



THE ROLE OF ECONOMIC INDICATORS IN PERSPECTIVE OF ENERGY CRISIS IN PAKISTAN

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ABSTRACT

The present study aims to explore the theoretical relationship of energy crisis with different economic indicators. For this purpose, Secondary data have been used for the period of 2000 to 2012. The study focuses only on descriptive analysis of incorporated economic indicators and their conceptual links with energy crises phenomenon. This study is divided into two parts, 1st part presents pre crisis era for the duration of (2000-2005) and second part is considered as post crisis era from the period of (2006-2012). In this study average values of selected economic indicators are to be used and on a basis of these averages values, try to investigate the expected trend of energy crises in a future. The methodology which exists in the study is horizontal analysis of (Gross domestic product, inflation, unemployment, exports, imports, gross domestic saving, investment, GDP deflator, Govt. expenditure and Foreign direct investment for the given time period. All these variables are conceptually interlinked with energy crisis in the period of post crisis. The study proposed that Govt. of Pakistan should take initiative to control those factors (demand as well as supply side management issues that strikes as crisis in energy) for the betterment of the economy of Pakistan.

Keywords: Energy Crisis, Horizontal analysis, Economic indicators, GDP.

I. INTRODUCTION

Energy is a back bone of an economy. Basically energy is a heat or power derived from the utilization of physical or chemical resources, especially to provide light and heat or to work machines. It is more than a need it is a fundamental requirement. The strong correlation between the availability of electricity and the level of human social development has been known since at least 1895MW with the electrification of Niagara falls with new poly- phase alternating current (AC) technology invented by Nikola Tesla (Awaan,1990). The critical state of Pakistan energy sector is a primary constraint on the country's economic development (Aladad, 2000).

Energy crisis defined as a great shortfall in supply of energy resources to the economy or price rise of energy resources (Haq, 2008). Pakistan is a developing nation, having a lot of resources to fulfill a need of electricity. Wrong policies are responsible for energy crisis. 53% of Pakistani population remains without facility of electricity for more than 8 hours daily throughout the year (Gilani Research Foundation). When Pakistan found on the World' map in 1947. The power capacity was 60MW from all energy resources for 31.5 million of peoples. When in 1958 water and power development authority established then after capacity of power was grow and reached 119MW. After this Pakistan energy sector face ups and down but the generation gap increased after 2000 when WAPDA dissolution and divide in 14 separate units.

Global oil crisis was also a big contribution in the energy crisis of Pakistan. In 2008 oil prices rose dramatically and reached huge level and Pakistan economy which relay round about 35% on oil in energy mix, with the shortage of oil in the world economy also face severe crisis of energy. During different political party' era no one took clear step to overcome the energy crisis.

Many reasons exist behind energy crisis in Pakistan such as, corruption, politically instability, terrorism and circular debt. Energy crisis have multiple impact on economy such as general price level, this will lead to decrease the living standard of the peoples. In present situation, Pakistan energy sector focuses on renewable energy resources such as wind energy, solar energy and also coal plant. So it is a better step for the present Govt. Various issues related to power sector are circular debt, pricing policy, etc. if the Government of Pakistan wants to overcome the energy crisis. In this section we study the

problems in details which face the power sector of Pakistan. As a result of thermal power plants, electricity generation' capacity decreased and load shading increase because the demand not decreases. The country lost between 2000MW to 2500MW because of the delay payments to the private companies.

The cost of electricity was not fully recovered because of bad pricing policy applied. There was no check and balance among the institutions in Pakistan that's why Pakistan economy faces many challenges regarding energy crises. In the energy sector there was no tariff adjusted in the fiscal year 2003-04 from the government side. Weak link between demand of electricity and the price of energy was responsible for the energy crisis. 68% of electricity in Pakistan generated from imported oil and gas in the thermal based plants. Even after 2007 government notified tariff low policy always remained below the NEPRA determined to cover the average cost of power companies.

