PRICING AND COSTING OF RAILWAY SERVICES WITH SPECIAL REFERENCE TO INDIAN RAILWAYS (A REVIEW)

P. G. KULKARNI

DEMALE INSTITUTE OF POLITICS & ECONOMICS
PUNE-411004
JULY 1989

Pricing and Costing of Railway Services
with Special Reference to Indian Railways
(A Review)

A Dissertation Submitted to
the University of Poona
in Partial Fulfilment of the Degree of
Master of Philosophy in Economics

 $\mathbf{B}\mathbf{y}$

P. G. Kulkarni

Gokhale Institute of Politics & Economics
Pune 411004

July 1989

ACKNOWLEDGEMENTS

I am most obliged to Dr. S. Sriraman, Gokhale
Institute of Politics and Economics, Pune for sparing
his valuable time and insight to guide me in writing
this dissertation. This piece of work would never have
been completed without his constant encouragement,
critical comments and valuable suggestions. I thank
him for the same.

I express my deep sense of gratitude to the Director and all the members of the faculty at Gokhale Institute of Politics and Economics for the goodwill and cooperation extended to me during my study.

I am also very much grateful to U.G.C. authorities and Junnar Taluka Shivner Shikshan Prasarak Mandli, Junnar for giving me an opportunity to study under U.G.C.'s Faculty Improvement Programme.

I owe to Prof. V. N. Mathur and Library Staff of Railway Staff College, Vadodara for providing me useful information and some data required for the purpose.

I must also be thankful to Shri Nitin Nirokhekar for assisting me for diagrams.

I owe a special word of thanks to Shri S.K.Athale for his prompt and skilful assistance in typing in a very short period.

Gokhale Institute of Politics & Economics Pune 411004

P. G. Kulkarni

July 1989

CONTENTS

		Page
ACKNOWLEDGEMENTS		(i)
LIST OF TABLES		(111)
Chapter		
I	INTRODUCTION	1
II	PRICING OF TRANSPORT SERVICES - SOME THEORETICAL INSIGHTS	15
III	COST-PRICE RELATIONSHIP IN GOODS TRAFFIC	47
IV	COSTING AND PRICING OF PASSENGER TRAFFIC	80
V	SUMMARY AND CONCLUDING REMARKS	106
BIBLIOGR APHY		112

LIST OF TABLES

Table No.		Page No.
1.1	Growth of Freight and Passenger Traffic	6
1.2	Utilisation of Wagon since 1950-51	8
1.3	Financial Performance of Indian Railways	10
1.4	Trends in Earnings and Staff Cost	12
2.1	Classes of Output Related Units, their Technical Forms and Conventional Averages	20
2.2	Cost Data for Transport Undertaking with Cost Dis- continuities	37
3.1	New Freight Structure Adopted with Effect from 1.10.1948	49
3.2	New Freight Structure Adopted since 1.10.1948 for Wagon Loads	50
3•3	Freight Structure Adopted with Effect from 1.10.1958	514
3.4	Base Scale of Class 100 Suggested by RTEC	58
3.5	Distance Blocks for Computa- tion of Freight Charges	58
3.6	Base Scale (Class 100) Adopted by Government with Effect from 1.4.1983	59

Table No.		Page No.
3.7	Minimum Weight Conditions for Bulky Commodities for Wagon Load and Train Load and their Average Lead	75
4.1	Growth of Passenger Traffic from 1950-51 to 1985-86	81
4.2	Growth of Passenger Kilometres During 1950-51 to 1985-86	82
4.3	Composition of Passenger Traffic	83
, , ,	Average Distance Travelled by a Passenger (Average Lead)	84
4.5	Basis of Charges for Mail/ Express Trains from 1.4.1948 to 1.4.1951	87
4.6	Basic Class 100 Scale with Effect from 1.4.1983	91
4.7	Distance Blocks Adopted	91
4.8	Indices for Various Classes in Relation to Class 100 Base Scale	92
4.9	Percentage of Passengers Travelling with Season Tickets and with Single Journey Tickets	96
4.10	Unit Cost and Unit Revenue Per Passenger Kilometre	103