Global Journal of Management and Business Research
Volume 12 Issue 4 Version 1.0 March 2012
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

Financial Analysis of Energy Producing Companies in Pakistan (2001-2010)

By Yasir Hassan, Kashif-ud-Din, Ali Ashfaq, Zouraiz Akhtar, Adeel Shafique, Usman Ali, Iqra Habib, Aatka Zafar, Faiza Ahmed & Javaid Khan
University of Lahore, Pakistan

Abstract - This research study analyzes the performance of one of the most important industrial sector of Pakistan's economy i.e. energy producing companies including oil, gas, coal and electricity. The study portrays the financial data of the energy producing companies in Pakistan over the last decade. As the energy sector is one of the most significant sector of a country especially the oil prices which are determinant of worldwide currency prices, so this study is worthy in respect to many issues. The analysis of these companies will also highlight the economy of Pakistan. It shows how profit after tax of a company will change if bank charges. Owners' equity, total assets, paid up capital and value of shares changes. On the other hand we determine how sales relate to paid up capital, no of shares, total assets and bank/financial charges.

Keywords : *Million tons of oil equivalent (MTOE), hydropower, commercial energy.*

GJMBR-A Classification : *FOR Code: 150202 JEL Code: O12 ,G17, G30*

Strictly as per the compliance and regulations of:

Financial Analysis of Energy Producing Companies in Pakistan (2001-2010)

Yasir Hassan[α] , Kashif-ud-Din[σ], Ali Ashfaq[ρ], Zouraiz Akhtar[ρ], Adeel Shafique[ρ], Usman Ali[ρ], Iqra Habib[ρ], Aatka Zafar[ρ], Faiza Ahmed[ρ] & Javaid Khan[ρ]

Abstract - This research study analyzes the performance of one of the most important industrial sector of Pakistan's economy i.e. energy producing companies including oil, gas, coal and electricity. The study portrays the financial data of the energy producing companies in Pakistan over the last decade. As the energy sector is one of the most significant sector of a country especially the oil prices which are determinant of worldwide currency prices, so this study is worthy in respect to many issues. The analysis of these companies will also highlight the economy of Pakistan. It shows how profit after tax of a company will change if bank charges. Owners' equity, total assets, paid up capital and value of shares changes. On the other hand we determine how sales relate to paid up capital, no of shares, total assets and bank/financial charges.

Keywords : Million tons of oil equivalent (MTOE), hydropower, commercial energy.

I. Introduction

There are many different ways in which the abundance of energy around us can be stored, converted, and amplified for our use. Energy is basically derived from petrol, gas, and coal which are fossil fuels. Another major form is energy is electricity which is produces using above energy resources.

a) Fossil Fuels

Fossil fuels come from fossils which are the remains of organisms that lived million of years ago. As mentioned before that fossil fuel consists of coal, crude oil and gas.

b) Renewable Energy

Renewable energy is derived directly from sunlight, wind, tides, and geothermal heat. These energy resources will not run out in long term. They are hence known as renewable energy resources.

The main forms of renewable energy are given below:

- Solar energy
- Hydropower
- Biofuel
- Biomass
- Wind power
- Geothermal energy

Author α : Lecturer: Lahore Business School, the University of Lahore, Pakistan. E-mail : Yasir.uol@hotmail.com
Author σ : Dean: Lahore Business School, the University of Lahore, Pakistan.
Author ρ : Students: Lahore Business School, the University of Lahore, Pakistan.

c) Organizations involved in Energy Sector of Pakistan

i. *Oil*

The oil sector is regulated by Pakistan's Ministry of Petroleum and Natural Resources. There are 3 large national oil companies (NOCs):

- Oil and Gas Development Corporation limited (OGDCL)
- Pakistan Petroleum Limited (PPL)
- Pakistan State Oil (PSO)

The international oil companies (IOCs) in Pakistan are:

- BP (UK)
- Eni (Italy)
- OMV (Australia)
- Orient Petroleum Inc (INC Canada)
- Petronas (Malaysia)
- Tullow (Ireland)

The Pakistan state oil company has 3800 retail outlets across the country, as do many major international oil companies, such as shell.

ii. *Gas*

The two largest gas producers in the country are

- PPL
- OGDCL

The largest gas producing international company is OMV.

iii. *Electricity*

Electric power in Pakistan comes from a variety of sources; thermal, hydro-electricity and nuclear. The two main companies generating electricity in Pakistan are

- Water and Power Development Authority (WAPDA)
- Karachi Electricity Supply Corporation (KESC).

