

SOME EXPLANATIONS FOR THE HIGH CORPORATE PROFITS IN THE PHILIPPINE PHARMACEUTICAL INDUSTRY

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This study finds the high profitability in the Philippine pharmaceutical industry to be primarily due to two factors. One is the industry's ability to increase prices, even under the adverse economic conditions of the 1982 - 1987 period, without adverse effects on total revenue. The other factor is the relatively low investments in fixed assets in the industry, particularly plant and equipment, suggesting that pharmaceutical manufacturing in the Philippines is concentrated in the later part of the production process, e.g. the compounding and packaging stages. The study also identifies possible industry reactions to the newly-passed Generics Law.

The pharmaceutical industry is a vital and controversial industry. A conference in Sweden in 1985 highlighted some issues surrounding the operations of this global industry, as follows:

- Under-medication of the poor, especially in the Third World, who cannot afford or obtain access to essential pharmaceuticals;
- Over-medication of large segments of the population particularly in the industrialized countries, who could be better treated by more selective drug therapy or by non-drug therapies;
- Excessive and irresponsible promotion which

creates demands for pharmaceuticals among physicians and consumers;

- Misdirected innovation which sets too low a proportion of industry resources dedicated to developing genuine therapeutic breakthroughs and almost none devoted to tropical diseases¹

In third world countries, the problems are not limited to the foregoing. Some problems observed include the following - the domination by transnational corporations of the pharmaceutical markets, the marketing of inferior or unsafe products not acceptable in advanced countries, and marketing practices which lead to high profits but increase the cost of drugs beyond the reach of the bulk of the population.²

The Philippine pharmaceutical industry has been among the most profitable industries in the country. In a study of industry rates of return over the period 1971-1983,³ it was found that Philippine pharmaceutical companies outperformed companies from 11 other industries in the study in terms of the Return on Assets measure. Moreover, the study showed that the pharmaceutical industry was the only industry where returns were not positively correlated with an economy rate of return index. Similarly another report⁴

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¹Dag Hammarskjold Foundation, "Another Development in Pharmaceuticals: Summary and Conclusions, Development Dialogue (1985): 130.

²United Nations Centre on Transnational Corporations, Transnational Corporations in World Development. (New York: United Nations, 1987), p. 145; and K. Jayasena, "Drugs-Registration and Marketing Practices in the Third World" Development Dialogue 2 (1985): 38 - 47.

³Erlinda S. Echanis, "Some Properties of Accounting Rates of Return of Selected Philippine Industries", (DBA dissertation, UP College of Business Administration, 1985).

⁴Nicanor C. Gabunada, Jr., The Philippine Pharmaceutical Industry Fact Book, (1987), p.20.

showed that Return on Assets for the Philippine pharmaceutical industry was higher than the average for the entire Philippine manufacturing industry in the period 1978-1985.

What explains the high returns in the pharmaceutical industry? Studies on transnational pharmaceutical companies generally attribute their high profitability to the existence of "entry barriers" in the form of process and product patents (which result from Research and Development), product differentiation (e.g., through advertising and promotions), and scale economies which shield companies against competition.⁵ This paper hopes to gain further insights into this question in the case of the Philippine pharmaceutical industry through an analysis of the recent financial performance of nine local companies. The paper will also consider some possible industry reactions to the newly-passed and still controversial Generics Law.

METHODOLOGY

The data in this study were taken primarily from the financial statements filed annually by the companies at

the Securities and Exchange Commission (SEC) for the years 1982 through 1987. Financial statements for the years prior to 1982 could not be made available by the SEC. Other industry financial data were taken from the *1000 Top Corporations in the Philippines* and *Corporate Profiles* published by the Business Day Corporation, *The Philippines' Best 1000 Corporations* published by the Mahal Kong Pilipinas Foundation, Inc., *The Philippine Statistical Yearbook* published by the National Economic Development Authority, various reports published by the Drug Association of the Philippines, and data compiled by the Central bank of the Philippines.

