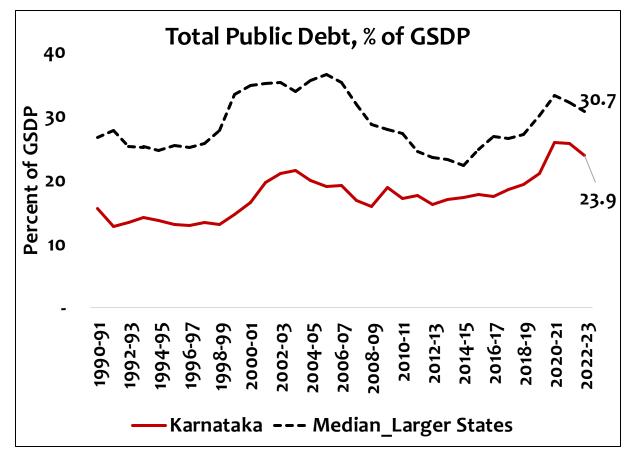


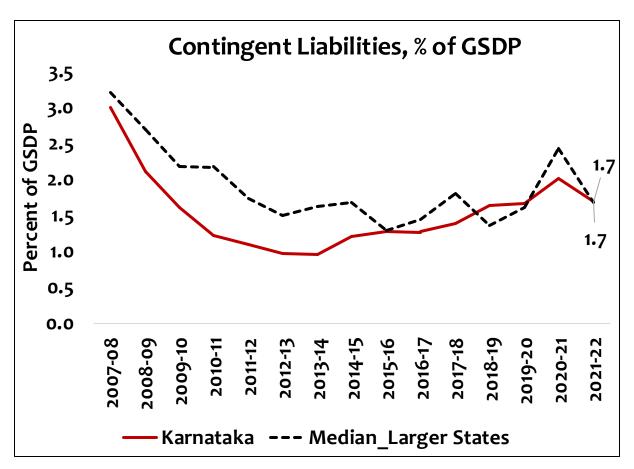


Source: i. CapEx is calculated as Capital Outlay + Loans and Advances given by the State government and the data for both is taken from RBI SFR (2022-23); ii. State GSDP – MoSPI (2022-23).

Note: i. The Total Expenditure is calculated as RevEx + CapEx; ii. The variable as a percent of GSDP has been calculated for each State, and its median across 22 major States has been shown (all Union Territories and North Eastern States, except Assam, are excluded).

Karnataka's Public Debt has seen a steady rise since 2016 but it has consistently remained below the median State. Its Contingent Liabilities were at par with a median State at 1.7 percent of its GSDP in 2021-22





Source: i. Public Debt and State-wise contingent liabilities - RBI SFR (2022-23); ii. State GSDP – MoSPI (2022-23).

Note: The variable as a percent of GSDP has been calculated for each State, and its median across 22 major States has been shown (all Union Territories and North Eastern States, except Assam, are excluded).