WAPDA supplies electric power to all of Pakistan except for Karachi, which is supplied by KESC. More than two-thirds of the electricity generated comes from thermal stations powered by oil, natural gas and coal. In recent years, an increase in thermal power generation has come from new independent power producers (IPPs), some of which have been funded by foreign investors; fifteen IPPs currently operate in Pakistan.

II. Literature Review

a) Conventional Energy Resources

i. Oil

Oil accounts for 40% of Pakistan's commercial energy use. The country imports almost 90% of its oil requirements, and despite domestic oil production having increased four-fold, roughly three-quarters of Pakistan's oil requirement is still imported. This dependence on imports left Pakistan extremely vulnerable during the Gulf crisis; before August 1990, more than half of the country's imported oil came from Kuwait.

Since the mid-1970s, the government has encouraged the development of oil and gas reserves through its pricing policy, which raised local crude prices above international prices effective in early 1987, and by allowing joint exploratory efforts under production-sharing agreements between the government and private companies. Thirteen private-sector oil companies and the state-owned Oil and Gas Development Corporation (OGDC) are engaged in oil exploration and development in Pakistan (Economic Survey, 1988-89) [1], and most of the crude produced in Pakistan now comes from fields operated by foreign firms. Considerable reserves have been found. The prospects for future discoveries remain reasonably good since more than 85% of the country has sedimentary rocks, and off- shore geological conditions in the Indus Basin are similar to those of the Bombay High where India produces most of its oil and gas.

Bureaucratic, technical, and geological problems have impeded rapid progress. The bureaucracy has been slow in processing applications for concessions, emigration of technical personnel limits the human capital available to the OGDC (Abu Mohammad IzharulHaque)[2], investment in oil exploration carries a high risk and is very capital-intensive, and the paucity of foreign exchange reserves to finance the import of drilling equipment contributes to the difficulty of searching for oil in Pakistan's rugged terrain.

There are three oil refineries in Pakistan, two near Karachi and one in the north at Attock that is designed to process the heavy crude produced locally. The quantity of oil recently produced in the south exceeds the amount that can be handled at the Karachi refineries, which were designed for lighter imported crude, and an inadequate transportation infrastructure makes it impossible to ship the surplus local crude to Attock for refining. Hence, because of its limited refining capacity and inadequate infrastructure, Pakistan, an importer of large quantities of oil, has to rely on exporting to balance oil production with refinery capacity.

Of the oil consumed in Pakistan, 60% is used by the transportation sector where the substitution of other fuels is not economically feasible. The agricultural sector, in contrast, responded to the oil crisis of the late 1970s by substituting electricity for oil on a large scale. Oil's share in total residential energy use has fallen in the past two decades because of increased rural electrification and the substitution of wood, biogas, and other noncommercial and nontraditional energy sources for expensive kerosene oil. The industrial use of oil has increased steadily and 14% of the total energy consumption by industry comes from oil.

ii. Natural gas

Pakistan produces all of its natural gas supplies domestically. The large Sui natural gas field was discovered in Baluchistan shortly after independence, additional fields have continued to be found, and associated natural gas is often recovered from crude oil production.