The government determined tariff always less than the tariff determined by the national electric power regulatory authority. The difference between actual and domestic price charged known as subsidies on electric to the consumers by the government. So we conclude that pricing policy have the major impact on the supply of the electricity in the case of Pakistan. Energy is most prominent factor of any economy but unfortunately Pakistan faces a huge energy crisis from the last decade. It is true that in Pakistan economy many economic indicators are affected by shortage of energy. How much these economic indicators affected by the energy crisis in Pakistan, this is the research gap and this study tried to highlight the issue.

The objective of the study is to check the impact of energy crisis on economic indicators which fluctuate in advance and a sign of future prediction and compare the values of specific variables before the crisis and after the crisis of energy in the case of Pakistan. This study only focuses the descriptive analysis of different economic indicators and associated with energy consumption and to check the Pakistan fall in crises or not?

II. LITERATURE REVIEW

A number of researchers conducted different studies to consider the connection between economic progress and human capital. Following is an immediate review of some recent studies about growth and human capital.

Siddiqui (2004) investigated the study of energy and economic growth in Pakistan. Time series data collected from secondary resource from 1970 to 2003 through different articles, journals and internet. Energy production used as a dependent variable and independent variables were human capital, exports, technologies, labor force, and energy consumption. Unit root test applied to check a stationarity of variables. Most variable were stationary on first difference. In this study autoregressive distributed lagged model was applied. This study found that energy supply as well as demand play vital role not only for the economic prosperity of the current generation but also for future' generation.

Shah and Bhatti (2009) stated that energy crisis in Pakistan is a debatable issue in these days. This study is also conducted for the purpose of what was the reason of crisis and what were the possible solutions to overcome this disaster. The study showed that only short run solutions concerned only and long term remedies postponed. For the long term solutions, the study focused to build new dams and also concerned with hydro power projects. Also renewable sources such as wind energy, solar energy are very cheap resources and beneficial for the grooming of the Pak economy.

Dar et al. (2009) established the study to calculate the impact of energy consumption on economic indicators. Data collected from secondary resources from 1980 to 2009 through articles, net, and journals. This study used horizontal analysis and concluded huge impact of energy consumption on economic indicators. Throughout in a study found that Pakistan have the ability to fulfill the energy needs but wrong polices are responsible for present crises. The study also described that energy consumption increased the GDP of a country. It didn't not mean that greater the GDP leads greater energy consumption. Pakistan tries to focus on the utilization of hydroelectric resources through construction of Dams such as Kala Bagh Dam, Bhasha Dam, and also on Thar coal projects. Researcher also suggested that Pakistan should also focus on the international relations and gas pipe line projects.

Javed et al. (2011) noted that renewable energy sources, infrastructure, financing and technology were important factors to overcome the energy crisis in the case of Pakistan. The study showed that Pakistan economy disturbed because of energy crisis. Many industries in Pakistan were closed down, Sitara textile mill already transferred to Bangladesh. Energy crisis is an alarming sign for investors. They are not satisfied for the investment. The government should take positive steps to overcome the energy disaster.

Khan et al. (2012) explored that in these days without energy peoples life is like a waste. Pakistan economy faced many challenges such as energy crisis, financial crisis, low investment, terrorism etc. The study concluded that Pakistan Sitara textile mill transfer from Pakistan to Bangladesh the reason behind was energy crisis. Other industries closed down due to load shading. The study suggested that government should focus solar energy projects because of the favorable climate of Pakistan. According to researcher government should also focus Hydel power projects for producing cheap electricity for a nation.

Hussain and Junaid (2012) estimated that during the energy crisis, profitability of listed food producers in Pakistan and energy price had positive relationship to each other. For real analysis, secondary data were used from 2001 to 2010 from internet, articles, statistical books and journals. The main objective of this study was to explore the impact of energy crisis combined with energy prices escalation of profitability of listed food producers in Pakistan. For the estimation generalized method moments (GMM) is used. Dependent variable was return of asset and independent variable were return on asset (-1) lagged, size, firm growth, efficiency, financial leverage, working capital, economic growth, inflation and energy price. All variables had positive relationship but financial leverage has negative relationship.