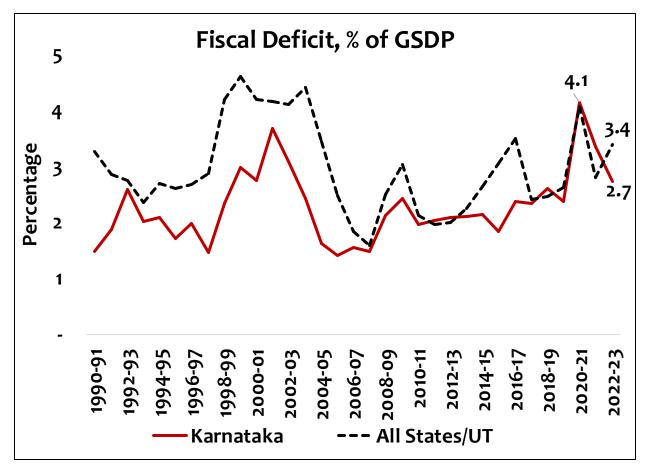
#### **Fiscal Indicators**

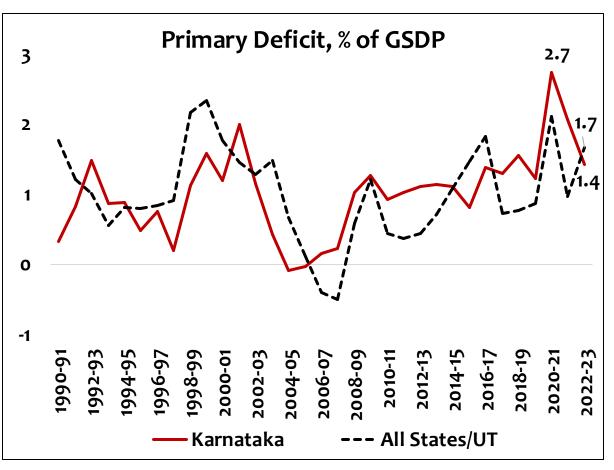
(II) Benchmarked with respect to All States/UTs

Note: In Section 5, the benchmark was defined as the median of all States. This variable was computed as a percentage of GSDP for each State, and the median was taken across 29 States (excluding all Union Territories).

In contrast, the benchmark in this section refers to the All States/UTs number, taken as available from the source and expressed as a percentage of national Gross Domestic Product.

### As of 2022-23, Karnataka ran a fiscal deficit and primary deficit of 2.7 and 1.4 percent of its GSDP respectively, with both deficits lower than the average of all States

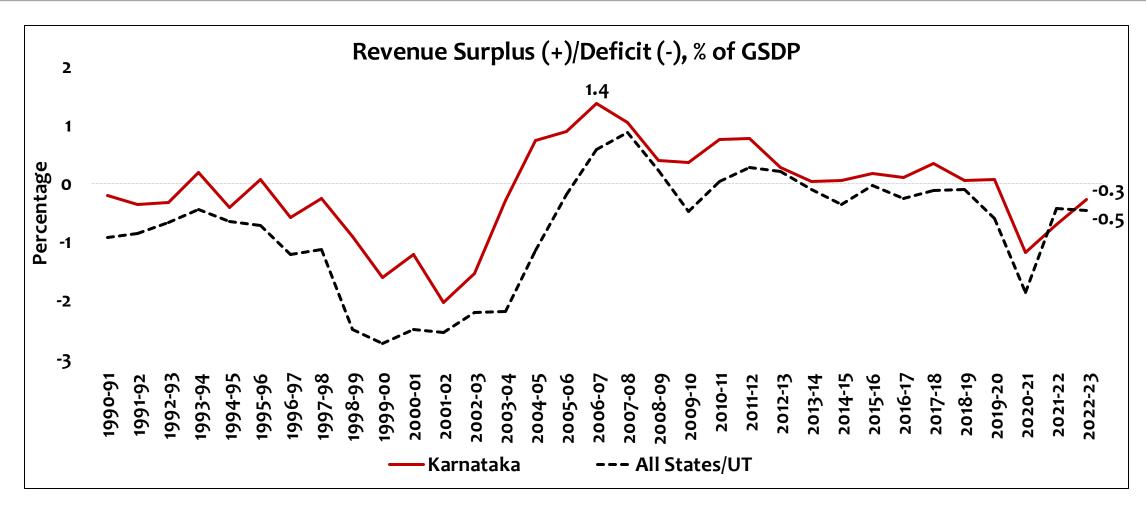




Source: i. Fiscal Deficit (FD) - Reserve Bank of India State Finances Report (SFR, 2022-23); ii. Primary Deficit (PD) is calculated (Fiscal Deficit – Interest Payments); iii. Interest Payments - RBI SFR; iv. State GSDP - MoSPI.

