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Abstract

Karachi Electric Supply Co. (KESC) is power utility company serving more than 2.1 million consumers. It covers around 6000 km of vast area to supply electricity. It has been more than 10 to 20 years that this company is suffering from poor financial position due to which it is not able to fulfill the required demand of Karachi city and hence load shedding and power outages have been caused. This paper is an effort to gauge the impact of financial crises which have been faced by the KESC on its performance to produce and provide energy to its consumers. Various accounting variables which include Profitability Ratio, Long Term Solvency Ratio, Short term Solvency ratio, and Shareholder's Investment Ratio which have been recorded for the period of financial crisis (2007:07 to 2010:06) have been used as the proxy of financial crises at KESC. The findings concluded that the long term solvency and short term solvency have the significant impact on energy productions at KESC.

Keywords: Financial Crisis, Energy Crisis, KESC, growth rate, debt ratio, long-term solvency ratio, short-term solvency ratio, profitability ratio, shareholder's investment.

1. Introduction

It is the very lips touching proposition that the KESC's performance in terms of energy production, is the reflection of financial sickness the KESC faces for every now then. This paper is an attempt and effort to measure the validity and reliability of stated/ outlined proposition. The contributions of financial crises towards the production capabilities for various organizations have been investigated for various instances. Karachi, a fast-moving business city has been overwhelmed with electricity major power breakdowns and failures. The calamity, which is being faced by all social classes of Karachi has disturbed the economic and social environment due to insufficient use of energy resources (Subhani, Hasan, Osman, Khan, Muhammad, 2012). No doubt, to some extent the global recession is also a major factor in the economic fall but energy crisis in this city has tripled the effect of the recession. The energy crisis in precise are shut down of industrial plants, declination in production plants, which is generating less employment and income of workers. All industries are facing this mishap and voicing their concerns on media and press. It has come to a killing verge of burning tyres and rallies on the road every now and then. The government's habitual dialogues are irritating, agonizing and raging the streets of Karachi. There are always the effects if internal and external factors are in fiasco that map up the efficiencies which happens also for the case of KESC. This paper is a précis on the possible effects of KESC internal factors on its production performance for the era which is so to speak as the current epoch.

2. Literature Review

Generally the important factor is the increase in the consumption and production of energy through eco strategy. One can see an increase in population, which means the increase in consumption as a whole. In such circumstances, it is important to create an energy market at low rates to reduce the non-renewable energy production (Gavriletea & Gavriltear, 2007).

Research has indentified that almost half of the firms do not operate on their private generators and suffer business loss due to power shutdown. Also, due to the industrial input a high burden is levied on the energy consumption that high dependency in the electric supply from KESC (Nausheen, 1999).

The linearly and negatively association has been found between government budget deficits and growth rate (real and potential outputs). This is an indication of damaging impact of the public debt stock still under the threshold. It is not a good policy option to target a higher debt level for supporting the growth rate (Cristina & Philipp, 2010).

The key disadvantage of hydro power generation is the investment cost, which is quite high. Due to the production, the surrounding vicinity is affected by scratch and loss for instance the dam not functioning properly. For the purpose, effective contingency planning is required to regulate the process at the point of risk (Gavriletea & Gavriltear, 2007). Due to the change in the natural environment, there is a need of change accordingly as due to global warming the demands of other machinery is required for keeping the temperature cooler. The expenditure cycle is required to be generated by the government to make society more affordable to purchase expensive and now a necessity product/service for living. Hence, this would also eventually effect on energy production (Grein, Nordell, & Al Mathnani, 2007).

KESC has the monopoly to provide energy to the entire Karachi city and does not want any interference of other electric suppliers. If other energy and electricity suppliers will deliver the output in liaison with KESC then it will change the current negative scenario into a much better position as KESC is not satisfying the minimum requirement of the energy production (Nausheen, 1999).

Another key aspect in aiding the energy production is the water consumption. Government should fix its unnecessary tantrums and handle the serious concerns of electricity and water. Government should make use of producing and exporting electricity by using various existing natural resources to achieve the

vision of enlightened Pakistan (Grein, Nordell, & Al Mathnani, 2007). The use of hydro power energy is a better route for energy production as it using the natural resource of water to generate electricity and the costs and damages curtailed are far less. Hydro-power energy plants should be generated evenly (Gavriletea & Gavriltear, 2007).