The analysis of the data is done through an examination of the trend in industry sales as well as various ratios on sales margins, asset turnover, and profitability.

INDUSTRY SALES GROWTH

The study takes the combined sales of the drug manufacturing companies belonging to the top 1000 corporations as the industry total.⁶ On this basis, industry sales from 1982-87 are shown in Table 1.

Table 1. INDUSTRY SALES AND DRUG IMPORTS

Year	Industry Sales		Drug Imports	
	Amount (000)	Rate of Change (Percent)	Amount (000)	Rate of Change (Percent)
1982	P 3,522,676		\$81,898	
1983	4,247,813	20.58	75,913	(7.31)
1984	6,153,210	44.86	58,194	(23.34)
1985	8,015,668	30.27	52,402	(9.95)
1986	8,625,323	7.61	67,274	28.38
1987	10,627,331	23.21	98,878	46.98

Source: Philippine Pharmaceutical Industry FACT Book and the Central Bank of the Philippines

⁵United Nations Centre on Transnational Corporations. *Transnational Corporations and Technology Transfer: Effects and Policy Issues*, (New York: United Nations, 1987), p. 23.

⁶The Industry Sales of Drug Manufacturing Companies for each year was adjusted to exclude Hoechst Philippines, Inc., and instead include Hoechst Far East Marketing. The latter was listed as the appropriate firm owning and operating drug manufacturing laboratories in the Philippine Pharmaceutical Fact Book by Gabunada.

Table 2. COMPANY SALES

Year	Abbott		Ciba Geigy		Hoechst		Johnson & Johnson	
	Amount (P 000)	% Change	Amount (P 000)	% Change	Amount (P 000)	% Change	Amount (P 000)	% Change
1982	181206	--	116161	--	108211	--	334528	--
1983	237773	31.22	133464	14.90	126826	17.20	390462	16.72
1984	349512	46.99	188130	40.96	176909	39.49	468503	19.99
1985	480232	37.40	250508	33.16	222505	25.77	540764	15.42
1986	563539	17.35	331443	32.31	261202	17.39	555335	2.69
1987	657295	16.44	410346	23.81	334102	27.91	669475	20.55

Year	Mead Johnson		Pfizer		United		Warner Lambert		Wyeth Suaco	
	Amount (P 000)	% Change	Amount (P 000)	% Change	Amount (P 000)	% Change	Amount (P 000)	% Change	Amount (P 000)	% Change
1982	n. a.	--	145581	--	732763	--	175985	--	252128	--
1983	n. a.	15.28	165606	13.76	849747	15.96	216073	22.78	317764	26.03
1984	354994	218.12	204326	23.38	1104780	30.01	289480	33.97	419456	32.00
1985	351683	(0.93)	213396	4.44	1521525	32.82	424898	46.78	489588	16.72
1986	510846	45.26	246676	15.60	1719856	13.04	509728	19.96	626160	27.90
1987	611331	19.67	298569	21.04	2152217	25.14	537069	5.36	815139	30.18