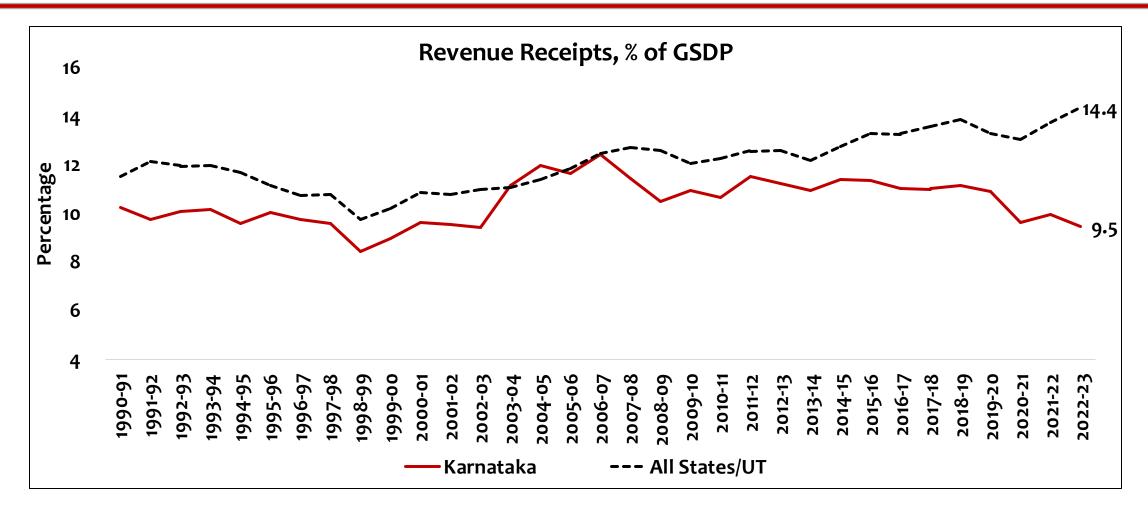
Note: i. State GSDP and national GDP data is from MoSPI; ii. All States/UTs shows the total of all States, Delhi and Puducherry as a % of national gross domestic product.

### Karnataka's revenue deficit was 0.3 percent of its GSDP in 2022-23, lower than the average revenue deficit of all other States



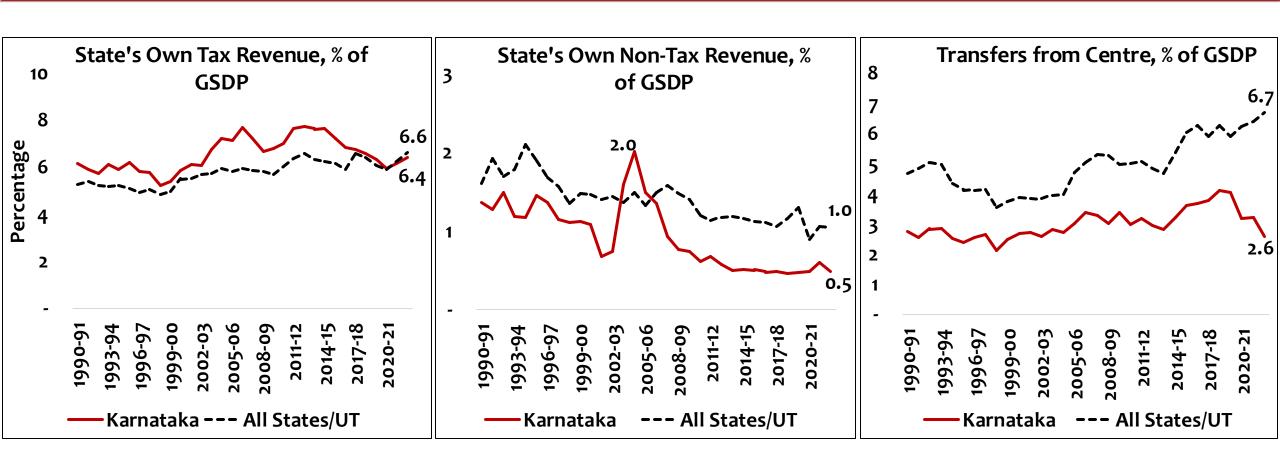
Source: i. Revenue Deficit from RBI SFR (2022-23); ii. State GSDP and national GDP data is from MoSPI (2022-23). Note: All States/UTs shows the total of all States, Delhi and Puducherry as a % of national gross domestic product.