Policies affecting natural gas development and consumption took several swings. The wellhead price for producers was kept low in the 1970s, providing little incentive for new exploration. The price of natural gas to consumers was significantly below the rising price of fuel oil, causing a rapid rise in natural gas utilization. In the early 1980s, the government responded to natural gas shortages by restricting its use in power plants and industries such as cement where furnace oil could be used. To encourage more natural gas production, the government has agreed to increase the price it pays to producing companies, and clear formulas for the pricing of gases associated with oil extraction have reduced the time lost in lengthy rate negotiations. Prices of associated gases are increased when international oil prices decrease and decreased when oil prices increase, thus guaranteeing profits to companies producing crude oil along with associated gases. Consumer prices for natural gas are being increased gradually and are likely to reach parity with petroleum product substitutes.

iii. Coal

Pakistan is endowed with an abundance of coal, but the sector is plagued by a number of production problems. As a result, coal has met less than 10% of the country's total energy requirements during the past two to three decades. Most coal is produced in Baluchistan, the sole coal-based power plant is located in Quetta and Sindh where its contribution to employment is as important as its energy contribution (Charles K. Ebinger) [3].

The coal industry also exhibits a fragmented institutional structure. Most of the mines are small and privately owned, and the mine owners often do not have adequate capital, machinery, or technical personnel to increase production. In addition, coal is distributed mainly by rail, which limits the locations that can be served.

Efforts are being made to expand the production of coal because of its abundance and potential to reduce reliance on more scarce resources. The Pakistan Mineral Development Corporation (PMDC) is contemplating a plant to mold smokeless coal briquettes to replace kerosene as fuel for domestic heating, and plans are underway to set up three new coal-based power plants, two in Baluchistan and one in Punjab.

iv. *Hydro, thermal, and nuclear*

Over one-half of the electric power generated in Pakistan comes from hydroelectric plants. The remainder is provided by thermal power plants, except for the 2% provided by the Karachi Nuclear Power Plant (KANUPP). There has been much bureaucratic controversy over the generating facilities to be constructed in the future. First, many existing plants are operating well below capacity, raising the question of whether attention should be focused on improving the efficiency of power production rather than on new construction. In the long run it is risky to depend on large future discoveries of oil and natural gas, and while there is much potential for increasing hydroelectric capacity, this avenue leads to environmental and water-distribution problems. The controversy over the advantages and disadvantages of nuclear power development parallels that in many other countries. Large gains could be realized by redirecting efforts toward improving power transmission and distribution facilities and reducing corruption.

Transmission and distribution losses are at least 20%, and bribes are offered and accepted in exchange for the reduction of electricity charges (Economic Survey, 1989-90) [4]. A large amount of power is lost due to the low voltage capacity of distribution lines as well as to theft and inefficient metering. Difficulties in policy planning are compounded by the rapid growth of electricity demand. Official reports indicate demand is growing at 11% annually, but it may be up to twice this rate (Majid Sheikh, 1989)[5]. Droughts, large seasonal fluctuations in the flows of rivers, and the priority given to irrigation make hydroelectric power generation unreliable, and hydroelectric installations must be backed up with thermal or nuclear capacity. The high siltation rates of the Indus and its major tributaries, largely caused by deforestation, present another problem. There are many sites in the mountainous north with hydroelectric potential that have not been exploited because of their remote location and the cost of transmission to the south.

Shortages of electricity that result from transmission losses, growth in demand, and weather conditions are threatening Pakistan's development. The Water and Power Development Authority (WAPDA) adopted a policy of load-shedding to handle the shortages in 1983 and this is likely to continue to the end of the century (Majid Sheikh, 1989) [6], even though unprecedented load-shedding in 1989 caused large production losses. Some large firms have started using their own generators. Rural electrification has progressed. Over half of Pakistan's villages had been electrified by June 1987: 49% in Punjab, 82% in the North-West Frontier Province (NWFP) and the Federally Administered Tribal Areas, 86% in Sindh, and 23% in Baluchistan. These numbers can be deceiving, however, since on average, only one-quarter of the population in Pakistan's electrified villages has access to electricity (Asit K. Biswas, 1987-88) [7].