Afzal (2012) explored negative relationship between electricity crisis and interest rate on textile industry of Pakistan. Data collected from 2000 to 2010 from secondary source such as internet, journals and statistical year books. Multiple linear regressions model applied. The results showed that there were strong negative relationship between electricity crisis and interest rate on textile industry of Pakistan. 1 MV increase in the shortfall of electricity led the negative change of .0065 million square meter in the production of textile and if 1% increase in interest rate brought negative change in production of 27.430 million square meter in textile of Pakistan. According to the policy recommendation the study focused on tariff of electricity. According to author should decrease tariff of electricity and also provided subsidies to the textile industry of Pakistan.

Khalid et al. (2012) pointed out that energy crisis is a main factor which effect the negatively to foreign direct investment (FDI) inflow. The study found that politically instable, low law & order and poverty were also effect those factors which disrupt the (FDI) and as well as the whole economy. Energy disaster was creating issues for the investors. Pakistan currently needed 20000 MW per day and supply did not fulfill the demand. The study

recommended that construction of new dams and renewable resources such as wind, solar etc.

Munir and Khalid (2012) identified that mismanagement and interference of foreign countries was responsible for the energy crisis in Pakistan. According to this study, first draw back about energy crisis began, when (WAPDA) divided into nine sub units. The study said that the weak link between electricity prices and demand was established which create this situation. Tariff burden was also a big issue in the Pakistan economy. The study recommended that electricity tariff should be decreased because this will lead more poverty in developing countries like Pakistan.

Shah et al. (2013) investigated the impact of energy crises on the textile sector of Pakistan (2005-2010). Data was collected from secondary sources from the period of 2005 to 2010 such as net statistical books and journals. Data divided into two parts, first is pre-crises from 2005 to 2006 and second part is post crises from 2007 to 2010. The study showed the strong negative impact of energy crises on textile sector. Finding of this study focused valuable for decision makers and top management authority. The study suggested that the government of Pakistan should focus on the energy sector of the country in order to achieve rapid growth of textile industry of Pakistan.

Masood (2013) founded that 380 million cubic feet per day (mmcfd) were going to in the way of theft, 200 (mmcfd) from Sui northern gas pipelines and 180 (mmcfd) from Sui southern gas company system. The study investigated that theft is about 12.5% of total production of gas. The study also pointed out that the gas theft is the major factor which create gas crisis. From the study, the researcher easily checked out that this theft is done by non-transparency system. The study suggested that transparency was the pillar of good governance. Check and balance should be exists among institutions and Law & order situation should be improved for development.

Nadeem and Hafeez (2013) explained that coal and energy generation had positive relationship. Time series data was collected from 1981 to 2011, for long run relationship among dependent and independent variable through co-integration technique. Dependent variable was electricity generation and independent variables were coal, gas, oil, nuclear. The study suggested that the government should focus coal projects and also reduce load of electricity from oil and gas. Private sector and foreign investors should be

invests in Thar- coal projects. In Thar coal projects there were a big opportunity for the investors.

III. THEORETICAL AND CONCEPTUAL FRAMEWORK

A. DATA SOURCES

Data collection method is most important phase for any research. Mostly the real world data provide true and reliable results. For getting real insight of the phenomenon under study, this study used secondary data from World Development Indicator (WDI).

B. SAMPLING DESIGN

This study included ten economic indicators that have been selected for analyzing the impact of energy before the crisis and after the crisis from period 2000 to 2011. For this investigation we have conducted horizontal analysis for the following indicators,

C. ECONOMIC INDICATORS

Annual percentage growth rate of GDP used, at market prices based on, constant local currency. The monetary value of all the finished goods and services produced within a country's borders in a specific time period, though GDP is usually calculated on an annual basis. Expected relationship between energy crises and GDP growth rate is negative. The proportion of a loan that is charged as interest to the borrower, typically expressed as an annual percentage of the loan outstanding. Interest rate relationship with energy crises is expectedly uncertain.