Karnataka's total revenue receipts (own tax, own non-tax, and shared by the Centre) was substantially lower than what an average State collects, at about 9.5 percent of its GSDP in 2022-23



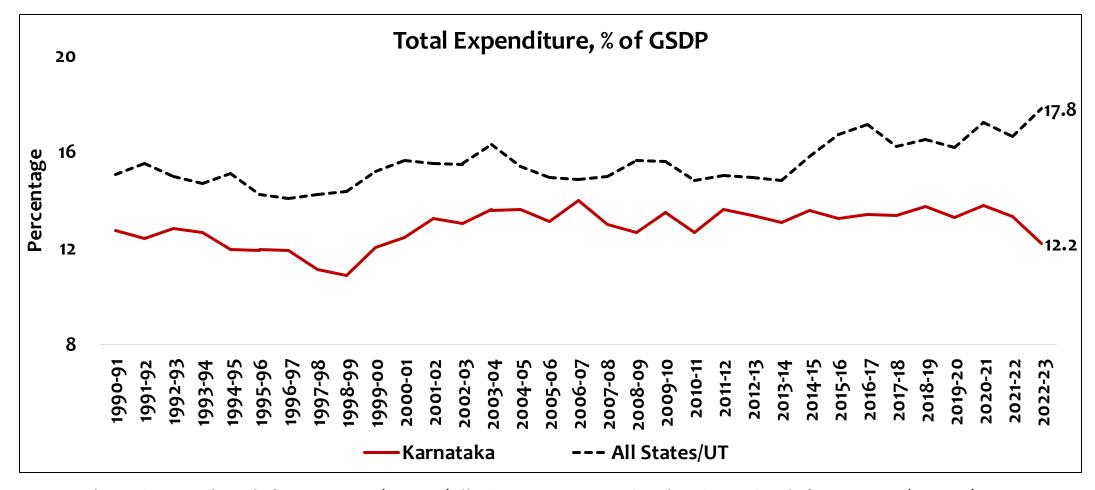
Source: i. Revenue Receipts from RBI SFR (2022-23); ii. State GSDP and national GDP data is from MoSPI (2022-23). Note: All States/UTs shows the total of all States, Delhi and Puducherry as a % of national gross domestic product.

### Karnataka's Own-Tax Revenue constitutes 6.4 percent of the GSDP. Its Own Non-Tax Revenue and Transfers from Centre are both lower than the average of other States



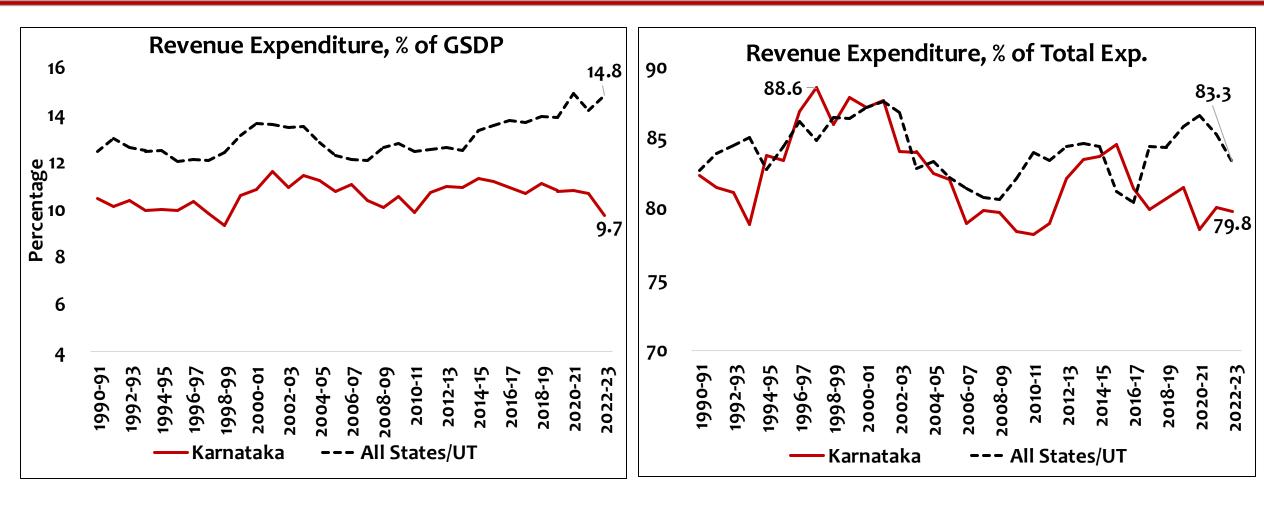
Source: i. Own Tax and Non-Tax Revenue, and Transfers from Centre from RBI SFR (2022-23); ii. The State GSDP and national GDP data is from MoSPI (2022-23). Note: i. Transfers from Centre include both tax- and non-tax revenue transfers; ii. All States/UTs shows the total of all States, Delhi and Puducherry as a % of national gross domestic product.

