

A Study of State Policies Affecting Competition Passenger Transportation Sector

Study Commissioned by the Competition Commission of
India



Structure of Presentation

- Objectives
- Scope of the Study
- External Learning
- Internal Learning
 - Central Motor Vehicle Act 1988
 - PCA Analysis- performance of SRTC
- Methodology
- Market Structure
- State Transport Policies- Fare Structure, Permit, Route, Regulation, Dispute Settlement etc.
- Partial Productivity Measures
- Case Study- Maharashtra
- Concluding remarks



Key Objectives

- To study the passenger road transport segment's competition policies:
 - inter province (state)
 - intra province (state).

(Intra city- outside the scope)
- To study the impact of transport policy on efficiency and performance of the passenger road transport network
- Lubricate efficiency of development across borders.
 - Not to preclude any section/ region in the competitive era.
- To advocate enhanced competition and institutional reforms

- Focus on six states with different levels of economic development with 2 states within the same region.

Western Zone: Maharashtra & Rajasthan

- *Eastern Zone:* West Bengal & Orissa
- *Southern Zone:* Tamil Nadu & Kerala
- *Northern Zone:* Himachal Pradesh- land locked, no other mode of transport. (taken up as a special case on CCIs request)

- **Focus** - “internal learning and external learning”.
- **External Learning:** did competition help governments and consumers elsewhere in the world- through secondary sources.
 - Developed Countries
 - Developing Countries
- **Internal Learning:** state level constraints affecting efficiency through secondary & primary data source- interviews & questionnaires.