n. a. = not available

FIGURE 1
INDUSTRY SALES AND GROWTH RATES

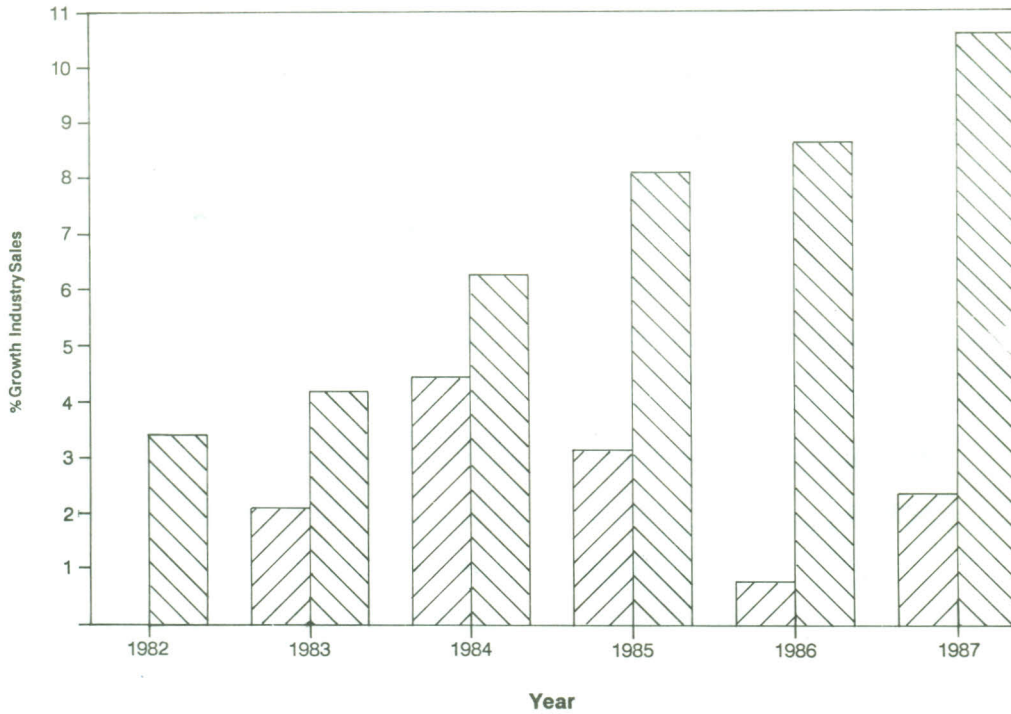
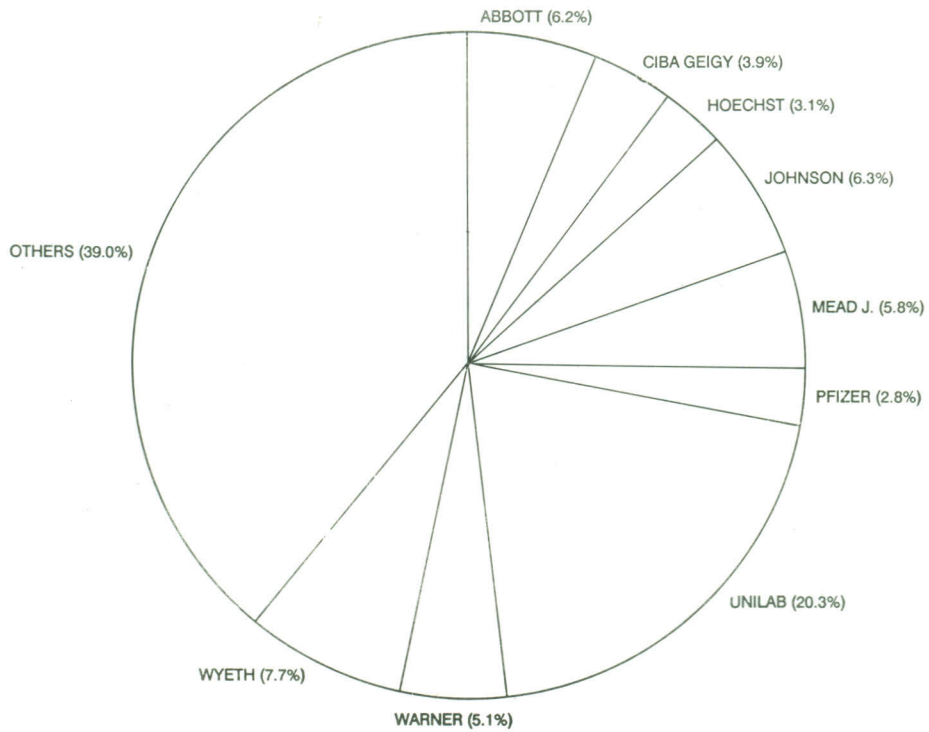