### In 2022-23, Karnataka's public expenditure was at 12.2 percent of its GSDP, about 5.6 percentage points lesser than an average State



Source: i. Total Expenditure is from RBI SFR (2022-23); ii. The State GSDP and national GDP data is from MoSPI (2022-23). Note: i. The Total Expenditure is calculated as sum of Revenue Expenditure (RevEx) and Capital Expenditure (CapEx); ii. All States/UTs shows the total of all States, Delhi and Puducherry as a percent of national gross domestic product.

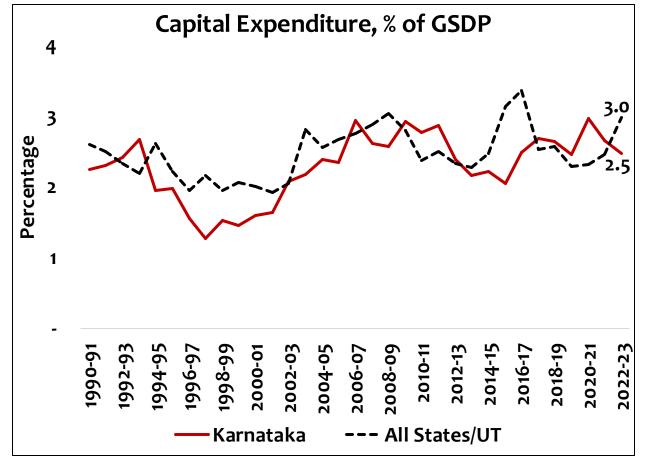
# Karnataka's RevEx was 9.7 percent of its GSDP in 2022-23, about 5 percentage points lower than an average State

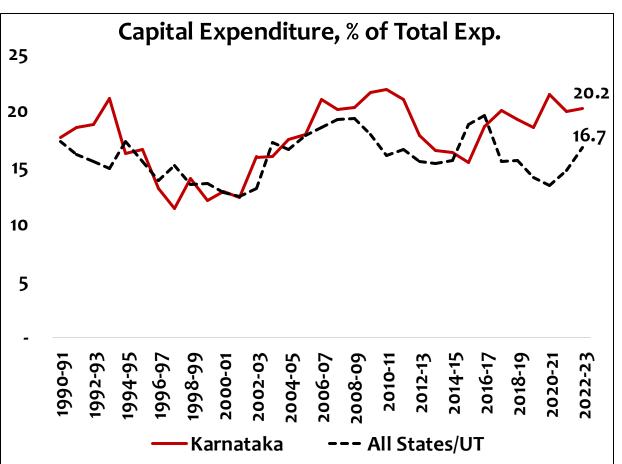


Source: i. Revenue Expenditure is from RBI SFR (2022-23); ii. State GSDP and national GDP data is from MoSPI (2022-23).

Note: i. Total Expenditure is calculated as RevEx plus CapEx; ii. All States/UTs shows the total of all States, Delhi and Puducherry as a % of national gross domestic product.