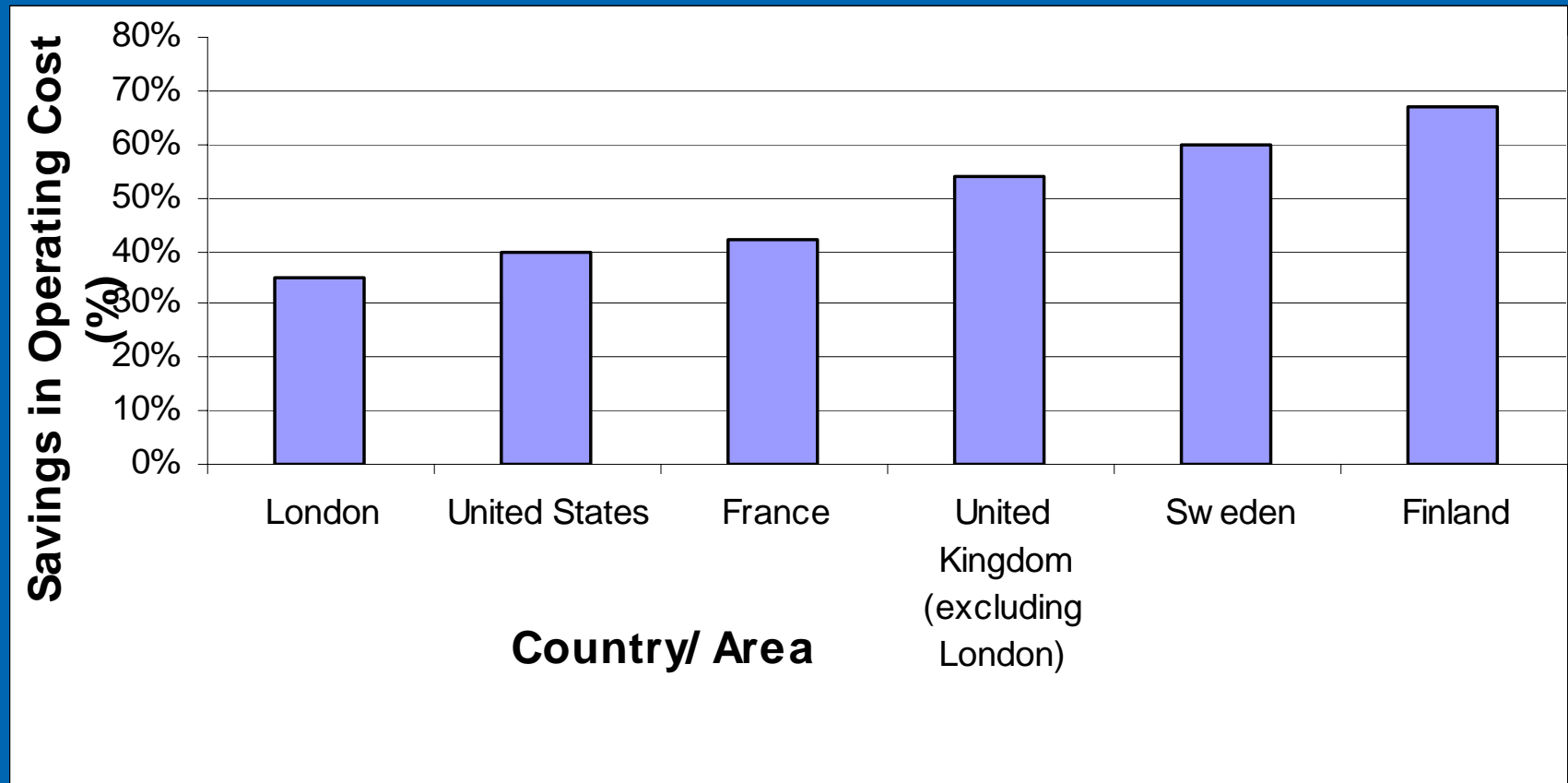
External Learning

Developed Countries

- **Modality Adapted-** Competitive Tendering- In Finland, Sweden, France & United States
 - Privatization & Deregulation- United Kingdom (except London)
 - Privatization with Regulation- London
- **Year of Reform-** Finland (1997), Sweden (1989), France (2003), United States (1977-1988), United Kingdom (1985)
- **Bus Service Supply-** Improved in Finland, Sweden, France, United States & United Kingdom
- **Environmental Standards-** Improved in Finland, Sweden, France & United Kingdom
- **Frequency of Buses-** Improved in Finland, Sweden, France & United Kingdom
- **Ridership-** Improved in Finland, Sweden, France, United States & London
 - Decreased- United Kingdom
- **Government Support-** Reduced in Finland, Sweden, France & United Kingdom

External Learning

Cost Savings due to Competitive Tendering - Developed Countries



This data is pertaining to developed countries. No such trend is observed for developing countries.



External Learning- Sri Lanka

- **Modality Adopted-** Deregulation followed by nationalization.
Re-entry of the private sector.
- **Year of Reform-** Deregulation- 1907- 1927
Nationalization- 1958
- **Bus Service Supply-** 1) Oversupply of buses at profitable routes.
2) Idling of buses at terminals and stops increased.
3) Increased accident-risk factors
4) Productivity of buses decreased.
- **Ridership-** Increased overloading of buses
- **Cost-** Increased
- **Government Support-** Rs.2-3 billion per annum.
The state bus sector subsidized by around 30%.