FIGURE 2
1987 COMPANY MARKET SHARE



Industry sales increased continuously during the period and tripled by 1987, an average annual growth rate of 25 percent. It is noteworthy that the highest rates of sales increases occurred between 1983 and 1985, a period marked by very adverse economic conditions in the country. It is also noteworthy that total industry sales posted an increasing trend while drug imports declined from 1983 through 1985 at an average rate of 13.5 percent per annum. Since almost all active substances and auxiliaries for drugs sold locally are imported, the continued increases in industry sales in the face of declining drug imports imply lower physical volume of sales and high drug unit prices during these years.

Previous studies have indicated that the demand for pharmaceuticals is income elastic though relatively price inelastic.⁷ The sales performance of the industry during the 1982-87 period suggests that whatever adverse effects on drug consumption were brought about by the negative growth of the economy in 1983-85, were successfully offset by the industry through price increases.

COMPANY SALES AND MARKET SHARE

Data on industry sales and market shares of nine companies are shown in Figures 1 and 2. The combined

sales of the nine companies comprise more than 50 percent of industry sales. It is notable that the largest market share in the sample belongs to a Filipino firm, United Laboratories, with a market share of 20 percent as of 1987. Company sales performance roughly follows the industry trend as shown in Table 2. Thus, all the companies in the sample continuously increased sales during the period, and all but Johnson and Johnson and Pfizer maintained their market shares throughout the period. Also, with few exceptions, the slow-down in the growth of industry sales in 1986 is reflected in company sales growth rates. The slowdown in industry sales growth in 1986 may reflect the cumulative impact of the two previous years' negative growth rates for the economy which reduced per capita income (at 1972 prices) in the Philippines to its lowest level (at P1,271) during the 1982-1986 period.

SALES MARGINS

Table 3 shows the gross margins of the nine companies over the period. The average gross margins range between 37 percent (Hoechst) and 64 percent (Warner Lambert).

Table 3. GROSS PROFIT RATES
(in percent)

Year	Abbott	Ciba Geigy	Hoechst Far East	Johnson & Johnson	Mead Johnson	Pfizer	United	Warner Lambert	Wyeth Suaco
1982	40.64	41.23	n. a.	53.00	n. a.	38.00	41.61	57.86	42.28
1983	45.79	41.87	38.06	48.96	n. a.	41.03	38.75	61.27	45.32
1984	45.31	50.76	41.06	56.79	34.24	54.53	38.43	64.35	41.84
1985	42.20	54.41	36.80	55.40	35.91	42.41	39.60	66.56	36.75
1986	47.73	44.38	34.43	56.69	50.49	41.53	39.70	69.34	41.53
1987	47.35	44.60	34.98	55.22	49.12	49.19	39.79	67.31	41.84
Average	44.84	46.21	37.07	54.34	42.44	43.28	39.65	64.45	41.59

n. a. = not available

⁷Gabunada, p.12

It is also apparent that gross margins increased during the period. Since drug unit costs almost certainly increased during the period due to the successive peso devaluations, the maintenance and improvement of company gross margins throughout the period is another indication of the industry's capacity to pass on increased costs through price increases.

While gross margins are generally and comparably high, net margins among the sample companies vary more widely. Also shown in Table 4 are the average net margins which range from -.86 percent for Ciba Geigy to 17 percent for Warner Lambert.

Company	Average Net Margin (in percent)
Abbott	10.60
Ciba Geigy	(.86)
Hoechst Far East	2.71
Johnson & Johnson	12.59
Mead Johnson ¹	12.20
Pfizer	4.69
United	5.86
Warner Lambert	17.30
Wyeth Suaco	15.17

¹ Average of Net Margins for the period 1984 to 1987 only.