According to Says, inflation is nothing more than upward movement level of prices. When purchasing power of money decrease this situation is defined as inflation. Expected relationship between crises and inflation is positive. Unemployment rate is calculated as a percentage by dividing the number of unemployed individuals by all individuals currently in the labor force. Unemployment rate definitely increase in a case of energy shortfall. Send (goods or services) to another country for sale is considered as an export. Energy shortfall reduces the supply of exportable goods. Purchase goods and services from abroad. Expected relationship between import and energy crises is positive related to each other.

A foreign direct investment (FDI) is a controlling ownership in a business enterprise in one country by an entity based in another country. Next variable is

government final consumption expenditure (GFCE) is a transaction of the national account's use of income account representing government expenditure on goods and services that are used for the direct satisfaction of individual needs (individual consumption) or collective needs of members of the community (collective). Gross domestic savings are calculated as GDP less final consumption expenditure (total consumption). External debt also known as foreign debt is the component of total debt held by creditors of foreign countries, i.e. non-residents of the debtor's country.

HYPOTHESIS OF RESEARCH

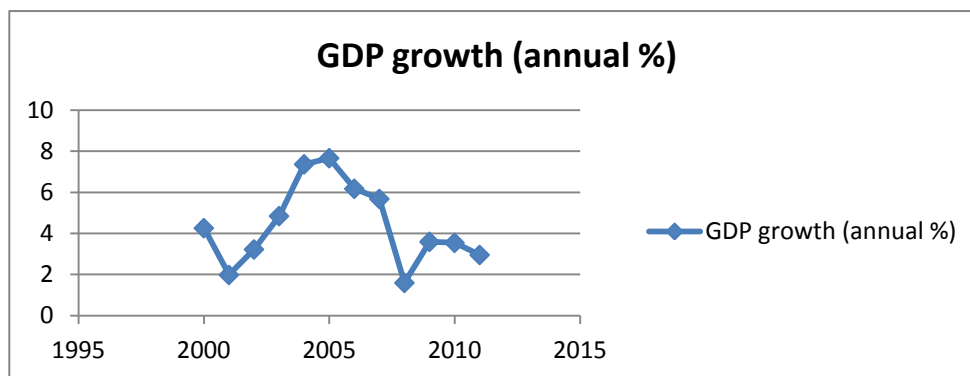
H₀: Energy crisis have a great impact on economic indicators.

H₁: Energy crisis have no impact on economic indicators.

IV. RESULTS AND DISCUSSION

Impact of energy crisis on economic indicators evaluated through horizontal analysis from 2000 to 2011. Major indicators are includes in this study which covers approximately whole economy. These include, GDP growth, GDS, FDI, etc.

Graph 1



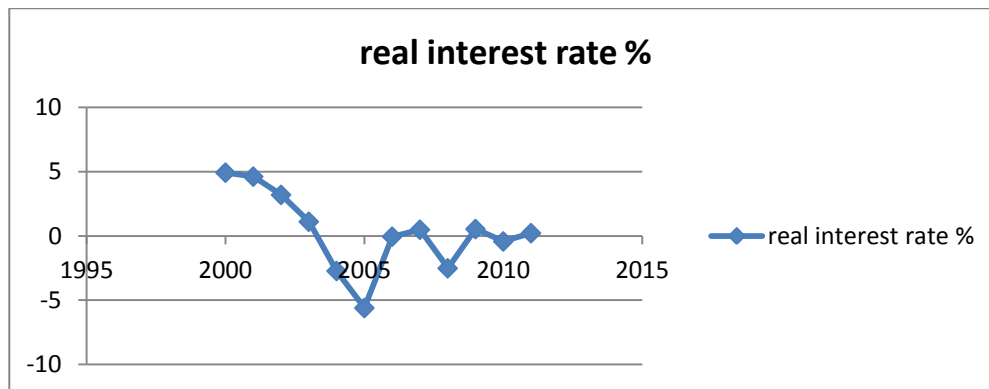
According to data, we easily understand that pre energy crisis GDP growth is more than after energy crisis. Many reasons behind the scene, in 2000 GDP growth was 4.2 and which was 3.66 in 1999, General Pervaiz Musharaf took steps to overcome the poverty with the help of external debt from World bank.