External Learning- Developing Countries

Chile (Santiago)

- **Modality Adopted-** Deregulation, Competitive tendering introduced at a later stage
- **Year of Reform-** 1980
- **Bus Service Supply-** Oversupply of bus services.
- **Environmental Standards-** Decline in air quality conditions
- **Ridership-** Increase in ratio of cost to value of service received during 1980 and 1987.
- **Cost-**
 - 1) cost per bus km- declined by 54%.
 - 2) cost per passenger journey- declined by 5%.
 - 3) effectiveness (cost per passenger km) is about twofold.
 - 4) increase in efficiency
- **Government Support-** Subsidies declined by 49% during 1985-1998

Internal Learning

Barriers to Entry (India)

No significant entry/ exit barriers for private operators
as most fall under the purview of Central Motor
Vehicles Act 1988

Barriers to entry analyzed w.r.t.:

- Application of Permit
- Duration and Renewal of Permit
- Cancellation and Suspension of Permit

Central Motor Vehicle Act 1988-

Application of Permit- Particulars Required Minimal

- An application for permit may be made at any time to the Regional Transport Authority (RTA) of the concerned region.
- An application shall contain following particulars:
 - ❖ **For stage carriage**
 1. Route/ routes required.
 2. Type & seating capacity of the vehicle.
 3. Minimum & maximum number of daily trips proposed
 4. Timetable for the normal trips.
 5. Number of vehicles to be kept in reserve.
 6. Arrangements for maintenance, repair & housing of vehicles.
 - ❖ **For contract carriage**
 1. Route/ routes required.
 2. Type and seating capacity of each vehicle.