III. Alternative and Traditional Energy Resources

Alternative resources have the potential to improve energy availability in isolated areas and to offset the pressures on nonrenewable resources. Noncommercial resources account for more than half of Pakistan's total energy consumption and in rural areas this share is much higher (Charles K. Ebinger, 1981) [8]. The traditional, noncommercial resources used in Pakistan are predominantly biofuels, that is, fuelwood and animal and vegetable waste. Alternative ways of providing energy include biogas plants, small hydroelectric facilities, and solar- and wind-powered units.

a) Fuelwood

In spite of Pakistan's limited forest resources, wood provides an important source of energy, particularly in rural areas where four-fifths of all households use fuelwood for cooking. Wood is also vital for domestic heating in certain areas. Population pressures, expansion of cultivation, and overgrazing have caused much deforestation, affecting those who rely on wood for energy. River siltation results from deforestation and reduces the useful life span of hydroelectric and irrigation projects. Wood is primarily a noncommercial fuel source but it is sold on the market with increasing frequency (Biswas, 1987) [9].

b) Biogas

Animal, human, and vegetable waste can be converted into biogas to provide both a decentralized electricity source and a fuel for cooking, heating, and lighting. Animal waste is already in wide use in the rural areas of Pakistan. As oil prices rose, there was an abrupt shift toward use of dung instead of kerosene for cooking fuel. The increasing scarcity of wood is also leading farmers to use more dung for fuel, which reduces fertilizer supplies and lowers crop yields (Charles K. Ebinger, 1981)[10]. The government has been helping villagers utilize dung more efficiently since 1974 by constructing family and community biogas plants, and over 4,000 biogas units have been installed [11]. The largest, which is operating at Hillock near Lahore, was set up as a joint venture between a private firm and the Appropriate Technology Development

Corporation, an auxiliary of the Ministry of Science and Technology. This unit was expected to generate 10 kilowatts of power to run tube wells and provide 900 kilograms of fertilizer daily.

Biogas has considerable potential for use in cooking, heating, lighting, and operating irrigation pumps, allowing savings in other energy sources. It is cleaner and more healthful for cooking than dung cakes, and the energy yield from biogas is greater than that obtained from burning the original dung (Wallace E. Tyner, 1978) [12]

Further, the fertilizer value is not lost when dung is converted to biogas as biogas plants can produce both fuel and fertilizer supplies. One study suggests that the initial investment for a family biogas plant can be recovered in three to four years (M. M. Qurashi, 1984) [13].

c) Small hydroelectric projects

Small hydroelectric plants for local power production are an attractive alternative method of producing energy because they utilize a renewable resource and the technology involved is well proven and simple enough to allow use of domestic inputs and local participation in the construction process (Mark Gellerson, 1985) [14].

Further, such units are workable where streams provide hydroelectric potential in remote hilly areas not easily reached by the national electricity grid.

d) Solar and wind energy

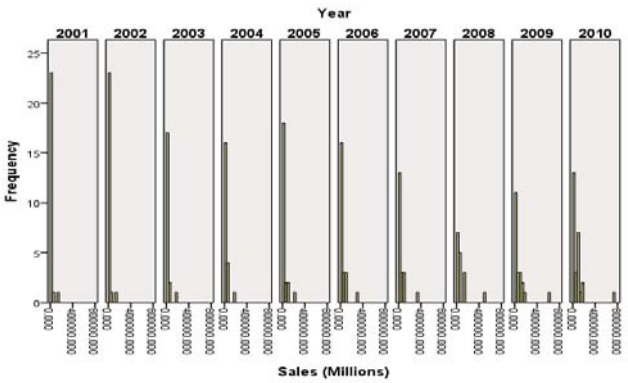
The potential advantages of solar energy deserve close attention as solar systems may be viable for use at household and community levels in areas not reached by transmission lines. The solar cell method is not practical for Pakistan due to its cost and other factors, but solar collectors could be used economically for crop drying, room heating and cooling, and water heating, distillation, and pumping. A recent report said that 18 solar village electrification systems have been installed [15]. Harnessing wind energy is a realistic possibility for raising underground well water and for small-scale irrigation projects in some regions, especially near the coast; overall wind velocity is not adequate to produce substantial quantities of electric power. The greatest problem with wind energy is storage. Using it for work that has an inherent storage capability such as water pumping, water heating, and refrigeration is one solution, and WAPDA has experimented with windmill irrigation pumps [16].