Karnataka's CapEx is 2.5 percent of its GSDP, lower than what an average State spends on Capex (as % of the GSDP). The Capex as percent of total expenditure is higher than what an average State spends in 2022-23

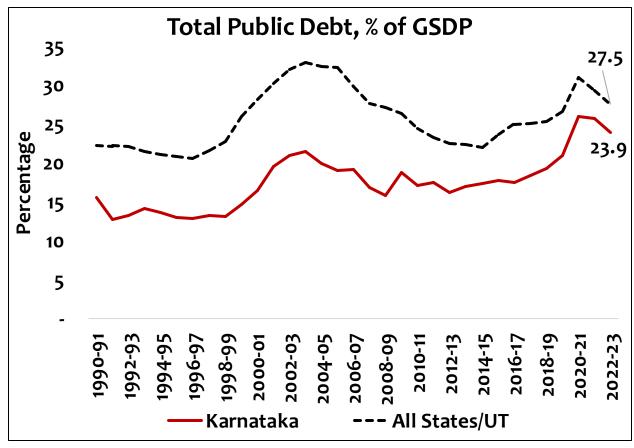


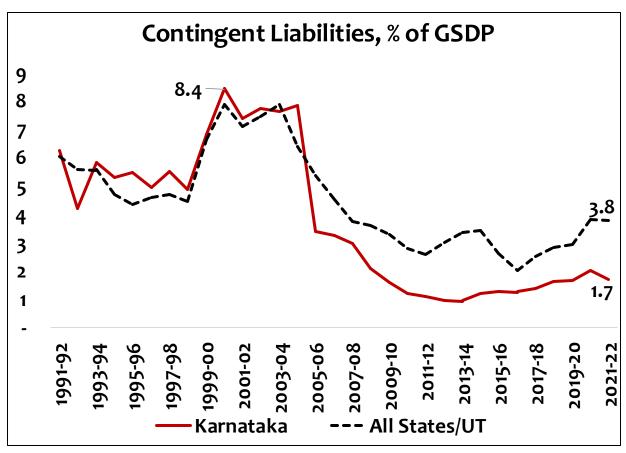


Source: i. CapEx is calculated as Capital Outlay + Loans and Advances given by the State government and the data for both is taken from RBI SFR (2022-23); ii. State GSDP and national GDP data is from MoSPI (2022-23).

Note: i. Total Expenditure is calculated as RevEx plus CapEx; ii. All States/UTs shows the total of all States, Delhi and Puducherry as a % of national gross domestic product.

Karnataka's public debt has seen a steady rise since 2016, and as of 2022-23 is 23.9 percent of its GSDP (about 3.5 percentage points lower than an average State). Its contingent liabilities, at 1.7 percent of its GSDP, were less than half of an average State in 2021-22





Source: i. Public Debt and State-wise contingent liabilities data has been taken from RBI SFR (2022-23); ii. State GSDP and national GDP data is from MoSPI (2022-23).

Note: All States/UTs shows the total of all States, Delhi and Puducherry as a % of national gross domestic product.

## 9. Annexure

Variable	Section	Definition
Dependency Ratio	Demography and Employment	The dependency ratio is the number of dependents—comprising children aged 0-14 years and older adults aged 60 years and above—per 100 individuals in the working-age population (15-59 years).
Sex Ratio	Demography and Employment	The Child Sex Ratio from Census is the number of females per 1,000 males in the age group of 0-6 years.  The NFHS Sex Ratio at Birth is the number of female births per 1,000 male births for children born in the last five years preceding the survey.
Unemployment Rate	Demography and Employment	The unemployment rate measures the proportion of unemployed individuals within the labour force, aged 15 years and above, based on the Usual Status (PS+SS) approach. This method integrates data from both the Principal Status (PS) and Subsidiary Status (SS) across rural and urban areas.
Female Labour Force Participation Rate	Demography and Employment	The Female Labour Force Participation Rate (LFPR) refers to the percentage of females aged 15 years and above who are part of the labour force, either working or actively seeking/available for work, relative to the total female population in the same age group. It is measured using the Usual Status (PS+SS) approach, which combines data from the Principal Status (PS) and Subsidiary Status (SS) to account for both rural and urban areas.
Urbanization Rate	Demography and Employment	The urbanization rate is the annual percentage change in the proportion of the population that lives in urban areas.
SDG Index	Demography and Employment	The SDG Index calculates goal-specific scores for the 16 Sustainable Development Goals (SDGs) across 113 indicators set by MoSPI to combine into composite scores, ranging from 0 to 100 representing the overall performance of a State. The higher the score, the closer the State is to meeting the SDG targets.