Central Motor Vehicle Act 1988- Refusal of Application- Clearly Specified

Regional Transport Authority (RTA) can refuse an application if:

1. Speed limit not likely to be followed- inferred from time table
2. Limit of number of stage carriage through RTA/ STA (State Transport Authority)

Central Motor Vehicle Act 1988-

Duration and Renewal of Permits- Clearly Specified

1. **Duration of a permit** (other than a temporary permit or a special permit)- 5 years.
2. Submission of application for **renewal of a permit**- required 15 days in advance before expiry.
(RTA/STA can exempt a genuine player if for reasons beyond his control could not meet the deadline)

Central Motor Vehicle Act 1988-

Cancellation and suspension of permit- Clear enumeration

Conditions in which a permit can be cancelled or suspended

1. Breach of any condition specified.
2. Vehicle allowed to be used in a manner not authorised by the permit.
3. Holder ceases to own the vehicle covered by the permit.
4. Permit was obtained by fraud or misrepresentation.
5. Holder acquires citizenship of a foreign country.
6. Holder surrenders the permit for cancellation.

A holder can surrender permit at any time.

Clear enumeration but can act as an entry barrier- **Maharashtra**

Maharashtra approximately 1000 permits were cancelled between April 2006 and September 2006

Central Motor Vehicle Act- Internal Learning

To Conclude:

No significant entry/ exit barriers for
private operators

(Central Motor Vehicles Act 1988)



Principal Component Analysis



The technique is used for development of composite index:

- Multivariate analytical tool
- Compression of Data
- Hierarchy of Goals/ Criteria's
- Weighting to obtain composite indicator- objective assignment of weights to reflect their importance in the composite index.



Data Analysis-

State Transport Corporations All India.....

Principal Component Analysis (PCA) was used for analysis of major STCs of the country

Variables Analyzed- Revenue, Cost, Physical Performance, Daily Bus Utilization, Staff Position, Fuel Performance & Accidents

Variable	Relative Weight (%)
Revenue	20.4
Cost	19.9
Physical Performance	19.3
Daily bus utilization	4.2
Staff position	16.7
Accidents	19.5

Omitted variables- Fuel performance

State Transport Corporations

SRTC	Rank
Maharashtra SRTC	1
Andhra Pra. SRTC	2
Gujarat SRTC	3
Uttar Pradesh SRTC	4
Karnataka SRTC	5
Rajasthan SRTC	6
Kerala SRTC	7
Tamil Nadu STC	8
Himachal RTC	9
Calcutta STC	10
South Bengal STC	11
North Bengal STC	12
Orissa SRTC	13

Leader- Maharashtra,
Andhra Pradesh, Gujarat &
Uttar Pradesh

Average achievers-
Karnataka, Rajasthan,
Tamil Nadu & Kerala

Least Achievers -
Himachal, Orissa & West
Bengal

Methodology

For the purpose of the study primary survey was carried out in the seven states w.r.t.