IV. Methodology

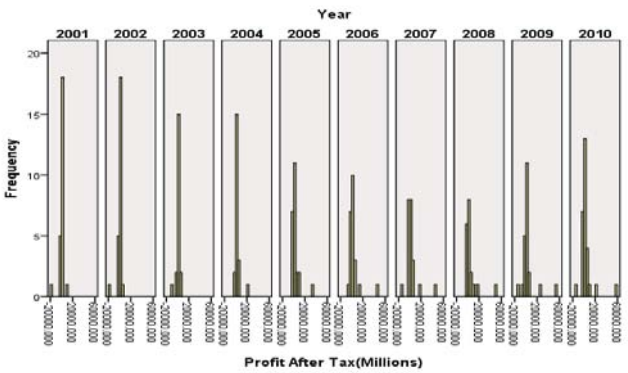
To determine the progress of fuel and energy sector of Pakistan, we have taken some financial data of different companies related to this sector. Sales and Profit before tax are taken as dependent variables while paid up capital, total assets, no of shares, equity and bank/financial charges are taken as explanatory variables. We have used the ANOVA test to compare the means of different variable from 2001-2010. We have used multiple regression to predict sales and profit before tax (both are dependent variables), that are depending on the explanatory variables mentioned above.

a) Empirical results

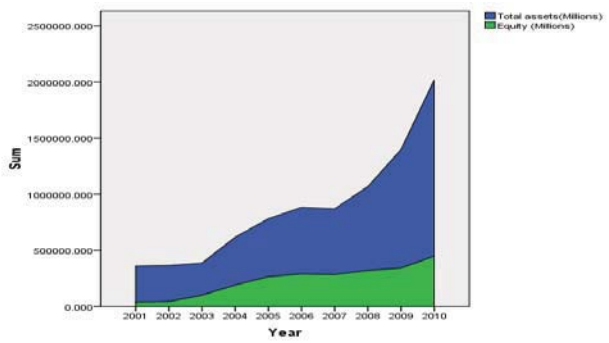
Histogram is used to determine the progress of variables as the time passes, histogram of sales and profit after tax is shown in the histograms below.



The sales is showing a decreasing trend initially as shown in the histogram, but after decreasing up to year 2007, its starts increasing again and increases till end.

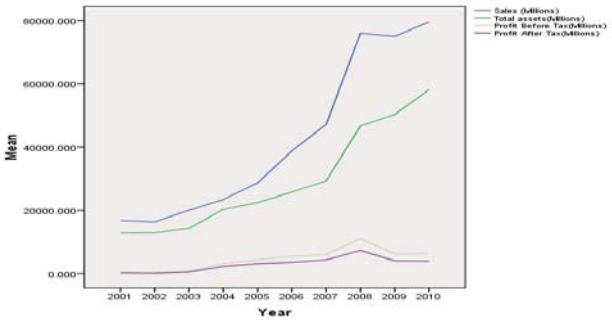


The histogram shows that the profit after tax decreasing in the first seven years, but after then it increases up to year 2010.



The area graph shows that equity starts increasing from year 2001 and it is continuously

increasing till 2010, total assets also shows the same trend as we can see that's it is much higher in 2010 as compared to other years.



The line chart is showing that sales mean value in 2001 is almost near 19000 and it kept on increasing and goes over 80000 in 2010. Total assets also increases but its mean values are comparatively lesser than that of sales. The lines representing profit before and after tax have shown the same trend also.