The incident of September 11, 2001 was a major issue for the down fall of the growth of Pakistan GDP and that's why growth of GDP was 1.9%. We know that GDP is a function of consumption and investments because of terrorism these factors are badly

affected. Many investors withdraw their assets and goes beyond from the country of Pakistan. Politically instability occurs and India blames on Pakistan that Pakistan involved in the attacks on the parliament of India. Political situation, peace, terrorism, suicide attacks are directly hit the investment as well as GDP. In 2004 European parliament voted in the favor of Pakistan trade and cooperation this is also a leading indicator for the investors and GDP growth reached 7.3 %. Because of all these events Pakistan GDP growing trend start. But in the 2007 two major events Benazir Bhutto killed and energy crisis occur and economy crash, index market was also fall round about 5%.

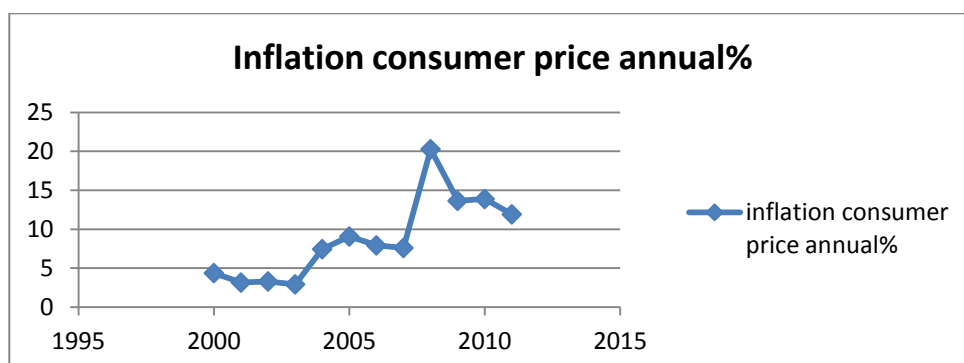
Energy was a prominent factor in industrial sector but in 2007 severe energy crisis face by Pakistan and industrial sector closed down. Pakistan economy faces big challenges such as terrorism, energy crisis, and financial crisis and politically instability etc. in 2009 the attacks on Sri Lankan team affected the tourism after this there is no any team enters for the playing in the Pakistan. So we can say that energy crisis have badly impacts on our economy but others factors are also play a major role in the down fall of Pakistan GDP growth. Only blame to energy crisis this is not a rational behavior.

Graph 2



This data is collected from the site of World Bank and it demonstrates that it is declining trend and this is not only for the paying back of political instability, law and order situation, terrorism but also include energy crisis which have a great impact on investment, interest rate and investment are negatively related with each other. From the period of 9/11 Pakistan economy faces many challenges such as terrorism, political instability etc. and investors are not fully confident for investment. So that's why state Bank of Pakistan decide to relaxation in the interest rate and purpose behind this down fall of interest rate was high investment which is negatively relate to the interest rate.

Graph 3



According to SAY inflation is nothing more than upward movement level of prices. Data conclude that after energy crisis prices of everything are sharply increased and then inflation also increased. In 2000 inflation was 4.37 and in 2007 it was 7.6 so this is occurring because of energy crisis. After the energy crisis inflation upward trend start and continue in the present situation. Graph shows that energy crisis was a major fault in upward movement level of prices and this is a directly hit inflation.