As an indicative comparison, the average net margins of five of the nine companies in the sample exceed the average net margins of top grossers such as the San Miguel Corporation (at 6.74 percent) and Bacnotan Consolidated Industries (at 5.34 percent), for the same period. Gross marginwise, the latter companies were considerably lower, at 9.09 percent and 14.19 percent, respectively. Indeed, the gross margins of San Miguel Corporation (SMC) and Bacnotan Consolidated Industries (Bacnotan) are roughly equal to the net margins of Abott, Wyeth Suaco, Warner Lambert, Johnson and Johnson and Mead Johnson.

EXPENDITURES FOR MARKETING AND PROMOTIONS

One factor which accounts for the differences in company net margins in the sample is the difference in the level of expenditures for marketing and promotions. Table 5 shows the level of marketing expenditures as a percentage of sales for six of the nine companies during the period. These range from a low average of 10.83 percent (Wyeth Suaco) to a high average of 22 percent (Mead Johnson and Hoechst). This range is lower than previous findings on marketing expenditure levels for the industry. Nonetheless, the data still show that marketing and promotions expenditures represent a major item of cost in the industry.

ASSET TURNOVER RATIOS

A component analysis of total assets for the firms in the sample is shown in Table 6. As is readily seen, Receivables and Inventories account for the bulk of the assets of the drug firms while Plant and Equipment represent a surprisingly smaller component of the asset mix, ranging from a low 11 percent to a high 32 percent. Plant and Equipment turnover ratios for the firms in the study are also compared with those of SMC and Bacnotan in Table 7.

The low investments in plant and equipment compared to current assets would support observations that the drug industry in the Philippines is concentrated on the final, not the basic, phases of drug production. And from an industry profitability point of view, the low investment requirement in plant and equipment reduces the size of the asset base needed to generate every peso of sales. Table 8 shows average asset turnover ratios for the drug companies during the period. These compare favorably with those of SMC (.98 x) and Bacnotan (.78 x) for the same period.

PROFITABILITY RATIOS

The return on assets (ROA) for the nine firms during the period are also shown in Table 8. ROAs varied considerably but all companies showed a positive ROA, average for the period with the exception of Ciba Geigy which is the lone firm to report losses for two years (1983 and 1986). During these two years, Ciba Geigy incurred foreign exchange losses arising from the importations of raw materials and finished goods.

Table 9 shows the high and low Return on Equity (ROE) ratios for the companies and the average company ROE. Again with the exception of Ciba Geigy, average company ROE during the period ranged from a low

Table 5. **MARKETING AND PROMOTIONS EXPENSES TO SALES RATIOS¹**
(in percent)

Company	1982	1983	1984	1985	1986	1987	Average
Abbott	16.00	16.75	15.44	14.82	15.72	14.28	15.50
Hoechst Far East	n. a.	24.05	21.21	19.81	23.85	25.36	22.86
Mead Johnson	n. a.	n. a.	13.92	18.72	21.01	20.88	18.63
Pfizer	19.31	18.73	20.15	23.54	24.92	26.25	22.15
United	16.50	17.23	16.12	16.76	n. a.	n. a.	16.65
Wyeth Suaco	11.00	9.81	9.56	11.10	11.63	11.86	10.83

¹Estimated from expense items in Company's Income Statement

n.a. = not available. Data from 1982-1987 for Geigy, Johnson and Johnson, and Warner Lambert are not available

Table 6. **COMPONENT ANALYSIS OF TOTAL ASSETS**

Company	Plant and Equipment as Percentage of Total Assets	Receivables and Inventories as Percentage of Total Assets
Abbott	15.22	58.73
Ciba Geigy	18.22	74.43
Hoechst Far East	16.13	77.70
Johnson & Johnson	31.58	59.53
Mead Johnson	18.91	68.59
Pfizer	25.68	59.60
United	11.23	64.75
Warner Lambert	32.28	48.11
Wyeth Suaco	27.20	58.72

