Growth, profitability and savings of quoted public limited companies 1964-70

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I

Whereas many economists have studied in great detail the process of industrialisation in Pakistan, the major emphasis has been either to see the effects of different policy measures on industrial growth or to evaluate the 'efficiency' of the resulting industrial structure. Hardly any studies exist on corporate behaviour in Pakistan although over the last few years this subject has been the basis for extensive research, both theoretical and empirical, in the advanced industrial countries (Galbriath, Marris, Penrose, Singh etc.). Clearly a detailed study into such aspects like profitability and savings in the corporate sector is of vital importance. Profitability determines not only the overall investment climate prevailing in the country but relative profitability between different industries will determine the pattern of industrial investment. The extent of corporate savings determines the growth of industrial investment as financed by the corporate sector itself. The whole question has now taken on a very important dimension as one of the major criticisms levied against the private sector as an engine of growth in developing countries is its low saving potential.

This present study into the growth, profitability and savings of the corporate sector is very limited in its scope and basically an extension of an earlier study carried out by Haq and Baqai[1] for the period 1959-63 and is also based on a sample of companies (except financial institutions) quoted on the Karachi Stock Exchange and compiled from data collected by the State Bank of Pakistan. By extending Haq and Baqai's original study to the later years of the sixties we hope to present a complete picture of a very important segment of the corporate sector for the entire period 1959-70. It should, however, be pointed out in the beginning that as in Haq and Baqai, this study is not based on continuous companies and includes all new companies that are included for quotation on the Stock Exchange each year. Also that these new companies listed on the Stock Exchange

do not necessarily represent capital of newly established firms but also the 'going public' of previously established private or public companies. (For a ratio of established to new companies on the Stock Exchange for the years 1962-68, (see Appendix Table I).

Size of the Sample

Since this study is limited to quoted public limited companies, it is important that we should have an idea of the size of our sample in relation to the total large scale manufacturing sector in Pakistan. This has been done by comparing the total sales of the important industries which we have studied with the value of production as given in the Census of Manufacturing Industries (CMI) for the year 1965-66. This was the last year for which CMI figures are available for both wings of the country.

TABLE 1

(Rs. Million)

	CMI 1965-66	Corporate Sector	Per cent
Cotton Textiles	1494.1	695.2	46.6
Other Textiles	401.7	123.1	30.6
Jute	737.1	535.8	72.7
Cement	201.6	88.3	43.8
Sugar and Allied	667.0	298.3	44.7
Fuel and Power	388.5	388.5	100.0
Chemicals	869.6	103.7	11.9
	4759.6	2232.9	46.9

Source: Census of Manufacturing Industries 1965-66 C.S.O., Balance Sheet Analysis of Joint Stock Companies, State Bank of Pakistan.

As one can see from the above table the corporate sector covers a reasonably large percentage of total industrial production in the case of most of the important industries and can, therefore, be taken as a fairly good indicator of the behaviour of the industrial sector. Although it was not possible to get corresponding figures for the engineering industry, a rough comparison showed it to cover about 25 per cent. In the case of transport and communication, our sample includes the only airway company as well as most of the large shipping companies in the country but excludes all road transport companies (which are generally very small) and railways which is in the public sector.

Growth of the Corporate Sector

The number of industrial companies in our study increased from 131 in 1964 to 223 in 1970 and include almost all the companies quoted on the Stock Exchange. In Table 2, we have given a detailed industry-wise break down of the number of companies included in the sample for the years 1965 to 1970.

TABLE 2

Industry-wise break down of Number of Companies in Sample* (1965-70).

	1965	1966	1967	1968	1969	1970
Cotton Textiles	33 (4)	33 (2)	37 (2)	43 (7)	51 (5)	64 (5)
Other Textiles	11 (2)	11 (1)	12 (1)	14 (1)	14	14
Jute	12 (2)	12 (1)	14 (3)	14 (4)	17 (2)	19
Chemicals	9 (5)	9 (4)	10 (5)	12 (5)	11 (2)	12 (1)
Engineering	15	15	18 (2)	18 (1)	18	18
Fuel and Power	15 (2)	15 (2)	16 (1)	17 (2)	18	18
Transport and Communication	6	6	6	6	6	6
Sugar and Allied	11 (3)	12 (2)	15 (3)	16 (3)	16 (3)	16
Cement	5 (1)	5	5	5	5	5
Others	25	26	32 (3)	35 (3)	38 (4)	51 (7)
Total	142	144	165	180	194	223

*Figures in parenthesis refer to companies included in the sample but which have either not started production or have just started and are producing far below their capacity level.

TABLE 3

Growth in size of Public Limited Companies 1964-70

(Rs. Crores)

Industry	Paid-up Capital			Net Worth			Net Assets		
	1964	1970	Per cent increase	1964	1970	Per cent increase	1964	1970	Per cent increase
Textiles and Allied	36.8	80.8	119.6	59.6	118.8	99.3	78.2	178.9	128.8
Jute	16.9	35.7	111.2	25.7	48.9	90.3	31.0	74.5	140.3
Cement	10.4	13.5	29.8	13.2	23.6	78.8	22.0	34.7	57.7
Chemicals	8.3	25.8	210.8	12.2	29.1	138.5	12.9	47.0	264.3
Engineering	7.5	16.2	129.3	10.5	24.1	129.5	12.7	32.7	157.5
Fuel and Power	25.5	55.5	117.6	45.0	98.6	119.1	77.0	171.0	122 1
Transport	16.5	25.4	353.8	24.5	45.9	87.3	40.8	80.5	97.3
Sugar and Allied	8.9	29.2	228.1	13.6	42.0	208.8	18.7	59.2	216.6
Others	35.2	59.9	70.2	52.7	88.0	67.0	61.7	125.5	103.4
All Industries	166.0	342.0	106.0	257.0	519.0	101.9	355.0	804.0	126.6