Associating the debt ratio with the financial crises at KESC with economic growth of the country can be assessed by the investments made by private and public investments. There is a negative association of the annual debt ratio with annual economic growth and other channels like total factor productivity and long-term nominal and real interest rates impact the debt ratio and economic growth (Cristina & Philipp, 2010). A focused investment should be nurtured in natural gas, coal, wind, hydroelectricity and nuclear power (Qazi & Sana, 2008). Coming back to debt and in specific to public debt, it has been found that the major increase of debt is related to higher public consumption and exchanges (Cristina & Philipp, 2010).

Leaning to KESC, the so-called developed and now semi-privatized organization of Pakistan, functional or dysfunctional, the known city of lights 'Karachi' as city of darkness now has failed to deliver nominal electricity or energy to the city. The salaries given to its top-management and the damages caused in the city due to no-electricity are huge and never-ending. The steadily increase is now up to 40% and the reasons of delivering the required energy output to the citizen are due to: 1) high pressure on the system, which cannot restore or restrain the power 2) old infrastructure and network causing transmission loss and power shutdown for days 3) electricity theft and unbilled electricity sent to high officials (Nausheen, 1999).

Karachi, is the hub of business ventures from different cultures and countries but it seems that the government has failed to deliver the minimum energy output due to saving of the nation's investment in their personal money bags. It has been observed that such crises and failures are due to government negligence and mal-approaches that results in bad economy and at the end the financial crisis. Keeping in view the historical recession events, it was known that enormous crash in productivity always pushes business's financial crisis over the edge and results in despair and recession (Timothy & Cordoba, 2009). Overall, the failure is economy crash/crises are due to not meeting the demands of the consumers and the society for a better living (David, Hans, Armin, Michael, Katarina, Alan, Thomas, & Brigitte, 2010). The industrial sector of Karachi is currently suffering huge losses due to power shut down and non-compliance of KESC's operations for power generation. The investment that could have been deployed in more of a profitable perspective by a certain manufacturing firm, it is now being used in restoring business and electricity via purchasing expensive equipments (Nausheen, 1999). As both domestic and foreign investors are discouraged from supplying further capital, the external debt extension influenced economic growth through private investment.

When there is an excess in a country's fiscal resources then it's the financial crisis time. In the most recent recession period, property boom and downfall was witnessed, which resulted dramatically in other business downturn globally. The reason of such depression was the monetary access (John, 2008).

2.1 Hypotheses

In order to investigate the proposition of this paper, following hypotheses have been developed and interrogated.

H1: There is an association of profitability ratio on Energy Production.

H2: There is an association of Long term solvency ratio on Energy Production.

H3: There is an association of short term solvency and liquidity ratio on Energy Production.

H4: There is an association of shareholder's Investment ratio on Energy Production.

3. Research Methods

3.1 Descriptions of Data , Sample and Econometrical Technique

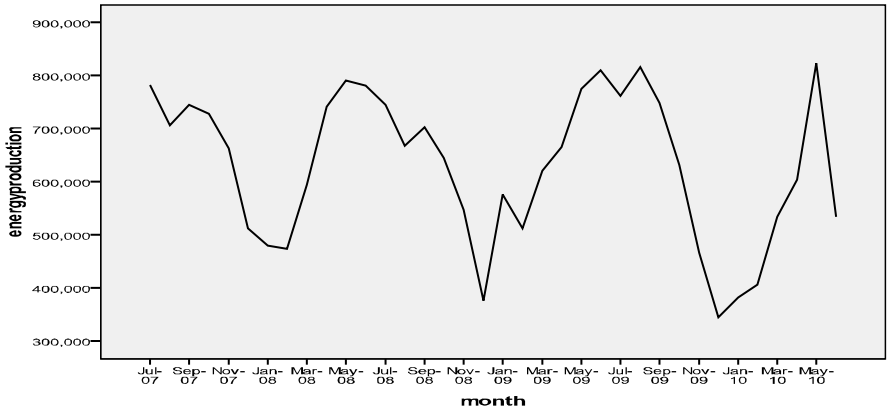
Monthly data from the Balance Sheet and Income Statement, which are comprised upon Profitability Ratio, Long Term Solvency Ratio, Short term Solvency ratio, and Shareholder's Investment Ratio for the period of financial crisis (2007:07 to 2010:06), were collected for Karachi Electric Supply Corporation. For the outlined period the Energy Productions in Mega Watt Hour at KESC have also been collected to investigate the propositions of the study. While, the split multiple regression was deployed to interogate the data and the propositions of the paper.