Table 7. **AVERAGE PLANT AND EQUIPMENT TURNOVER RATIOS**

Company	Ratio (Times) (1982-1987 Average)
Abbott	8.5
Ciba Geigy	4.7
Hoechst Far East	25.6
Johnson & Johnson	7.6
Mead Johnson	11.9
Pfizer	5.0
United	7.3
Warner Lambert	6.4
Wyeth Suaco	4.7
Average of all sample drug firms	9.08
San Miquel Corporation	3.05
Bacnotan Consolidated Industries	3.46

Table 8. **ASSET TURNOVER AND RETURN ON ASSETS**

Company	AVERAGE (times) ASSET TURNOVER (1982 - 1987)	AVERAGE (in percent) RETURN ON ASSETS (1982 - 1987)
Abbott	1.42	14.44
Ciba Geigy	1.07	(1.06)
Hoechst Far East	1.85	5.29
Johnson & Johnson	1.76	22.14
Mead Johnson	1.69 ¹	23.64
Pfizer	1.30	5.96
United	1.32	7.69
Warner Lambert	1.69	30.16
Wyeth Suaco	1.49	22.86

¹ Average for the 1984 to 1987 period only.

Table 9. RETURN ON EQUITY RATIOS
(In Percent)

Company	High	Low	Average (1982-1987)
Abbott	35.89	12.49	24.27
Ciba Geigy	7.03	(22.97)	(2.49)
Hoechst Far East ¹	62.83	29.35	67.33
Johnson & Johnson	40.49	29.00	34.65
Mead Johnson	82.63	20.59	49.66
Pfizer	25.95	4.82	13.21
United	15.03	10.30	11.97
Warner Lambert	104.28	33.21	61.90
Wyeth Suaco	48.51	18.96	31.68

¹For the years 1983 to 1987 only; 1982 data not available.

11.97 percent (United) to a high 67.33 percent (Hoechst). All but two of the companies had average ROE which substantially exceeded SMC and Bacnotan ROEs at 14.94 percent and 5.02 percent respectively for the period. In fact, the performance of some of the companies in the study during the period exceeded the ROE performance of their parent companies abroad.⁸

Table 10 shows the capital structure of the companies in the study. The companies vary significantly in the debt ratios which range from 16 percent (Ciba Geigy) to 84 percent (Hoechst). Interestingly, long term debt is non-existent or insignificant for all companies indicating that the industry uses credit primarily for working capital which, as we saw, comprises the bulk of their assets.

⁸Abbott (Philippines) average ROE was 24.27 percent for the period 1982 to 1987 while Abbot (USA) earned an average of 20 percent from 1970 to 1984; Johnson & Johnson (Philippines) ROE for the period 1982 to 1987 was 34.65 percent while Johnson & Johnson (USA) earned an average of 18 percent only for the period 1970 -1984. For Wyeth Suaco, its average ROE for the period 1982 - 1987 is about the same as the average ROE of its major stockholder, American Home Products, at 31 percent for the period 1970 - 1984.

Apart from high margins, asset turnover, and debt ratios, dividend policy, as shown in Table 11, may also be a contributory factor to high ROE performance in the industry. As can be seen, Payout Ratios for the period ranged from a low 16.61 percent (Abbott) to a high 71.80 percent (Mead Johnson). The companies with high Payout Ratios during the period also have high average ROE in the sample. The payment of dividends reduces the growth of the equity base and hence affects the ROE ratios in subsequent periods.

SUMMARY AND CONCLUSIONS

Financial data of Philippine pharmaceutical companies during the period 1982-87 show the following:

1. Industry revenues grew continuously at an average annual rate of 25 percent during the period despite the years of negative economic growth in the country in 1983-85. The same growth is reflected in sales of the individual companies in the study.
2. Despite successive devaluations of the peso during the period, the companies in the study maintained or improved their sales margins. Average

Table 10. **CAPITAL STRUCTURE AND LEVERAGE RATIOS**
As of 1987
(in percent)