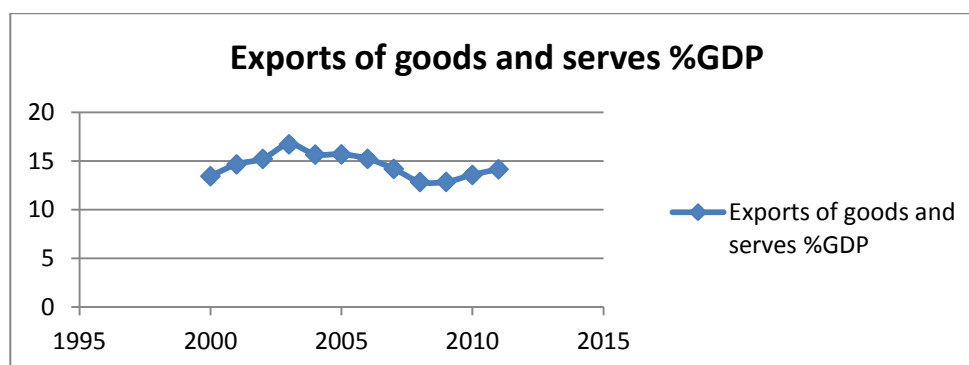
Table 1: Unemployment Rate % of Labor Force

Year	Unemployment rate % of labor force
2000	6.87
2001	7.83
2002	8.05
2003	8.27
2004	7.98
2005	7.69
2006	6.91
2007	6.19
2008	6.19
2009	6.19
2010	6.19

Data shows that pre crisis unemployment was greater than after energy crisis. It shows that energy crisis hit negatively to the unemployment, when energy crisis start unemployment was 8.27 in 2004 and in 2007 it was 6.91 what was the reason behind this down fall in the unemployment trend? The reason is that after the energy crisis new ideas promote in the mind of peoples, they focus alternative resources which work at the alternative of electricity such as wind, solar etc. After the innovation of generator, wind

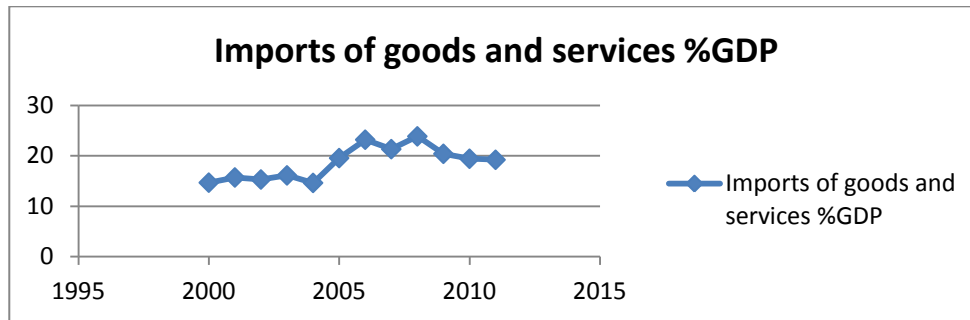
tools, etc a huge part of labor uses, so that's why unemployment decrease in the time of energy crisis and have a negative impact on unemployment, the graph is also indicates this trend. We collect data from world bank site according the data in pre energy crisis unemployment was very high in 2005 7.7. Reason is that earthquake was accrue 75000 people died, so that's why unemployment high. In 2006 because of agreement on trade security signed and other improvements unemployment rate is reduce. In 2007 severe energy crisis occur in Pakistan, because of politically instability this issue continues more than one year but in this year unemployment ratio trend decrees. In 2008 because of new govt. establish and unemployment rate also decrease in the present of energy crisis. So we conclude that pre energy crisis unemployment high but post energy crisis low unemployment.

Graph 4



According to our data we easily conclude that our exports % of GDP was declined after energy crisis and data also shows that energy crisis have a strong impact on exports of goods and services in the case of Pakistan, Why exports declined due to energy crisis? Reason is that energy is a backbone of any industry because of load shading industrial sector close down and the production process mostly affected as well as exports, so that's why Pakistan exports declined due to energy crisis. Our major exports are rice, raw cotton, leather and leather products, sports goods, readymade garments, fruits. Exports of rice declined due to lesser production caused by adverse whether condition and energy crisis. Due to energy crisis many agricultural products damage such as wheat. In sports industries energy play a major role due to crisis exports decrease.