4. Empirical Findings

Table 1: Descriptive Analysis

YEARS	VARIABLES	SUM	MEAN	STANDARD DEVIATION	VARIANCE
2007	Profitability	-1.06	-0.1759	0.19022	0.036
	Longtermsolvency	2.96	0.493	0.04976	0.002
	Shorttermsolvency	4.01	0.6681	0.04195	0.002
	EarningPerShares	-0.83	-0.1383	0.15142	0.023
	Energyproduction	4,137,856	689,642.73	95,576.84	9.14E+09
2008	Profitability	-3.05	-0.2543	0.18048	0.033
	Longtermsolvency	8	0.6667	0.08215	0.007
	Shorttermsolvency	7.08	0.59	0.02645	0.001
	EarningPerShares	-1.65	-0.1376	0.0943	0.009
	Energyproduction	7,544,408	628,700.69	135,209.25	1.83E+10
2009	Profitability	-2.07	-0.1723	0.07594	0.006
	Longtermsolvency	12.09	1.0072	0.24867	0.062
	Shorttermsolvency	8.07	0.6728	0.10467	0.011
	EarningPerShares	-1.16	-0.0967	0.06096	0.004
	Energyproduction	7,728,976	644,081.30	148,668.67	2.21E+10
2010	Profitability	-0.65	-0.1077	0.09258	0.009
	Longtermsolvency	5.15	0.8575	0.13219	0.017
	Shorttermsolvency	4.17	0.6951	0.01858	0
	EarningPerShares	-0.19	-0.0311	0.02779	0.001
	Energyproduction	3,280,059	546,676.54	159,417.15	2.54E+10

Figure 1: Trend Analysis



The results in Table 1 confirms that the period of 2007-2010 was the period of financial crises as the sums and means of profitability and Earning per shares for all those years are revealed with negative empirical magnitudes. While, the energy production at KESC were fluctuating during the same period as shown by Figure 1.

Table 2: Regression Analysis

			2007	2008	2009	2010
Adj. R Square			0.536	0.057	0.769	0.622
Durbin-Watson			2.290	1.720	1.846	2.847
F			2.443	1.168	10.15	3.053
Variables	**Profitability**	**Beta**	0.917	2.225	0.168	0.957
		Sig. Value	0.920	0.179	0.732	0.573
	Long term solvency	**Beta**	0.350	0.285	1.312	-1.751
		Sig. Value	0.852	0.453	0.170	0.244
	Short term solvency	**Beta**	0.168	-0.088	-1.018	0.354
		Sig. Value	0.731	0.894	0.210	0.599
	Earning Per Shares	**Beta**	-2.154	-2.636	-0.447	0.704
		Sig. Value	0.839	0.151	0.434	0.657
DV= Energy Productions in Mega Watt Hour ** Significance at 5%						

Table 3: Hypotheses Assessment Summary

HYPOTHESES	**2007**	**2008**	**2009**	**2010**
H1 There is an association of profitability ratio on Energy Production.	Rejected	Rejected	Rejected	Rejected
H2 There is an association of Long term solvency ratio on Energy Production.	Rejected	Rejected	Rejected	Rejected
H3 There is an association of short term solvency and liquidity ratio on Energy Production.	Rejected	Rejected	Rejected	Rejected
H4 There is an association of shareholder's Investment ratio on Energy Production.	Rejected	Rejected	Rejected	Rejected

The findings of split regression as shown in table 2 reveal that none of the outlined variables for the period of financial crisis (2007 to 2010) which include Profitability, Long term Solvency, short term

solvency, Earning Per Shares matter for energy production at KESC as testing specification for all of the predictors (t-stats) are found in-significant, hence the proposition (Energy production at KESC is associated with the Financial Crisis at KESC) and all of the formulated hypotheses they get rejected as also shown in table 3 for all of the period of financial crises.

5. Discussions and Conclusion

The very careful finding of this paper translates that the KESC has been suffered with the financial sickness for years but despite of the financial trauma, KESC has been able somehow enough to perform and produce the energy for the city of Karachi with the fluctuating trend, and the paradox and the dilemma of fluctuating trend of energy production and its short fall are not found associated with the KESC financial sickness. The findings of this paper lift two major questions which include:

1- Is the financial sickness at KESC really real?
2- If not real then why is fluctuating energy short falls so intense and overwhelming?

This paper further is an allusion which provokes all concerns to come with serious note that government has enough budgets to conceal its departments and how has KESC reached to the financial crisis level and making the city deprived from the basic necessity of modern civilization. This investigation will answer a question raised by the millions of individuals suffering from this ailment and also strike the government, officials working in KESC and policy-makers that how the Bank reserves of the Pakistan are being used in their personal accounts and height of incapability of such culprits has brought the city at stagnancy and disruption. Is it really financial crises at KESC (as visibly can be seen in the results), which has caused a negative impact on the energy production or the incompetency of the top-management (public servants of KESC) is a root of it?

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