	Abbott	Ciba Geigy	Hoechst Far East	Johnson & Johnson	Mead Johnson	Pfizer	United	Warner Lambert	Wyeth Suaco
Current Liabilities	18.86	56.87	77.53	34.00	45.68	53.26	28.00	58.44	24.00
Long-Term Liabilities	3.30	5.90	7.02	2.00	--	--	2.00	1.78	2.00
Equity	77.84	37.23	15.45	64.00	54.32	46.74	70.00	39.78	74.00
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Debt Ratio	.22	.16	.84	.36	.46	.53	.30	.60	.26

Table 11. **CASH DIVIDENDS AND PAYOUT RATIOS¹**
(1982-1987)

Company	Cash Dividends (P 000)	Net Income (P 000)	Payout Ratio (in percent)
Abbott	47,736	287,305	16.61
Hoechst Far East ²	15,600	38,453	40.57
Johnson & Johnson	218,924	357,138	61.30
Mead Johnson	202,500	282,015	71.80
Pfizer	18,400	60,041	30.65
United	110,133	487,301	22.60
Warner Lambert	283,700	410,356	69.13
Wyeth Suaco	179,598	431,057	41.66

¹Ciba Geigy did not declare Cash Dividends for the period.

²Cash Dividends data not available for 1982.

company gross margins ranged between 37 percent and 64 percent during the period. Marketing and promotions expenditures were significant items of cost during the period and the average ratio of such expense to sales among the companies ranged between 10 percent and 23 percent.

3. The investment in plant and equipment is a relatively smaller component of total assets as compared to current assets among the companies in the study. This is consistent with previous observations that pharmaceutical manufacturing in the country is still largely limited to the compounding and packaging stages.
4. Partly because of the above, asset turnover for the companies in the study is higher than in other large companies such as San Miguel Corporation and Bacnotan Consolidated Industries.
5. With the exception of one, all firms in the sample were profitable throughout the period, and average return on equity among the latter firms ranged from a low 12.63 percent to a high 61.90 percent per annum.
6. All firms in the study are relatively free of long term debt, although debt ratios still ranged from 16 percent to 84 percent.
7. Payout ratios differed substantially among the companies in the study and in three cases, exceeded 60 percent of earnings during the period.

The above suggests two factors which help explain the high returns in the industry. On the investment side, the firms' strategy of importing all of their chemical raw materials, perhaps mostly from the parent companies, reduces their investment base in the country and allows many of them to pay substantial dividends out of income. On the income side, the continued and substantial increases in revenues for the industry, even in what was perhaps the most adverse economic period in the country since the immediate postwar years, demonstrate the industry's capacity to increase prices without adverse effects on total revenues. This in turn can be ex-

plained in terms of what was previously observed about the structure of the industry - that firms enjoy varying degrees of "monopoly power" in their markets by virtue of numerous entry barriers and products which are highly differentiated through advertising, promotions, and product R and D.

The newly-passed Generics Law is largely intended to alter this structure by reducing product differentiation through generic labeling, hence reducing prices through the ensuing competition among generically identical products. There are however a number of reasons to believe that the industry may largely be able to offset this intended result.

Firstly, the present Generics Law still allows physicians to indicate branded pharmaceutical products when making prescriptions. It may still be worthwhile for the firms in the industry to continue to "differentiate" their products and promote them as such to the physicians.

Secondly, since under the new law, drug outlets and their personnel may influence the choice from among competing generic products, the firms in the industry can use their considerable promotions budgets and know-how to induce selective stocking and/or dispensing of their products among drug outlets and their personnel.

Thirdly, should the drug outlets prove to be the critical factor in the competition among generic drugs, firms in the industry can integrate forward to the distribution end and deny access to distribution to competing products.

Given these and perhaps other options that are available to the industry, it remains to be seen whether government's recent initiatives in the pharmaceutical industry, and the Generics Law in particular, will result in a better balance between the need for essential drugs of the right quality which are priced within the reach of the common person, on the one hand, and a financially healthy pharmaceutical industry which can ensure the continued supply of such products in this country, on the other.