	1964	1970	(Rs. Millions)
Average size of the Company (Paid-up Capital)	12.67	15.33	
Average Net Worth.	19.61	23.27	
Average Net Assets.	27.10	36.05	

The growth in size of public limited companies for the period 1964-70 is shown in Table 3. Paid-up capital, net worth and net assets doubled over the seven years period showing increases of 106, 101.9 and 126.5 per cent respectively. The average size of the company as represented by paid-up capital increased from Rs. 12.67 million to Rs. 15.33 million (an increase of 20.9 per cent) and the average net worth from Rs. 19.61 million to Rs. 23.27 million (an increase of 18.7 per cent). The figure for average net assets increased from Rs. 27.1 million to Rs. 36.05 million and since over the years the difference between net assets and net worth increased, it shows that firms were relying more on loan capital than they had done previously.

Industry-wise break down shows that the largest increases were for sugar and chemical industries followed by engineering, jute and textile and allied industries. In the case of sugar and chemicals, net assets increased by as much as 217 and 264 per cent respectively.

Measurement of Profitability

The overall trend of profitability of the corporate sector is most important as it not only reflects the state of demand for new investment during the period but is also a close reflection of the degree of competition prevailing in the economy besides showing the profitability of new investments which are undertaken.

The real problem in measuring profitability, however, is not only in finding accurate and reliable figures of profits but also in deciding upon the appropriate indicator of profitability that should be used. It is well known that figures for profits as shown in balance-sheets of companies must be viewed with considerable amount of suspicion. Evasion of taxes is rampant among almost all companies and this is done by understating their actual profits. This leaves one with no other alternative but to work on the assumption that the practice of showing lower profits remained about the same throughout the period and is generally the same among different industries. A study of profitability over a period of time can

then be taken as a good indicator of the general trend even if it is not a good reflection of the absolute level of profits.

The other difficulty arises as to what should be taken as the best indicator of company profits. The net pre-tax profit figure is a good indicator but since depreciation charges are calculated on the basis of tax concessions, it seriously under-estimates profits. The figure for gross profits as shown in the State Bank statistics is simply arrived at by subtracting cost of production and opening stocks from net sales and closing stocks but includes operating expenses (like selling expenses, general and administrative expenses and managing agents allowance and commission) and also other expenses like interest charges and is, therefore, not an indicator of profits earned.

The figure for gross profits as used in this study in the sum of depreciation and net profits before tax. This to a large extent covers the weakness of the figure for gross profits as defined by the State Bank, as is excludes operating expenses. However, managing agencies remuneration were in fact a convenient way of siphoning off profits by the industrialists who owned both the managing agency as well as the company. (The actual services rendered by the managing agencies were in fact almost negligible). The best indicator of profits would in these circumstances be the gross profit figure used by us plus managing agencies remuneration. Since the State Bank does not provide a separate figure for managing agencies remuneration it has not been possible to do this and we have therefore used the gross profit figure.

We have also not been able to get figures for 1964-70 for profitability as shown by the ratio of gross profits to gross capital employed. The latter was defined in Haq and Baqai's study as the sum of gross fixed assets and inventory accumulation. Since the State Bank does not give a figure for inventories we have not been able to calculate gross capital employed. Also since Haq and Baqai's study has not given the figures for net assets, this leaves us in the unfortunate position of having only one comparable profitability ratio for the whole period 1959-70, that of gross profits to net worth.

We have used the following indicators to measure profitability. They together with their weaknesses are explained below :

Indicator I, Net Profits before Tax/Net Assets. The ratio of net

pre-tax profits to net assets is generally the most accepted indicator to measure the rate of return. To the extent that depreciation charges are calculated on tax considerations (which allow a higher initial and accelerated depreciation for providing incentives to investment), this will underestimate the rate of return on investment.

Indicator II, Gross Profits/Net Assets. This indicator covers the weakness of Indicator I in that gross profits is derived by adding depreciation allowance to pre-tax profits. As has been pointed out, it does not include managing agencies remuneration and therefore also underestimates profitability.

Indicator III, Gross Profits/Net Worth. The figure for gross profits is taken as a return of net worth (which is ordinary share capital plus reserves) and is important from the investors point of view.

II

Overall Economic Situation

Before we discuss the trends in profitability, let us first get an overall view of the economic situation prevailing in the country during this period. The economic boom in the Second Plan (1960-65) had been brought about principally through increased foreign assistance (which rose by 12.5 per cent per annum in the Second Plan period) and increased exports (which grew by 7.6 per cent annually). This had made it possible to achieve an increase in private investment from 4.5 per cent of GNP in 1959-60 to 9.5 per cent in 1964-65 and a 15 per cent growth in large-scale manufacturing. An impressive increase in agricultural production of 3.4 per cent during the Second Plan made it possible to save foreign exchange which would otherwise have been spent to import food grains. The resulting improvement in the country's balance of payment position had made it possible to follow a liberal import policy which was operated through the bonus voucher scheme.

These trends in the economy, especially progressive liberalization and a rising level of imports suffered a reversal in the first two years of the Third Plan (1965-70), because of a sharp decline in the amount of foreign exchange resources available for financing commodity imports. This situation was principally brought about through a suspension of foreign aid assistance following the September, 1965 War with India and although it

was restored, it was still 27 per cent less in the Third Plan period than had been expected.

The curtailment of aid, however, was not the only factor. There were a number of other important factors which worsened this situation. The first was the extraordinary large claims made by the defence forces on Pakistan's exchange resources arising out of the war with India and the cessation of military grant assistance from abroad. Second, the first two years of the Plan saw the agricultural sector faced with a severe drought with the volume of production of major crops in 1965/66 and 1966-67 remaining stagnant and roughly at the 1964-65 level and with food crops as a group showing a decline in production. These difficulties were made particularly acute by the fact that foodgrain imports had to be increased at a time when less PL-480 assistance was available, so that the country's own resources had to be diverted more to financing sizeable food imports. Finally, the economy was faced with large sums to be paid for debt servicing on previous assistance and also greater reliance had to be made on short-term credits.