Variable	Section	Definition
MPI	Demography and Employment	The National Multidimensional Poverty Index (MPI) is calculated by multiplying the Headcount Ratio (proportion of multidimensionally poor people) and the Intensity of Poverty (the average percentage of deprivations experienced by poor individuals) across 12 indicators of health, education and living standards.
Inflation Rate	Economic Structure	The Inflation Rate is calculated as the annual growth rate of the Consumer Price Index (CPI), which has been calculated by averaging the monthly CPI values for each financial year.
GSDP	Economic Structure	Gross State Domestic Product (GSDP), at current market prices with 2011-12 as the base year, represents the total value of goods and services produced within a State. This series has been spliced with earlier GSDP series to generate the long time series.
GSVA	Economic Structure	Gross State Value Added (GSVA) is the sum of the value added by all sectors—agriculture, industry, and services—at current market prices with 2011-12 as the base year. This series has been spliced with earlier GSDP series to generate the long time series.
Decadal Average of Growth Rates	Economic Structure	The decadal average of growth rates is calculated using real variables to determine the shares of sectors. It represents the simple average of the annual growth rates over a ten-year period, from 2013-14 to 2022-23.
Foreign Direct Investment (FDI)	Trade	Investment through capital instruments by a resident outside India in an unlisted Indian company; or in 10 percent or more of the post-issue paid-up equity capital of a listed Indian company. Additionally, in case an existing investment by a resident outside India in capital instruments of a listed Indian company falls to a level below 10 percent, the investment shall continue to be treated as FDI.
Exports	Trade	Exports refer to transactions where goods are supplied with/without leaving the country, and payment for these supplies is received either in Indian rupees or in freely convertible foreign exchange.

Variable	Section	Definition
Pupil-Teacher Ratio	Socio-Economic Indicators (Education)	The Pupil-Teacher Ratio is the average number of students (pupils) per teacher in a school or educational institution.
Infant Mortality Rate	Socio-Economic Indicators (Health)	The probability of a child dying between birth and the first birthday, expressed per 1,000 live births.
Under-Five Mortality Rate	Socio-Economic Indicators (Health)	The probability of a child dying between birth and the fifth birthday, expressed per 1,000 live births.
Total Fertility Rate	Socio-Economic Indicators (Health)	The average number of children a woman is expected to have by the end of her childbearing years, assuming she experiences the current age-specific fertility rates throughout her reproductive life. Age-specific fertility rates are calculated based on the three years preceding the survey, using detailed birth histories provided by women.
Children Fully Immunized	Socio-Economic Indicators (Health)	Includes children aged 12-23 months who have received one dose of Bacillus Calmette Guerin (BCG) vaccine for tuberculosis, three doses of DPT vaccine for diphtheria, pertussis and tetanus, three doses for polio vaccine and one dose of measles vaccine at any time before the survey.
Underweight Children	Socio-Economic Indicators (Health)	Children under five years whose weight-for-age score is below minus two standard deviations from the median of the reference population are classified as underweight.
Stunting among Children	Socio-Economic Indicators (Health)	Children under age five years whose height-for-age score is below minus two standard deviations from the median of the reference population are considered short for their age (stunted).

Variable	Section	Definition
Anaemia among Children, Anaemia among Women	Socio-Economic Indicators (Health)	Children under five years and Women aged 15-49 years with haemoglobin levels below 11 grams/decilitre are considered anaemic.
Fiscal Deficit	Fiscal Indicators	Fiscal Deficit is calculated as the difference between the total expenditure and the total revenue (excluding borrowings).
Primary Deficit	Fiscal Indicators	Primary Deficit is calculated as the difference between fiscal deficit and interest payments.
Revenue Surplus (+)/Deficit (-)	Fiscal Indicators	Revenue Surplus/Deficit is a measure of the difference between the revenue receipts and revenue expenditure.
Total Revenue Receipts	Fiscal Indicators	Total Revenue Receipts is calculated as the sum of own tax revenue, own non-tax revenue and transfers from the centre.
Own Tax Revenue	Fiscal Indicators	Own Tax Revenue is the revenue collected by the government through taxes.
Own Non Tax Revenue	Fiscal Indicators	Own Non-Tax Revenue is the revenue collected by the government from non-tax sources like various services, fees, and penalties.
Revenue Expenditure	Fiscal Indicators	Revenue Expenditure refers to government spending that is incurred for the regular functioning of its departments and services, meeting its operational needs, and fulfilling its recurring liabilities.