- State Transport Authority (STA)- policy implications
- State transport Corporation (STC)- bus operations in public domain
- Private Operators- bus operations in private domain
- Bus Passengers- Users' Satisfaction level

Since the data collection is still under progress, the current presentation is limited to the states of :

- Maharashtra
- Rajasthan
- Tamil Nadu

Only preliminary results, a generalization cannot be made at this stage



Analysis in the Indian Context

The bus operations in the six states are analyzed w.r.t.the following aspects :

- Policy
- Permit/ Route
- Service Contract
- Bus time -table/Schedule
- Regulation- Operation/Routes
- Fare Structure
- Parking
- Dispute settlement Mechanism
- Computerization

State Transport Policies- General Policy Statement

Increasing Private Sector participation



Maharashtra

1. Private operations allowed only on inter state routes
2. No change in fleet size of STC (1998-2005)

Tamil Nadu

1. Almost all routes under public operations.
2. No new routes awarded to private operators.
3. 10.6% growth in the fleet size of STC (1998-2005)
4. Private sector operations in select districts/ routes

Rajasthan

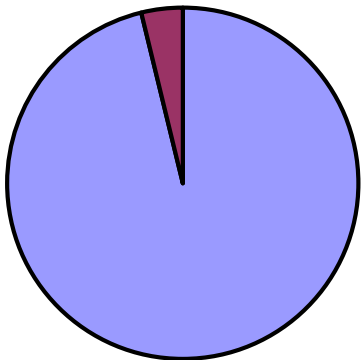
1. Free market for private operations
2. Private operators on all routes
3. No change in fleet size of STC (1998-2005)



Ownership Structure- Share of Buses

Maharashtra

4%

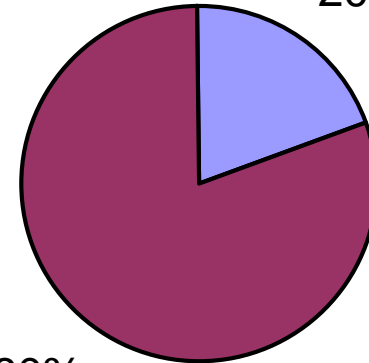


Public
Private

96%

Rajasthan

20%

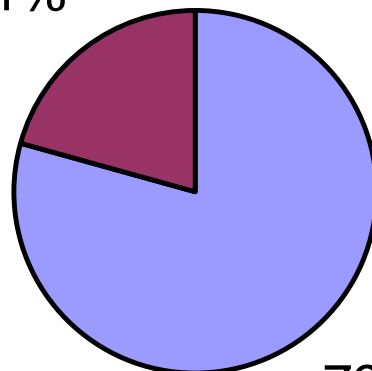


Public
Private

80%

Tamil Nadu

21%



Public
Private

79%

N State transport policies- Route / permit policy

The criteria for awarding the route to private operator-

Demand by passengers for buses on a particular route- **All states**

Permission required to change the route network, fleet size & time table & withdrawing a bus - **Maharashtra & Tamil Nadu**

-No permission required for fleet size- Rajasthan.

Routes reserved for public operator, as per the policy of nationalisation- **All states.**

Service Contract

Meeting Shortage of SRTC Buses

Service contract between State Transport Corporation and Private operators for the operation of buses on inter state and intra state routes

4 Rajasthan

6 Maharashtra

6 Tamil Nadu



State transport policies

Bus Time-Table

- Mandatory for public & private operator to follow the time table- **All States**
- Prepared by concerned departments in all the states.
 - **Maharashtra**- Traffic department
 - **Tamil Nadu**- Permit Issuing Authority
 - **Rajasthan**
 - Rajasthan State Road Transport Corporation (RSRTC): nationalised routes.
 - Regional Transport Authority: non- nationalised routes.

State transport policies

Bus Time-Table

Basis for preparing Time-Table/Schedule:

1. By State Transport Corporation (STC) As per the demand of passengers -Maharashtra & Rajasthan (only nationalised routes)
2. By the RTA- Rajasthan (for non nationalised routes)
3. In consultation with all the operators in the state- Tamil Nadu

Revision:

Timetable updated frequently- Maharashtra & Rajasthan

-Updated when the necessity arises- Tamil Nadu

State transport policies-

Regulation - Operation / Routes

Criteria for regulation:

- Limit for maximum number of vehicles operated - **Tamil Nadu**
- Limit on maximum number of routes - **Tamil Nadu**
- Restrictions on operation after mid night - **Tamil Nadu**
- Age of Bus- **maximum 10 years- All States.**
- Bus inspection - After two years in case of new bus and then every year- **All States**