By 1967-68, the economy had recovered primarily because of a tremendous increase in agricultural production. It broke down again in the autumn of 1968 because of large scale political agitation against the Ayub Government which led to widespread labour unrest. This movement brought about the downfall of Ayub's Government in March, 1969, the proclamation of Martial Law and although the law and order situation improved, the fact that elections were promised in the near future, led to a complete collapse of investor's confidence and industrial investment fell drastically.

III

Ratio of Gross Profits to Sales: 1959-70

Haq and Baqai have discussed in detail the causes of the decline in the ratio between profitability and sales for the period 1959-63. Their basic argument is that there was growing competition in the manufacturing sector both as a result of increase in domestic production and the availability of imported substitutes. The latter was the result of liberalization of import controls especially the operation of the bonus scheme which set a ceiling on the permissible increases in the domestic prices of imported goods.[2]

The mark-up ratio continued to show a declining trend during the rest of the period 1964-70 (see Table 4). In 1970, it was 25 per cent lower as compared to 1964 and 33 per cent less than what it had been in 1959.

For the last two years of the Second Plan period *i.e.*, 1963-65 as in the earlier years it appears that the principal factor responsible was the import liberalization policy which the government had introduced. Readily available imports increased capacity utilization and also kept a check on domestic price increases. Mark-up ratios fell on the average 7.8 per cent per year during 1964 and 1965 and compared to 1959 they were 17.7 per cent lower in 1965.

During the period 1965-70, there was a fall of 18.5 per cent in mark-up ratios but a completely different set of factors seem to be responsible for it.

If we ignore the drastic fall in 1967 (which was the result of special circumstances prevailing in the jute industry) the major reason for the decline in the mark-up ratios over this period was the general rise in the price level and the improvement in the terms of trade in favour of agriculture in relation to the manufacturing sector.[3] The rise in prices of agricultural commodities was triggered off by a severe draught in 1966 and 1967 which led to a sharp rise in foodgrain prices. Profits failed to keep up with rising prices as costs increased—the general price index being 137 in 1968-69 compared to 112.4 in 1964-65 (1959-60=100). The price index for foodgrains was 141.8 and that of manufactures 127.8 in 1968-69 compared to 112.1 and 107.1 in 1964-65.

This situation was further worsened by the fact that the industrial sector was hit by considerable labour unrest in 1968 and the first quarter of 1969. This led to a large number of working days being lost through strikes. Even though the labour situation stabilized with the imposition of Martial Law in May, 1969, the new government announced new labour laws and a minimum wage (September, 1969) which led to increase in wage costs in 1970 and explains the fall in the mark-up ratio between 1969 and 1970.

Ratio of Gross Profits to Sales—Industry-wise

The ratio of gross profits to sale *i.e.* the mark-up ratio is important amongst others because it highlig ts the factors which effect the pricing policy followed in different industries.

TABLE 4

Ratio of Gross Profits to Sales, Net Assets and Net Worth 1959-70.

(Rs. Crores)

	HAQ AND BAQAI						*STATE BANK OF PAKISTAN*					
	1959	**1960**	**1961**	**1962**	**1963**	**1964**	**1965**	**1966**	**1967**	**1968**	**1969**	**1970**
1. GROSS PROFITS	26.2	33.3	36.8	42.2	52.2	60	62	73	70	94	112	122
2. GROSS SALES	133.3	174.5	215.2	226.4	286.2	343	384	450	565	624	776	923
3. Ratio of 1 to 2	19.7	19.0	17.1	18.6	18.2	17.6	16.2	16.2	12.4	15.1	14.4	13.2
4. Change in Mark-up Ratio		—3.7	—10.0	+8.8	—0.2	—7.7	—7.9	—	—23.46	+21.8	—2.0	—8.3
5. NET WORTH	98.2	120.3	146.4	169.4	205.3	257	304	335	372	391	460	519
6. Ratio of 1 to 5	27	28	25	25	25	23.3	20.4	21.8	18.8	24.0	24.4	23.5
7. NET ASSETS	NA	NA	NA	NA	NA	355	454	512	580	627	724	804
8. Ratio of 1 to 7	NA	NA	NA	NA	NA	16.9	13.7	14.3	12.1	15.10	15.5	15.2
9. PAID-UP CAPITAL	78.1	92.7	112	126.3	150.3	160	198	205	236	255	297	342
10. Ratio of 1 to 9	33.6	35.9	32.8	33.4	34.7	36.2	31.3	35.6	29.7	36.9	37.7	35.7

We can start by looking at the extreme case where the price of the product is regulated by the government and the producers are allowed a fixed amount of profits per unit of output. In this case higher costs will be passed on to consumers in the form of higher prices but since the profit rate is fixed producers will face declining mark-up ratios. The best example of this is the fuel and power industry where prices are controlled and regulated by the government.

In the case of industries where prices are regulated by market forces the movement of mark-up ratios is influenced by a number of factors. The most important of course are the forces of competition either because of entry of new firms into the industry or because of liberalization of import policy. Early enterants into the market having monopoly or near monopoly control can charge very high mark-up ratios but these would be eroded as new firms enter the industry leading to increased production and lowering prices. Similarly, industries enjoying protection from imported goods would be able to charge higher mark-up ratios which would be adversely effected if the government followed a more liberal import policy and subject the industry to the forces of outside competition.

Increased production, however, need not lead to lowering of mark-up ratio when new companies are in the control of the same industrial houses or there exist cartel like arrangements between the firms in the industry. Also increase in efficiency of production or lower costs of inputs in most cases result in higher mark-up ratios rather than being passed on in the form of lower prices.

