

CEMENT INDUSTRY IN INDIA: SOME ASPECTS

**A DISSERTATION
SUBMITTED TO THE
UNIVERSITY OF POONA
IN PARTIAL FULFILMENT OF THE REQUIREMENT
FOR THE DEGREE OF
MASTER OF PHILOSOPHY
(IN ECONOMICS)**

**BY
KIRAN SAWHNEY**

**GOKHALE INSTITUTE OF POLITICS AND ECONOMICS,
PUNE 411 004**

DECEMBER 1983

ACKNOWLEDGEMENTS

I would like to thank my guide, Prof. V.S. Patvardhan, for the valuable time he gave me. My sincere appreciation also to Prof. P. Venkatramaiah and Prof. B.S.R. Rao for their advice.

I owe a debt of gratitude to Mr. S.S. Ambardekar and Mr. Jacob for turning an illegible manuscript into a presentable dissertation. It remains only for me to thank my family for having made this venture at all possible.

I would like to mention also that I am solely responsible for the views expressed in this work.

December 1983

Kiran Sawhney

C O N T E N T S

	<u>Page</u>
ACKNOWLEDGEMENTS	ii
LIST OF TABLES	iv
 <u>CHAPTER</u>	
I THE CEMENT INDUSTRY	1
II THE INDUSTRY AND PRICE REGULATIONS	8
III CAPACITY UTILISATION, PRODUCTIVITY AND BARRIERS TO ENTRY	48
IV A FINANCIAL OVERVIEW	76
V ACC AND CCI - A COMPARISON	100
VI CONCLUSIONS	122
 BIBLIOGRAPHY	 125

LIST OF TABLES

<u>Table</u>		<u>Page</u>
1.1	Cement and Five Year Plans	4
2.1	Total installed capacity and production	13
2.2	Uniform pricing system	27
2.3	3-tier pricing system	29
2.4	Ex-works prices and the Demand-Supply gap	32
2.5	Cost structure (as % of value of production) of cement companies	35
2.6	Composition of works cost estimated in successive Tariff Commissions and High Level Committees	40
2.7	Consumption per tonne of clinker (1978)	42
2.8	Excise duty component	42
2.9	Age pattern of units (as at the time of various Tariff Commissions)	44
2.10	Size of plants	45
2.11	Regionwise distribution of production and consumption of cement	46
3.1	Trends in capacity utilisation	51
3.2	Reasons for shortfall in production	52
3.3	Capacity utilisation - Regionwise	55
3.4	Capacity utilisation (%) according to age of factories	58
3.5	Capacity utilisation (%) according to size	60

<u>Table</u>	<u>Page</u>	
3.6	Capacity utilisation according to process	61
3.7	Unit capacity in tonnes per day (tpd)	62
3.8	Ownership pattern (Percentage to total)	65
3.9	Capacity utilisation according to management	66
3.10	Average C/O ratio at 1960-61 prices	68
3.11	Capital intensity indices in cement 1961=100	69
3.12	Cost conditions of cement companies	72
4.1	Average growth rates (% per annum)	80
4.2	Net capital between 1965 and 1970	81
4.3	Ratios of dividend payments (average for the 5 year periods)	89
4.4	Averages of profit ratios for 5 year periods	93
4.5	Average ratios for 5 year periods	97
4.6	Capital efficiency (average for the five year period)	98
5.1	Capacity utilisation	106-a
5.2	Costs per tonne of cement	107
5.3	Fixed assets per tonne of installed capacity	108
5.4	Cost of raw materials per tonne of cement	109
5.5	Cost of raw materials	110

<u>Table</u>		<u>Page</u>
5.6	Some indicators of operations	111
5.7	Profitability ratios (%)	113
5.8A	ACC : Cost as percentage of earnings	114
5.8B	CGI : Cost as percentage of earnings	114
5.9	Borrowings position of ACC and CGI	116
5.10	Debt:Equity ratios	117
5.11	Net sales:net fixed assets (%)	118
5.12	Inventory:sales (%)	120