State transport policies-

Fare Structure- Various Practices

1 Fare fixed by government- All States

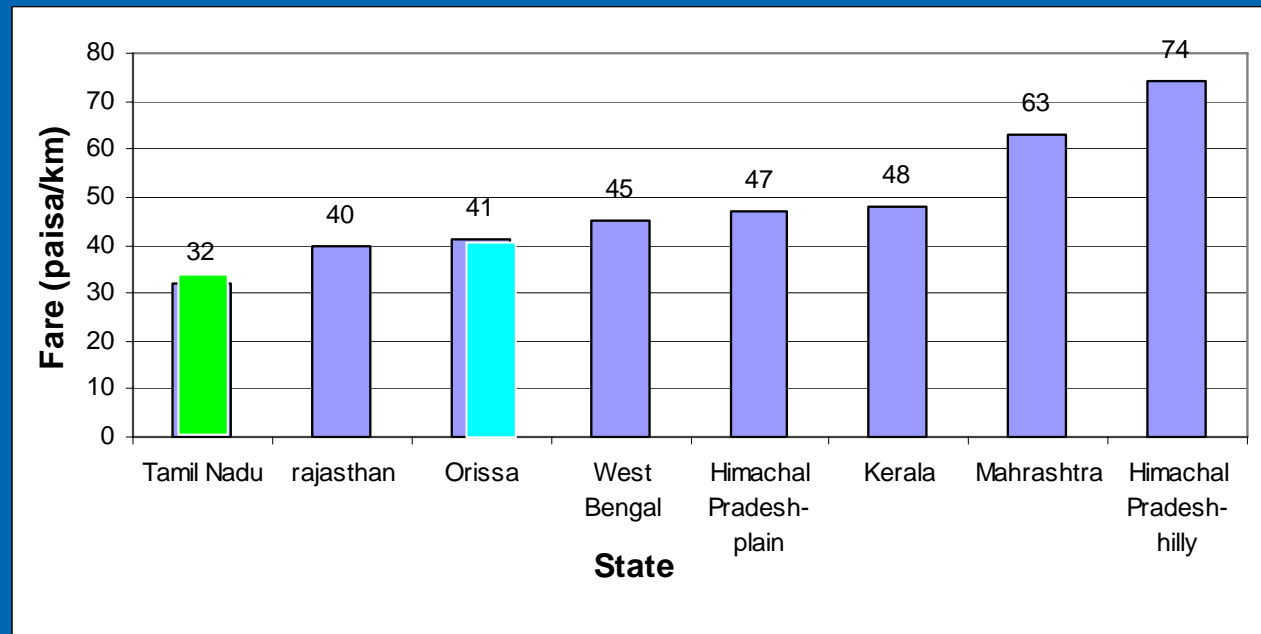
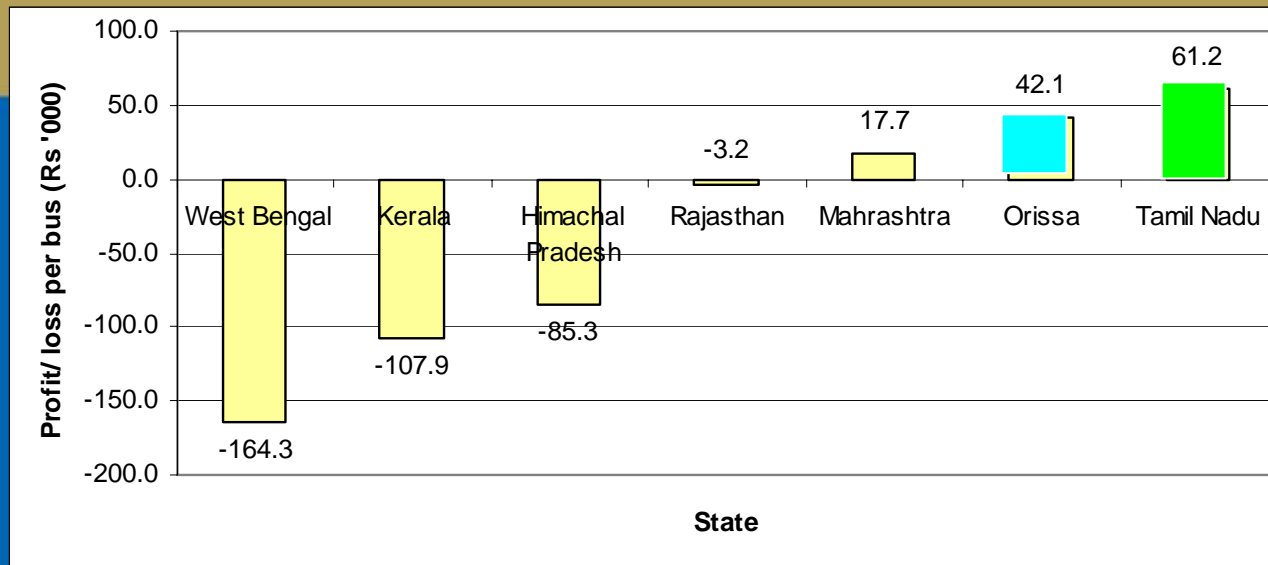
- Same fare applicable for stage carriage of both
 - State Transport Corporation
 - private operators.
- Upper Bound- Rajasthan