Our study does not permit us to make any generalization about how firms fix prices and unfortunately no such study for Pakistan exists. What our results of mark-up ratios and profitability seem to show is that firms concentrate on maintaining the latter rather than the former. There seems to be good logic in following such a principle. Investors are primarily interested in recovering their initial investment in the minimum time period and therefore wish to maximise profits on capital invested. Also more important is the fact that in most of the industries the government plays an important part in determining prices. This is done either through the rate of bonus in the case of exports or through controlling prices of major inputs or in certain cases of controlling prices of

TABLE 5

Ratio of Gross Profits to Sales—Industry-wise

	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
1. TEXTILES AND ALLIED	25.8	24.5	24.0	19.9	18.4	17.3	16.1	14.2	15.0	16.1	17.1	15.1
2. COTTON TEXTILES	NA	NA	NA	NA	NA	17.0	15.6	14.2	15.1	16.0	17.3	15.4
3. OTHER TEXTILES	NA	NA	NA	NA	NA	20.1	19.1	13.9	14.8	16.5	15.7	13.5
4. JUTE	21.3	21.0	6.9	20.4	19.8	14.7	13.0	14.8	7.0	10.9	9.3	11.1
5. CEMENT	40.9	51.9	30.8	36.1	20.4	45.3	42.0	27.1	23.8	20.4	20.6	16.7
6. CHEMICALS	19.4	25.6	22.9	22.6	22.9	20.5	18.8	18.6	11.5	7.4	13.0	13.2
7. ENGINEERING AND CONSTRUCTION	21.9	11.3	9.8	9.7	9.2	9.4	10.0	12.6	9.6	12.2	11.5	9.4
8. FUEL AND POWER	43.8	44.4	44.8	46.9	31.1	31.8	24.0	21.5	15.4	17.4	16.4	14.1
9. TRANSPORT	10.4	11.9	17.2	15.1	15.9	22.2	22.8	20.8	21.0	20.6	19.9	17.1
10. SUGAR AND ALLIED	7.1	2.1	9.3	9.1	26.1	23.2	19.1	15.3	10.5	20.0	19.0	15.4

commodities themselves. This makes it difficult for the firm to be able to influence the mark-up ratios.

Our results for the period 1964-70 show a far more stable level of profitability as compared to a declining overall level of gross profits to sales and seems to support this hypothesis. Whereas the latter fell by 25 per cent between 1964 and 1970 and by 33 per cent between 1959 and 1970, profitability as measured by the ratio of gross profits to net worth was the same in 1964 as in 1970 and fell by only 11 per cent between 1959 and 1970. (Table 4).

Industry-wise break down of the ratios of gross profits to sales (Table 5) seems to confirm that where firms were able to fix prices they were able to maintain mark-up ratios, whereas where prices were controlled by the government, they were subject to declining mark-up ratios. The best example of reasonably steady mark-up ratios is the case of cotton textiles where prices were demand-determined and this should be contrasted to that of fuel and power where prices were fixed by the government. Fluctuating prices seem to be the main factor in explaining the wide changes in the jute industry whereas increased competition pulled down the ratio in the case of cement. Engineering and construction had a steady mark-up ratio from 1960 onwards as did transport and communications after 1964. The sugar industry enjoyed a marked rise in the ratio of gross profits to sales once the industry was freed from government controlled prices after 1962 and with the exception of 1967 (which was a very bad crushing season) maintained reasonably high mark-up ratios.

Profitability

One of the interesting results of this study is that whereas mark-up ratios declined, the profitability ratios were far more stable during the entire period 1959-70. In Table 6 we have calculated a three year moving average of profitability for this period, excluding the year 1967 which was an exceptional year because of the dismal profits of the jute industry.

When looking into the profitability of the industrial sector one must never forget that profitability as shown by the balance sheets of companies, considerably underestimates the actual profitability. It is a well known fact that the actual rate of return on industrial investment for most industries was so high in the beginning of our period that industrialists recovered their own investment in one and a half to two years. Since

TABLE 6

Profitability—Three Year Moving Average

	1959-61	1960-62	1961-63	1962-64	1963-65	1964-66	1965-68	1966-69	1968-70
GROSS PROFITS/ PAID-UP CAPITAL ...	30.8	34.0	33.6	34.8	34.7	34.4	34.6	36.7	36.8
GROSS PROFITS/ NET WORTH ...	26.7	26.0	25.0	24.4	22.9	21.8	22.7	23.4	24.0
GROSS PROFITS/ NET ASSETS ...	—	—	—	—	—	15.0	14.4	15.0	15.2

the rate of return on paid-up capital was as high, if not higher at the end of the period it shows that industrial investment was still a very attractive proposition. The decline in industrial investment after 1965, therefore cannot be attributed to falling profitability. The real problems arose on the supply side. Principally they were the coming into operation of the foreign exchange constraint which acted as a brake on investment after 1965 and this situation was further worsened after 1969 when political uncertainty led to collapse of investors confidence.

Also we find that throughout the period 1959 to 1970 the ratio of gross profits to net worth was almost double that of gross profits to net assets. This shows the heavy dependence of firms on loaned capital. Since the lending rates of financial institutions were on the average much lower than profitability rates they pushed up considerably profitability on net worth and paid-up capital.

A much better explanation of the fluctuations in the profitability rate lies in a detailed study of the different industries which comprise the overall data. This is because different factors effected profitability of different industries at different time periods and this would only come out if we study each industry separately.