	Years	Means	S.D	C.V
Paid up capital (Rs. In millions)	*2001*	*199.541*	*229.5886*	*115.0584*
	2002	2269.454	4999.429	220.2921
	2003	3139.308	7129.381	227.1004
	2004	5380.165	11074.36	205.8368
	2005	5739.333	12376.75	215.6479
	2006	6014.727	12584.13	209.222
	2007	5935.482	12314.59	207.4741
	2008	4852.745	9594.009	197.7027
	2009	6298.925	12513.77	198.6652
	2010	6741.848	15699.31	232.8636
No of shares	2001			
	2002	226.9454	499.9428	220.2921
	2003	599.9404	1951.894	325.348
	2004	810.4065	2058.8	254.0453
	2005	930.5415	2754.364	295.9958
	2006	933.0196	2753.663	295.1345
	2007	950.1564	2748.922	289.3126
	2008	*421.9778*	*907.1151*	*214.9675*
	2009	921.8451	2696.18	292.4765
	2010	1131.015	3985.444	352.3776
Equity (Rs. In millions)	2001	1569.909	10070.4	641.4636
	2002	1768.713	10024.05	566.7425
	2003	5002.253	7164.081	143.2171
	2004	9135.866	16017.43	175.3247
	2005	11574.01	18887.43	163.1883
	2006	12622.74	20805.14	164.8226
	2007	14244.47	23191.57	162.811
	2008	*20119.15*	*27032.8*	*134.3635*
	2009	16306.56	29580.83	181.4044
	2010	16602.8	32962.51	198.5358

Total Assets (Rs. In millions)	2001	12873.09	19561.61	151.9574
	2002	12908.19	19363.79	150.0117
	2003	14370.91	20336.84	141.5139
	2004	20351.61	26813.72	131.7523
	2005	22475.85	29306.51	130.3911
	2006	25812.09	32442.42	125.6869
	2007	29314.94	35433.13	120.8705
	2008	*46748.41*	*46632.46*	*99.75197*
	2009	50360.04	57466.19	114.1107
	2010	58210.88	68594.28	117.8376
Sales (Rs. In millions)	2001	16890.58	31319.04	185.4231
	2002	16414.84	29774.89	181.3901
	2003	20063.86	41286.66	205.7763
	2004	23462.07	39841.18	169.811
	2005	28698.97	49714.76	173.2283
	2006	38823.3	67271.84	173.277
	2007	47243.11	81245.48	171.9732
	2008	*76037.48*	*121580.6*	*159.8956*
	2009	75080.06	135200	180.0745
	2010	79600.35	144680	181.758
Profit before tax (Rs. In millions)	2001	388.3318	4148.986	1068.413
	2002	310.0959	4171.497	1345.228
	2003	842.9967	2905.449	344.6573
	2004	3118.196	6758.235	216.7355
	2005	4444.71	10380.9	233.5564
	2006	5423.367	14248.87	262.7311
	2007	4947.431	14036.5	283.713
	2008	*8943.367*	*19256.45*	*215.3155*
	2009	5854.921	19645.67	335.5411
	2010	6146.035	18084.78	294.2511
Profit after tax (Rs.in millions)	2001	182.9786	4086.55	2233.348
	2002	72.33056	4062.43	5616.479
	2003	534.5539	2634.107	492.7673
	2004	2323.374	4987.239	214.655
	2005	3155.75	7033.52	222.8795
	2006	3634.104	9995.687	275.0523
	2007	3409.206	10604.81	311.0638
	2008	*5821.579*	*11611.66*	*199.4589*
	2009	3884.751	13637.62	351.0551
	2010	3843.664	12332.18	320.8444

Coefficient of variance of all the variables shows that they were most consistent in 2008 except for paid up capital, which is most consistent in 2001.