2 Separate fare for City, Town, Mofussil, Ghat & Express Services- Tamil Nadu

3 Fare system- Graduated Fare System

- fares based on distance travelled by a passenger.
- fare Revision- based on formula, includes cost of fuel, tyres, tubes, chaises etc

Pricing & Profitability Structure



State Road Transport Policies

Access to Infrastructure-Parking Standards

Only State Road Transport Corporation (SRTC) buses allowed to park at depots owned by them- Maharashtra, Tamil Nadu and Rajasthan

- Common bus stands for buses owned by STC & private operators- Tamil Nadu

Need to review the policy- permission for parking of private buses in the depots owned by SRTCs

State transport policies-

Dispute settlement mechanism

- The legal department of the corporation deals with legal cases-
- Cases are filed in the various courts against the corporation
- Fast settlement within a week.

All States



Computerisation



The information system of the state is computerised- Rajasthan & Tamil Nadu

Website consists of:

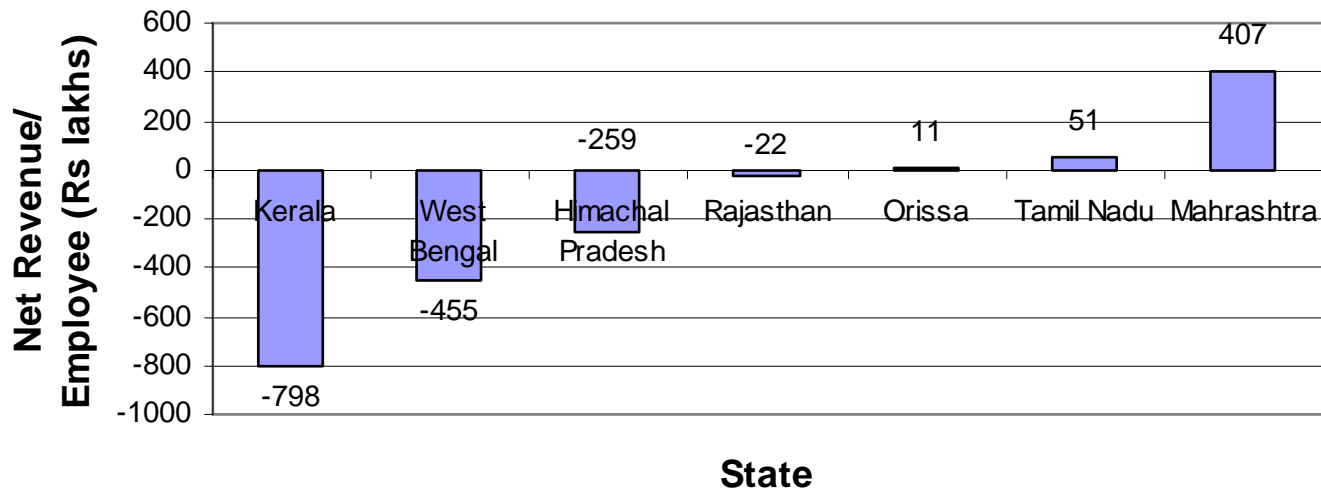
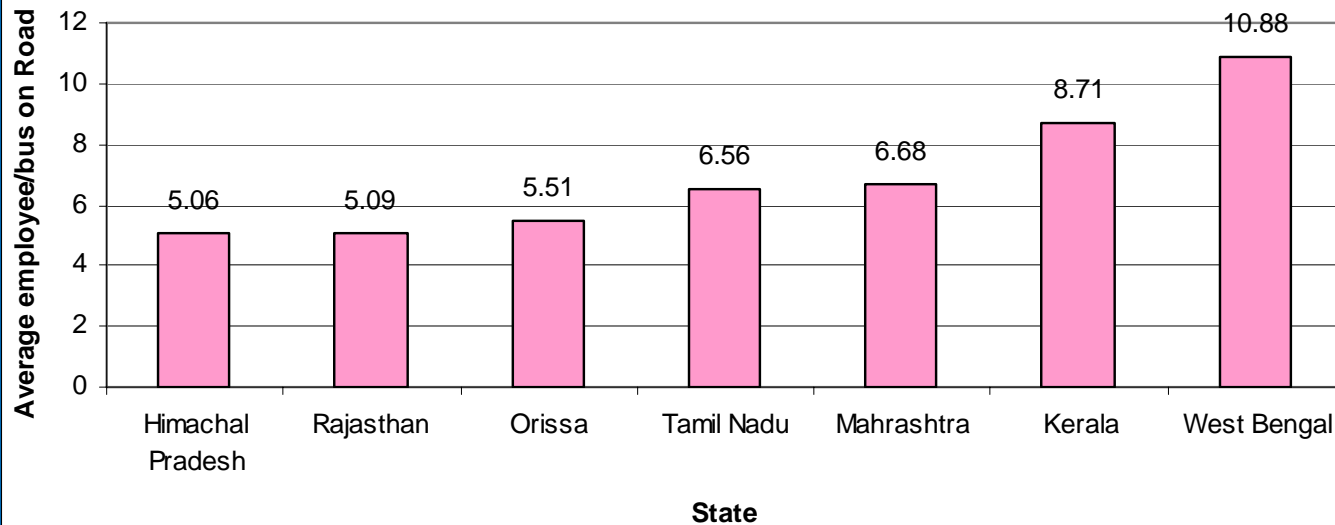
- Transport statistics- Rajasthan & Tamil Nadu
- Annual Report- Rajasthan
- Bus Time Table- Tamil Nadu
- Facilities available in buses- None
- Concessions- None
- Online Advance Passenger Ticket Reservation-

Maharashtra



Partial Productivity Measure

Employees/ Bus on Road





Case Study- Maharashtra

High proportion of Clandestine operations

Counter Strategy- 200 mini buses introduced by MSRTC to:

- compete private Clandestine operation and
- provide faster and safe service- especially short distance.

These buses are run on short distance and high traffic routes and are operated as conductor-less service.

The public response is satisfactory.

Approximately 1000 permits were cancelled between April 2006 and September 2006

Concluding Remarks

1. The analysis has been based on data collected from STAs and SRTC's only.
2. Still waiting for data from:
 - Private operators- to evaluate the issues of competition
 - Bus Passengers survey- to study the customer satisfaction w.r.t. public & private bus operation
3. Policy Implications



Thank you



External Learning- Kyrgyzstan (Bishkek)

- **Modality Adapted-** Franchising system
- **Year of Reform-** 1997
- **Bus Service Supply-** Decline in quality of the public sector vehicles
- **Cost-** Fares for the public operators controlled at 3 soms- continued deterioration of their finances.

Government Support- Proposal for use of revenue collected from the auctioning of franchises to support the unremunerative routes.