Profitability—Industry-wise

Industry-wise comparisons of profitability can be had from Table 7 which shows that the highest profitability as given by gross profits to net worth was in the case of transport and communications followed by sugar, fuel and power and engineering and construction industry. A change in rankings between industries takes place if we use the ratio of

gross profits to net assets as the profitability indicator with engineering and construction industry being the highest followed by sugar and cotton textiles. The large decline between the ratio of gross profits to net worth and gross profits to net assets in the case of transport and fuel and power is because of their heavy dependence on borrowed capital.

TABLE 7

Profitability—Industry-wise Average 1964-70

	Gross Profits/ Net Worth	Gross Profits/ Net Assets	Net Pre-Tax Profits/ Net Assets
1. Cotton Textiles	21.9	16.9	12.5
2. Other Textiles	14.2	7.2	4.7
3. Jute	17.9	13.7	10.0
4. Cement	17.2	10.7	7.4
5. Chemicals	13.1	8.9	6.4
6. Engineering and Construction	23.2	19.2	14.8
7. Fuel and Power	26.2	14.5	9.5
8. Transport and Communication	30.3	16.6	9.1
9. Sugar	26.9	18.4	13.1

The trend in profitability for the different industries between 1964 and 1970 is given in Table 8. (Detailed information concerning other profitability indicators is given in Appendix Tables II and III).

Our study of the textile industry clearly shows why it is very important to separate cotton from other textiles, a fact over-looked by Haq and Baqai who studied both together. Profitability in the case of the cotton textile industry is more than double that of other textiles as measured by the ratio of gross profits to net assets. The cotton textile industry showed a slight decline in profitability between 1964 and 1967 after which it recovered mostly because of the increase in bonus on exports of yarn and cloth. The fall in profitability in 1970 was because the industry was hit by a number of strikes. In order to remove any bias in the figure for profitability because of the entry of new firms we carried out the same exercise for twenty-eight continuous companies. Our results were not much different from that of the entire sample and showed that new enterants were either companies already in production or that they did not face any special difficulties on entry.

TABLE 8

Profitability—Industry-wise Ratio of Gross Profits to Net Worth

	1964	1965	1966	1967	1968	1969	1970
Cotton Textiles	22.9	20.1	19.5	19.5	21.6	26.7	22.9
Other Textiles	13.2	13.3	12.9	12.3	18.6	15.5	13.5
Jute	21.7	17.4	25.4	10.0	14.7	18.2	17.7
Cement	18.2	18.3	15.8	16.4	17.0	19.1	15.4
Chemicals	13.9	15.8	14.2	15.4	7.0	14.8	16.1
Engineering and Construction	27.6	20.9	25.5	21.7	24.7	23.7	18.3
Fuel and Power	25.3	23.1	23.7	23.5	28.5	28.8	30.6
Transport and Communication	28.3	31.8	27.1	29.4	33.3	33.7	28.9
Sugar	41.9	22.1	24.8	15.5	28.8	27.2	27.9

In the case of other textiles one major reason for their poor performance was the Koh-i-Noor Rayon plant which although being the biggest firm in the industry had very low level of profits mostly because of an unfavourable Government policy regarding the import of rayon. Also Karnaphully Rayon and Chemical plant, located in East Pakistan had a low level of profitability although its performance was better that of Koh-i Noor Rayon. Between them they accounted for almost 55 per cent of the net worth of the industry.

Jute industry showed wide fluctuations in profitability. The abysmally low figure in 1967 is explained by almost all companies as being due to the devaluation of the sterling and the reduced export duty on jute by India. The general trend for the entire period showed a decline and profits were much lower on the average in the Third Five Year Plan as compared to the Second. In fact for the period 1964-70 the average profitability of the jute industry was among the lowest in the group of industries covered and this is in striking contrast to its performance during 1959-63 when it had the highest rate of return.

The chemical industry showed the lowest profitability rate amongst all the industries and this is indeed very surprising as it was the second fastest growing industry during the period 1964-70. One reason for the low level of profitability is the entry of new firms into the industry which were either not in production or were working far below their capacity levels. The very low profitability figure in 1968 was, because Esso

Fertilizer and Valika Chemicals, two of the largest companies in the industry sustained heavy losses in their initial stages of production.

In order to remove the bias of new companies in the chemical industry we worked out profitability in the case of four continuous companies (Ferozsons, Glaxo, ICI and Pakistan Oxygen). The average profitability as given by the ratio of gross profits to net worth for the period 1964-70 was 23.1 and gross profits to net assets was 21.7—the latter being the highest amongst all the industries studied. This seems to confirm the hypothesis that one reason for the low profitability of the chemical industry was the fact that it included a number of new companies which in their earlier stages were experiencing considerable difficulty.

The sugar industry in Haq and Baqai's study had shown a big jump in profitability between 1962 and 1963 when it increased from 12 to 34 per cent. This sharp increase in profitability was becasue of a major change in government policy regarding this industry when it allowed the sale of part of its produce in the open market. The large decline in profitability between 1964 and 1965 was brought about by an influx of new companies attracted by the very high profit rate. Net assets of the industry increased by more than 55 per cent during these two years leading to a fall in the profit rate.

The figures for the cement industry in Haq and Baqai's study had shown a declining trend between 1959 and 1963 when they fell from 31 to 25 per cent but during the period 1964-70 they remained generally stable. In the case of fuel and power industry which comprised of a number of oil refineries, gas distribution and electric supply companies profitability rate had remained fairly steady during the period 1959-63 but in our study it showed an increase after 1967 and it was 25 per cent higher in 1970 as compared to 1964.

Our present treatment of engineering and construction companies is highly unsatisfactory as it lumps together the automobile industry, electrical engineering, mechanical engineering and construction companies together. On the whole the average profitability was lowest in the construction industry as compared to the others. There was also considerable variation in the profitability ratio of companies in each group. In the automobile industry for example Ghandara had a phenomenally high profit rate (60 per cent is the ratio of net pre-tax profits to net worth

for 1965) as compared to Mack Trucks which sustained a loss throughout the period. This industry had the highest profitability ratio as given by gross profits to net assets for the period 1964-70 amongst all the industries studied. The average was also much higher during this period as compared to 1959-63.