	ANOVA					
		Sum of Squares	df	Mean Square	F	Sig.
Sales (Millions)	Between Groups	133447999501.17	9.00	14827555500.13	2.06	0.035
	Within Groups	1519851309799.99	211.00	7203086776.30		
	Total	1653299309301.16	220.00			
Paid up capital(Millions)	Between Groups	990490149.72	9.00	110054461.08	0.93	0.499
	Within Groups	26363365420.21	223.00	118221369.60		
	Total	27353855569.93	232.00			
No of shares(Millions)	Between Groups	17139575.65	8.00	2142446.96	0.33	0.592
	Within Groups	1323165558.39	206.00	6423133.78		
	Total	1340305134.04	214.00			
Total assets(Millions)	Between Groups	57698293361.46	9.00	6410921484.61	4.13	0.000
	Within Groups	327325998939.48	211.00	1551308051.85		
	Total	385024292300.94	220.00			
Equity (Millions)	Between Groups	8147445787.67	9.00	905271754.19	2.01	0.040
	Within Groups	95253658594.21	211.00	451439140.26		
	Total	103401104381.89	220.00			
Bank/financial charges(Millions)	Between Groups	160384360.37	9.00	17820484.49	1.20	0.296
	Within Groups	3130518705.49	211.00	14836581.54		
	Total	3290903065.86	220.00			
Profit Before Tax(Millions)	Between Groups	1646429808.86	9.00	182936645.43	1.09	0.373
	Within Groups	36860590875.84	219.00	168313200.35		
	Total	38507020684.69	228.00			
Profit After Tax(Millions)	Between Groups	725459851.81	9.00	80606650.20	1.00	0.441
	Within Groups	17648000465.77	219.00	80584477.01		
	Total	18373460317.58	228.00			

b) Sales

H0: μ2001= μ2002= μ2003= μ2004= μ2005= μ2006= μ2007= μ2008= μ2009

H1: At least one mean is significantly different

c) Profit after Tax

H_0: μ2001= μ2002= μ2003= μ2004= μ2005= μ2006= μ2007= μ2008= μ2009

H_1: At least Two means are significantly different

The values of sales, total assets and equity are less than 0.05 that is why we rejected our null hypothesis and accept alternative, which is at least one mean is significantly different for these variables.

The other variables that includes paid up capital, number of share bank/financial charges, profit before tax and profit after tax, they all are greater than 0.05 that is why we accept null hypothesis i.e. all the means are significantly different.

ANOVA[d]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	17327521771.792	6	2887920295.299	3109.467	.000[a]
	Residual	175533914.877	189	928750.872		
	Total	17503055686.669	195			
2	Regression	17327394896.236	5	3465478979.247	3748.366	.000[b]
	Residual	175660790.432	190	924530.476		
	Total	17503055686.669	195			
3	Regression	17326731000.638	4	4331682750.160	4692.204	.000[c]
	Residual	176324686.030	191	923165.895		
	Total	17503055686.669	195			

a. Predictors: (Constant), Profit Before Tax(Millions), Bank/financial charges(Millions), Sales (Millions), No of shares(Millions), Total assets(Millions), Paid up capital(Millions)

b. Predictors: (Constant), Profit Before Tax(Millions), Bank/financial charges(Millions), Sales (Millions), No of shares(Millions), Paid up capital(Millions)

c. Predictors: (Constant), Profit Before Tax(Millions), Sales (Millions), No of shares(Millions), Paid up capital(Millions)

d. Dependent Variable: Profit After Tax(Millions)

Profit after Tax= b_0+ b_1 Bank / Financial Charges + B_2 Equity + B_3 Sales + B_4 Total Asset+ B_5 Paid-Up Capital+ B_6 No. Of Share

Profit after tax is considered as dependent variable while all the others are independent variables that include bank/financial charges, equity, sales, total assets, paid up capital and no of shares.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1326.164	4511.995		-.294	.769
	Paid up capital(Millions)	-7.789	.893	-.967	-8.727	.000
	No of shares(Millions)	10.509	3.597	.284	2.922	.004
	Total assets(Millions)	2.439	.126	1.166	19.426	.000
	Bank/financial charges(Millions)	2.439	1.024	.109	2.381	.018

a. Dependent Variable: Sales (Millions)

Profit after tax is dependent while paid up capital, no of shares, sales, profit before tax, total assets, and bank/financial charge are explanatory variables. By using backward method we have found out that profit can be best explained using paid up capital, no of shares, sales and profit before tax.

