Investment Behaviour of Selected Industries in the Private Corporate Sector in India

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Introduction (abridged)

The object of the study is to analyse the behaviour of certain selected private-sector industries in India in respect of their fixed investment. The industries considered by us are cigarette, cement and paper and paper board. Though these three industries do not cover a fairly wide spectrum of the manufacturing sector we have selected them for our study due to the analytical facilities offered by the generally homogeneous nature of the products within each industry. Further we have a comparatively smaller number of companies to consider in these industries than say, in jute or cotton textiles and this has helped us in carrying out an intensive study of the industries concerned, requiring as they do a good amount of computer time. Apart from this there are certain features of these industries which are also of interest to us, the point to which we shall return soon.

Decisions regarding investment, dividends and external finance interact with one another. The simultaneous behaviour of these factors is not our concern here and to that extent this study is a limited one. Our aim is to see the role of sales and financial variables affecting investment and try to disentangle their individual importance.

1.2 Unit of study

In any study of this nature the natural question which arises is regarding the unit of study. To industry a better unit than individual firms? Our opinion is that unless the behaviour of individual firms is analysed and interfirm differences are studied, it will be difficult to conclude about the investment process at the industrial level, particularly in the context of countries like India where government regulations, imperfect market conditions, necessity of importing large amount of machinery, etc. make interfirm differences within an industry all the more glaring. The other aspects like managerial competence ability to finance investment etc. tend to accentuate inter-firm differences. So we have concentrated on individual company-level data and analysed in each industry all the companies in our sample. Wherever, we felt the need pooling was done to necessitate further understanding of corporate behaviour.

The study is based on a time series analysis, with the period ranging from 1958 – 75 for cigarette, 1957 – 75 for cement and 1956 – 73 for paper and paper board. We have used published profit and loss and balance sheet accounts of companies covering the periods mentioned. Our main source of data was Bombay stock exchange directory supplemented by individual companies' balance sheets wherever necessary. Our period of analysis witnessed three wars (one in 1962, one 1965 & last one in 1971) and rupee was devalued in 1966. Later part of the decade was characterised by droughts & recession. There was a plan holiday from 1966 to 69. Upto 1965 in the period considered money and capital markets situation can be termed generally favourable but downtrend in the industrial security prices continued until 1960. Considering the private sector's difficulties in raising funds the government took measures like starting special financial institutions etc. Generally there was credit restraint after 1963 with selective liberalisation done in later sixties.

1.3 Trends in our industries

The industries under study namely cigarette, cement and paper and paper-board were not affected by recession and indicated no major decline in output. The three industries show a rising trend in output over the decade 1960-70 with a slight deceleration in the rate of growth of output in the year 1969. Capacity utilisation estimates for industrial sector is not reliable but we see the trend using RBI's potential utilisation rate for our industries. It is generally around 90% for our industries with 82% at the lowest & 95% at the highest in the case of cement and 85% and 97% in the case of paper & paper board. In the case of tobacoo it is 82.6% at the lowest & 95.3% at the highest between 1960 and 1972.

We use the figures computed by Krishnamurthy & Sastry for the two industries (namely cement and paper & paper board) to analyse certain trends like growth ration in fixed assets etc. These are based on the two samples of RBI for the periods 60-61 to 65-66 to 70-71. Averages for 61-66 and 66-71 are compared. The data are at current prices.

To cement the growth rate of fixed assets showed slight increase while as in paper it declined, in the second period. Growth rate of sales as well as profitability increased in the second half.

Though profits increased, dividends to net profit ratio declined in both and this is perhaps due to stability of dividends in relation to profits. In the case of cement external finance to total source, was around 40 to 45%. In the case of paper and paper-board it declined drastically. This may be due to i) increase in profitability & retention or ii) due to decline in capital formation. In paper and paper board the importance of new issues increased though external source as such declined very much in importance. The importance of borrowings declined and it is mainly due to decline in bank borrowings. We observe that total long term external financing (new issues, financial institution borrowings etc.) as a proportion of total source was small in both the industries, the point to which we return later.

In conclusion we can say sales & profitability show upward trend in second half in both the industries and in case of paper & paper board external funds to total source of funds declined in importance.

1.4 Conclusion

Ours is a time-series study of individual companies belonging to three industries namely cigarette, cement and paper and paper-board. We try to find the relative importance of sales and "internal fund flow" variable in determining investment behaviour. We also estimate the "reaction coefficient" which tells about the speed of adjustment of the capital stock to desired levels, by an indirect procedure. Study is both in current and constant prices, later used for estimating structural parameters.