IV

Distribution of Gross Profits

From the point of view of corporate savings, as Haq and Baqai pointed out in their study, the crucial decision on the part of management is the ratio of profits to be distributed to the share-holders as dividends and the amount to be re-invested for expanding the operations of the enterprise. The savings potential of the corporate sector is of considerable interest especially since a number of studies have cast doubts on the saving capacity of the private sector.[4]

Our study of corporate savings has been limited by a major change in the figures for tax provision as given by the 1964-69 series and the 1965-70 series. In the latter series there is a considerable drop in tax provision as compared to the former series.

The reason for this fall is because the basis followed for calculating tax provision was revised by the State Bank when they published the 1965-70 series. Whereas the item 'tax provision' comprised current year tax provision, reserve for taxation and deferred taxation for the 1964-69 series, for the 1965-70 series it consists only of current year tax provision. We have therefore used the series 1964-69 for the disposal of gross profits to make it comparable with the earlies 1959-63 series.

Tax Provision

In Table 9 we have shown the distribution of gross profits as given by the 1964-69 series. The percentage set aside for tax provision for the years 1964-69 is much lower (22.7 per cent) as compared to the average for 1959-63 (28 per cent) and the figure for retention is higher being 25 per cent as compared to 22.6 per cent for 1959-63. The only major change in government's taxation policy regarding the corporate sector was in the 1965-66 budget when tax-rebate in favour of public limited companies was raised from 5 to 10 per cent and this reduced taxes from 50 per cent to 45 per cent.[5] Although this can explain to

TABLE 9

Distribution of Gross Profits (Series 1964-69).

(Rs. Crores)

	1964	1965	1966	1967	1968	1969	*Average* 1964-69 (%)	*Average* 1959-63 (%)
1. Gross Profits	60	64	75	75	97	112		
2. Retention	18 (30)	19 (27)	22 (29)	12 (16)	21 (22)	27 (24)	24.7	22.6
3. Depreciation	16 (27)	18 (28)	20 (27)	26 (35)	32 (33)	35 (31)	30.2	28.8
4. Tax Provision	16 (27)	14 (22)	16 (21)	17 (23)	21 (22)	22 (20)	22.5	28.4
5. Dividends	10 (17)	13 (20.3)	17 (23)	20 (27)	23 (24)	28 (25)	22.7	20.2
6. Gross Savings	34 (57)	37 (58)	42 (56)	38 (51)	53 (55)	82 (55)	55.3	51.4
7. Retention Ratio	(64)	(60)	(56)	(38)	(48)	(49)	52.5	52.8

Note : Figures in parenthesis are percentages.

some extent the fall in tax provision from 1965 onwards, this certainly was not the major reason. The real reason for the fall in tax provision as a percentage of gross profits was the coming into production of industries which enjoyed complete tax holiday. The Government had after 1960 announced measures which gave systematic tax exemptions in the form of tax holidays to a large number of approved industries. Haq and Baqai had taken note of the fact that the ratio of tax provision to gross profits had remained stable throughout the period 1959-63 and that companies entitled to tax holiday had not gone into production by 1963. It appears that during the period 1964-70 a large number of companies enjoying tax holiday were now in production.

Gross Savings

The figure for gross savings defined as the sum of retained earnings and depreciation, for 1964-69 too is higher as compared to the average for 1959-63. The average for 1964-69 is 55 per cent as compared to 51 per cent for the years 1959-63. This means that throughout the period gross savings accounted for more than half of gross profits.

Dividends

One of the major changes in Government's policy during this period was in regard to the dividends paid out by the corporate sector. In the 1967-68 budget,[6] the Government announced as series of measures to encourage the distribution of dividends, and levied income tax at the rate of 10 per cent on so much amount of free reserves of a company as in excess of 100 per cent of the paid-up capital. They also were to pay an additional tax of 5 per cent on their undistributed income but would be allowed a rebate of 10 per cent in their existing rebates in respect to the amount distributed as dividend out of the income of that year. With the same objective in mind, tax holiday companies which had to set aside 60 per cent of their profits for the purpose of development and expansion was reduced to 40 per cent. The companies had to distribute the balance, namely 60 per cent of the profits or an amount equal to 10 per cent dividend, whichever was the less.

This change in Government's policy regarding distribution of dividends resulted in a large increase in the amount distributed out of gross

profits. The average for 1967-70 was 25 per cent as compared to 20 per cent for the period 1959-66.

This increase in the amount paid out as dividend is reflected in the retention ratio which is defined as retained earnings divided by the sum of retained earnings and dividends. This ratio does not show any increase in the period 1964-69 as compared to the 1959-63 series, although gross savings increased. This was because the increase in retained earnings this period was offset by the rise in the dividends which led to the retention ratio remaining constant.

TABLE 10

Disposal of Gross Profits—Industry-wise Average 1964-69

	Gross Savings	Depreciation	Retained Earnings	Dividend	Tax Provision
1. Textiles and Allied	49.6	27.2	22.4	26.0	24.4
(*a*) Cotton Textiles	50.0	26.3	23.7	25.6	24.4
(*b*) Other Textiles	47.8	31.8	16.0	27.5	24.7
2. Jute	50.8	27.9	22.9	29.7	19.5
3. Cement	63.6	25.3	38.3	24.7	11.7
4. Chemicals	31.5	35.9	—4.5	33.1	35.5
5. Engineering and Construction	44.9	22.3	22.6	24.1	31.0
6. Fuel and Power	54.3	35.2	19.1	20.6	25.1
7. Transport and Communication	86.7	47.0	39.7	10.6	2.7
8. Sugar	49.4	20.8	28.6	26.0	24.6

Industry-wise Analysis

Industry-wise breakdown of the disposal of corporate profits amongst gross savings, retained earnings, dividends and depreciations on the average for the period 1964-69 is given in Table 10. (For detailed year-wise breakdown given in Appendix Tables IV to VI). It is interesting to see that with the exception of the chemical industry all other industries saved almost half of their gross profits. In almost all the industries the percentage set aside for gross savings was around 50 per cent with the exception of cement, 63.6 per cent, and transport and communication which had an extraordinarily high figure of 86.7 per cent. In the case of the latter the major factor responsible was the very high savings rate of the state managed airline corporation, P.I.A.