We can rewrite the model as

Profit after tax (PAT) = b_0 + b_1 (paid up capital) + b_2(no of shares) + b_3(sales) +b_4(Profit before tax)

Profit after tax (PAT) = 106.838 + 0.043 (paid up capital)+ -0.346(no of shares)+ -0.02(sales) +0.674(Profit before tax)

Model shows that paid up capital and profit before tax have positive impact on profit after tax, while no of shares and sales have negative impact.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1326.164	4511.995		-.294	.769
	Paid up capital(Millions)	-7.789	.893	-.967	-8.727	.000
	No of shares(Millions)	10.509	3.597	.284	2.922	.004
	Total assets(Millions)	2.439	.126	1.166	19.426	.000
	Bank/financial charges(Millions)	2.439	1.024	.109	2.381	.018

a. Dependent Variable: Sales (Millions)

Here sales is dependent variable while paid up capital, no of shares, total assets, bank/financial charges are explanatory variables. We have used the backward method and it's clear that all the variables have some impact on sales.

Sales= b_0+ b_1(paid up capital) + b_2(no of shares) + b_3(total assets)+ b_4(bank/financial charges)
Sales= -1326.164 + -7.789(paid up capital) + 10.509(no of shares) + 2.439(total assets) + 2.439(bank/financial charges)

IV. Conclusion

The results overviews the Profit of a company directly depends on paid up capital. There exist an inverse relation between no. of shares, sales and profit after tax. Sales have positive relation with total assets and bank financial charges. Number of shares significantly relate to sales. While paid up capital has ordinary impact on sales.

References Références Referencias

1. Economic Adviser's Wing, Ministry of Finance, Economic Survey 1988-89 (Islamabad: Government of Pakistan, 1989), p. 45.
2. Abu Mohammad IzharulHaque, "Energy Planning in Pakistan: Problems and Prospects," in United Nations, Energy Planning in Developing Countries (New York: Oxford University Press, 1984), p. 262.
3. Charles K. Ebinger, Pakistan: Energy Planning in a Strategic Vortex (Bloomington: Indiana University Press, 1981), p. 18.
4. Economic Survey 1989-90, p. 85, and Emma Duncan, Breaking the Curfew: A Political Journey through Pakistan (London: Penguin Group, 1989), p. 42.
5. Majid Sheikh, "Demand and Power Supply," Pakistan and Gulf Economist, June 3-9, 1989, p. 12.
6. Ibid. Economic Survey 1987-88, p. 137; Asit K. Biswas, "Environmental Concerns in Pakistan, with Special Reference to Water and Forests," Environmental Conservation 14:4 (Winter 1987), p. 324.
7. Ebinger, Energy Planning in Strategic Vortex, p. 125.
8. Biswas, "Environmental Concerns," pp. 324-25.
9. Ebinger, Energy Planning in Strategic Vortex, p. 125.
10. Biswas, "Environmental Concerns," pp. 324-25.
11. Wallace E. Tyner, Energy Resources and Economic Development in India (Leiden, Netherlands: Martinus Nijhoff, 1978), pp. 120-21.
12. M. M. Qurashi, "Renewable Sources of Energy in Pakistan," The Pakistan Development Review 23:2 and 3 (Summer-Autumn 1984), p. 465.
13. Mark Gellerson, "The Economics of Small Hydro Power," Pakistan Economic and Social Review 23:1 (Summer 1985), p. 26.
14. Rafique Akhtar, Pakistan Year Book, 17th ed., 1989-90 (Karachi: East and West Pub- lishing Company, 1989), p. 667. 23.
15. Qurashi, "Renewable Sources," p. 469.

This page is intentionally left blank