Variable	Section	Definition
Transfers from the Centre	Fiscal Indicators	Transfers from the Centre refer to central taxes and grants devolved to States as untied funds for States to spend according to their discretion, under the recommendations of the Finance Commission.
Capital Expenditure	Fiscal Indicators	Capital Expenditure refers to government spending on creating physical and financial assets or reducing its liabilities.
Total Public Debt	Fiscal Indicators	Public debt include borrowings and other financial commitments arising from past fiscal operations that are yet to be repaid at a given point in time.
Contingent Liabilities	Fiscal Indicators	Contingent Liabilities are the commitments made by State governments to repay loans or other liabilities incurred by entities such as public sector undertakings (PSUs), corporations, local bodies, or other organizations if they fail to meet their debt obligations.
Off-Budget Borrowings	Fiscal Indicators	Off-Budget Borrowings involve the government taking on debt through entities, public sector undertakings (PSUs), or other off-budget mechanisms, rather than directly from the government's own borrowing channels that are not included in the official government budget.
Health Expenditure	Fiscal Indicators	Health Expenditure is calculated as the sum of Medical, Public Health, and Family Welfare expenditure.
Subsidies	Fiscal Indicators	Subsidies are financial assistance provided by the government to individuals, businesses, or sectors to support the production, consumption, or pricing of specific goods and services.
Buoyancy of Revenue Expenditure with GSDP	Fiscal Indicators	The Buoyancy of Revenue Expenditure is calculated as the ratio between the year-on-year growth rate of Revenue Expenditure and that of GSDP.
Committed Expenditure	Fiscal Indicators	Committed Expenditure is calculated as the sum of Wages, Salaries, and Pensions.

#### **List of Acronyms**

AISHE All India Survey on Higher Education

AT&C Aggregate Technical & Commercial

• BSR Basic Statistical Returns

CAG Comptroller and Auditor General

CapEx
 Capital Expenditure

• CHIPS Connect, Harness, Innovate, Protect and Sustain

• DGFT Directorate General of Foreign Trade

• **DISCOMS** Distribution Utilities/Companies

• EPWRF Economic and Political Weekly Research Foundation

FC Finance Commission

FLPR Female Labour Participation Rate

FRA Fiscal Responsibility Act

• FRBM Fiscal Responsibility and Budget Management Act

• GPI Gender Parity Index

GSDP Gross State Domestic Product

GDP Gross Domestic Product

GSVA Gross State Value Added

GVA Gross Value Added

#### **List of Acronyms**

M CDI	
<ul> <li>MoSPI</li> </ul>	Ministry of Statistical Programme and Implementation
• MPI	Multidimensional Poverty Index
<ul> <li>MTFP</li> </ul>	Medium Term Fiscal Policy
• NFHS	National Family Health Survey
• PFC	Power Finance Corporation
• PLFS	Periodic Labour Force Survey
• RBI	Reserve Bank of India
<ul> <li>RevEx</li> </ul>	Revenue Expenditure
• SDG	Sustainable Development Goal
• SFR	State Finances Report
• SPSE	State Public Sector Enterprises
• SRS	Sample Registration System
• SC	Scheduled Caste
• ST	Scheduled Tribe
• UDAY	Ujwal DISCOM Assurance Yojana
• U-DISE	Unified District Information System for Education

#### **Selected Research Topics**





**STATE SUMMARY** 

**DATA REPOSITORY** 

NCAER-NITI AAYOG STATE FISCAL AND ECONOMIC DASHBOARD

#### **Research & Commentary**

- Paper
- Op-eds
- Presentations

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