One striking feature about the disposal of gross profits is that the amount set aside for dividend, with the exception of transport and communication showed very slight variation between the different industries. It is about 25 per cent in the case of cotton textiles, other textiles, engineering and construction and sugar industry despite the wide variations in their profitability ratios. The slightly higher figure of 30 per cent in the case of jute and chemical industry is that because of their low level of profitability they had to set aside a larger percentage for dividends. The very low figure of 10.6 per cent in the case of transport and communications is explained by the very high savings, especially retained earnings in this industry and because P.I.A. followed a system of providing travel vouchers to their shareholders in place of cash dividends.

The figure for depreciation varies between 20 and 35 per cent of gross profits with the exception of transport and communication which is 47 per cent. There is, however, considerable variation in the figure for retained earnings which ranges from 4.5 per cent for chemicals to almost 40 per cent for transport and communication. It appears that most industries were therefore principally concerned with the sum set aside for depreciation and dividend and retained earnings was a residue and this explains its wide variations among the different industries.

Conclusion

In looking at the results of this study one must keep in mind the fact that with the exception of the jute industry most of the firms in the different industries covered by the sample were located in West Pakistan. This was the case for cotton textiles, cement, chemicals, fuel and power, engineering and sugar, where only a very small number of the companies were located in East Pakistan. To the extent that profitability differed in the two provinces this study for these industries must be seen as mostly relevant to West Pakistan.

The period of our study was one which witnessed a very large increase in the number of companies quoted on the Stock Exchange. Although the increase was not only because of newly floated companies but also of existing companies which went public, a cursory survey by the World Bank indicated that the vast majority of this increase was due to new companies. During the years 1964 to 1970, paid-up capital, net worth

and net assets of companies more than doubled with the largest increase in the sugar and chemical industries which showed increases in net assets of more than 200 and 250 per cent respectively. They were followed by engineering (152 per cent), jute (140 per cent), transport and communication (137 per cent) and textiles and allied (129 per cent).

Our study of mark-up ratios showed a declining trend throughout the period 1964-70 as the earlier study of Haq and Baqai had shown for 1959-63. It appears that during the Second Plan period this was due to import liberalization policies followed by the Government which kept prices under control. During 1965-70, the general rise in costs and the turning of the terms of trade in favour of agriculture seems to be responsible for the decline. Industry-wise break down of mark-up ratios showed that in the case of industries where prices were largely under government controls there was a large decline in mark-up ratios as increasing costs were passed on in the form of higher prices but profit margins remained constant. In the case of industries where prices were determined largely by market prices as in the case of cotton textiles the general level remained stable. Our study of mark-up ratios is, however, not exhaustive enough to put us in a position to speak with confidence on the pricing policy followed by firms in various industries.

Our study of profitability showed that on the whole profitability ratios remained fairly stable during the period covered. Industry-wise break downs, however, showed considerable fluctuations and marked differences between various industries. The fairly high and stable profitability ratio for cotton textiles compared to a much lower figure for other textiles showed the importance of studying the two separately. Jute industry showed considerable fluctuations in profitability with much lower profits on the average during the Third as compared to the Second Plan period. Fuel and power industry where prices were controlled by the government showed fairly stable profitability ratios. The chemical industry showed why it is important to include only those companies in the sample which had started production and how the inclusion of new companies can give a misleading picture of profitability in the industry. A study of four continuous companies showed a much higher level of profitability as compared to the total number of companies covered by the sample.

Our study of gross savings as the sum of retained earnings and

depreciation reserves showed an increase during 1964-69 as compared to the earlier period 1959-63. This means that there was no fall in corporate savings during this period as is claimed by certain studies.

The two major changes regarding the distribution of gross profits occured for tax provision and dividends distributed by the companies during this period. In the case of tax provision the fact that percentage declined from 28.4 per cent for 1959-63 to 22.5 per cent for 1964-69 showed that a large number of companies coming into production during this period enjoyed tax holiday status. The increase in the dividends ratio after 1967 was the result of government policy to encourage companies to pay out higher dividends through tax concessions. It appears that government's policy bore fruit but whether it had the desired effect on the stock exchange and helped mobilize domestic savings for the corporate sector was not covered by this study.

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APPENDIX

The increase in the number of companies quoted on the Stock Exchange took place not only because of new companies being floated but also as a result of conversion of private companies or partnerships which went public. Such a distinction is important especially if we are interested in estimating new investment in the various industries. It was not possible to get a yearwise breakdown of companies which were already established and those which were newly formed but a survey carried out by a World Bank study provides us with an estimate for the years 1962 to 1968.

TABLE I

Year	Capital of established companies being listed	Per cent	Capital of new firms	Per cent
1962	30	28	77	72
1963	35	26	102	74
1964	22	12	155	88
1965	95	53	85	47
1966	35	32	75	68
1967	20	14	119	86
1968	62	39	96	61

Source : IBRD Industrialization of Pakistan, Volume III, Annexe I.

As one can see from the above table except for 1965 the major portion of companies added to Stock Exchange represented capital of new firms.

TABLE II

Profitability—Industry-wise (Gross Profits as Per cent of Net Assets)

	1964	1965	1966	1967	1968	1969	1970
1. Cotton Textiles	18.7	16.1	15.4	15.1	16.5	20.0	16.6
1-A. 28 Continuous Cos.	—	16.9	15.9	15.7	17.0	21.7	17.8
2. Other Textiles	8.0	7.8	6.0	5.6	8.8	7.5	6.8
3. Jute	18.0	14.2	20.4	7.6	10.7	13.2	11.6
4. Cement	10.9	11.1	9.5	10.2	10.7	12.1	10.5
5. Chemicals	13.1	9.0	8.8	9.4	3.5	8.8	9.9
5-A. 4 Continuous Cos.	—	20.9	20.4	20.4	23.0	23.8	21.5
6. Engineering and Construction	22.9	18.0	22.2	18.5	21.4	17.8	13.7
7. Fuel and Power	14.8	13.1	13.2	12.6	14.8	15.6	17.6
8. Transport and Communication	17.0	18.2	14.2	15.7	17.1	17.8	16.5
9. Sugar and Allied	30.4	14.4	15.9	10.4	19.7	18.5	19.8
9-A. Continuous Cos.	—	19.6	21.7	12.8	32.5	25.0	20.8

TABLE III

Profitability—Industry-wise (Net Pre-tax Profits as per cent of Net Assets)

	1964	1965	1966	1967	1968	1969	1970
1. Cotton Textiles	14.6	12.2	11.5	10.7	12.4	14.6	11.3
1-A. 28 Continuous Cos.	—	12.8	11.8	11.3	12.5	15.9	11.9
2. Other Textiles	6.0	5.3	4.6	4.0	5.7	3.9	3.2
3. Jute	13.8	11.1	17.5	4.9	6.4	9.0	7.0
4. Cement	7.8	7.9	7.5	7.8	8.0	7.0	5.6
5. Chemicals	10.5	7.0	6.9	7.1	3.5	4.9	5.2
5-A. 4 Continuous Cos.	—	16.2	15.7	18.1	18.5	18.7	16.2
6. Engineering and Construction	18.6	12.7	17.3	14.7	17.1	13.7	9.5
7. Fuel and Power	10.5	8.9	8.4	7.6	9.5	9.9	11.9
8. Transport and Communication	8.8	13.5	8.6	8.2	8.8	8.7	7.3
9. Sugar	27.9	11.5	12.4	6.8	16.6	14.1	14.8
9-A. 7 Continuous Cos.	—	15.7	16.8	8.3	28.2	20.9	16.9

TABLE IV

Re-investment of Profits in Selected Industries

(Gross Savings as per cent of Gross Profits)

	1964	1965	1966	1967	1968	1969	*Average* 1964-69	*Average* 1959-63
Textiles and Allied	50.0	53.3	45.1	40.1	54.0	55.1	49.6	49.6
Cotton Textiles	49.9	55.3	49.6	37.8	53.8	53.3	50.0	—
Other Textiles	50.6	44.0	22.3	50.6	54.6	64.7	47.8	—
Jute	47.5	44.9	59.5	44.5	53.2	55.0	50.8	58.2
Cement	61.8	69.4	69.7	62.2	51.2	67.2	63.6	50.4
Chemicals	40.8	40.7	47.6	13.3	9.2	56.0	31.5	44.0
Engineering	44.3	58.1	51.9	44.6	29.8	40.5	44.9	43.4
Transport and Communication	89.7	92.9	85.5	86.1	82.7	83.2	86.7	84.6
Sugar and Allied	57.9	42.5	56.4	42.7	48.9	47.7	49.4	—
Fuel and Power	63.0	54.5	54.5	48.0	51.5	54.0	54.3	47.2

TABLE V

Distribution of Dividends in Selected Industries

	1964	1965	1966	1967	1968	1969	*Average* 1964-69	*Average* 1959-63
Textiles and Allied	22.8	21.3	28.0	31.8	26.8	25.1	26.0	19.0
Cotton Textiles	23.1	20.2	27.3	32.8	24.8	25.3	25.6	—
Other Textiles	20.9	26.1	32.0	27.4	34.3	24.1	27.5	—
Jute	24.8	32.2	20.8	32.0	31.5	36.7	29.7	16.4
Cement	15.8	14.1	20.6	30.9	37.2	29.8	24.7	18.0
Chemicals	23.1	22.6	22.4	49.7	57.0	24.0	33.1	20.2
Engineering	18.0	19.2	21.1	22.0	31.3	33.0	24.1	21.0
Transport	5.6	5.2	13.1	12.2	12.3	15.0	10.6	10.0
Sugar	10.2	24.8	26.0	37.3	25.7	31.7	26.0	22.0
Fuel and Power	15.1	20.7	21.8	26.0	19.8	20.0	20.6	26.2

TABLE VI

Ratio of Depreciation to Gross Profits

	1964	1965	1966	1967	1968	1969	*Average* 1964-69	*Average* 1959-63
Textiles and Allied	22.3	24.7	25.8	28.1	33.9	28.6	27.2	20.8
Cotton Textiles	21.9	24.4	25.4	27.8	33.2	25.1	26.3	—
Other Textiles	24.7	25.7	27.7	29.3	36.9	46.3	31.8	—
Jute	23.3	21.4	13.9	36.2	39.0	33.8	27.9	25.6
Cement	28.2	26.9	16.4	23.5	24.8	32.1	52.3	30.4
Chemicals	20.1	22.6	20.5	37.1	69.0	46.3	35.9	17.8
Engineering	18.3	28.5	21.1	34.3	13.5	17.8	22.3	32.2
Transport	47.8	92.6	44.7	50.9	47.9	48.0	47.0	71.0
Sugar	8.2	19.6	22.0	36.4	15.1	23.5	20.8	78.0
Fuel and Power	31.1	32.4	35.6	40.5	35.2	36.1	35.2	32.6