Graph 5



The data shows upward trend in the imports of Pakistan, because we know that Pakistan is a developing country and that's why Pakistan depend on other countries. How energy crisis affected the imports? Reason is that when energy short fall start production process severe affected and domestically low production occur within the country supply of goods and services was decrease but demand was not decrease for the purpose of fulfill the required demand imports was the only way so that's why imports are greater in after the crisis. The study concludes that energy crisis strongly affected the imports through indirect way.

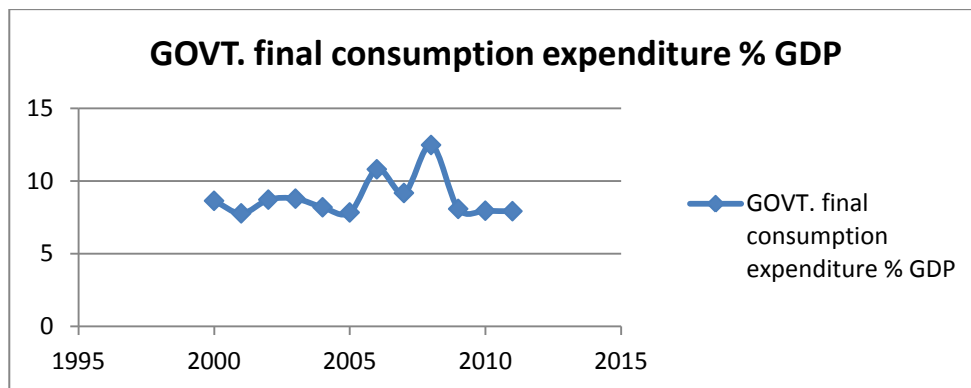
Table 2: Foreign direct investment % of GDP

Year	FDI inflow	FDI outflow
2000	0.42	0.014
2001	0.53	0.042
2002	1.13	0.038
2003	0.64	0.022
2004	1.14	0.057
2005	2.00	0.40
2006	3.53	0.085
2007	3.90	0.86
2008	3.31	0.29
2009	1.44	0.043
2010	1.14	0.026
2011	0.62	0.029

Comparing the FDI net inflow pre crisis with post crisis we easily conclude that in pre-crisis FDI net inflow have a upward trend and it was peak point in the year of 2007 but after this down ward trend start, which clearly shows that energy crisis affected strongly to the FDI net inflow. Channel through which energy crisis affected the FDI net inflow is

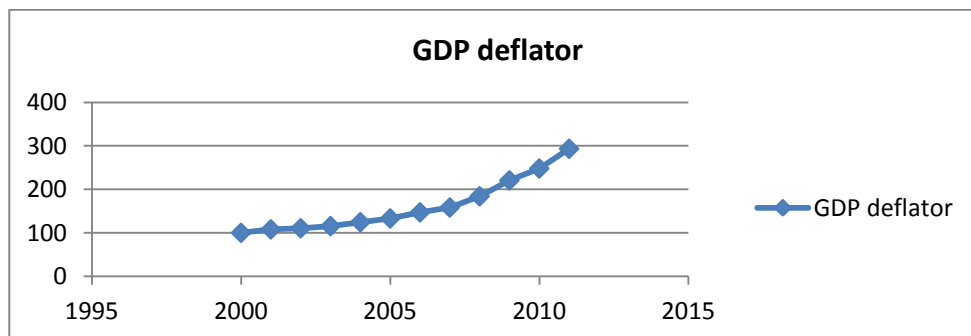
because we know that investment is a function of saving, in the case of Pakistan savings badly affected by load shading and high prices of electricity. So that's why we can say energy crisis have a significantly impact on FDI.

Graph 6



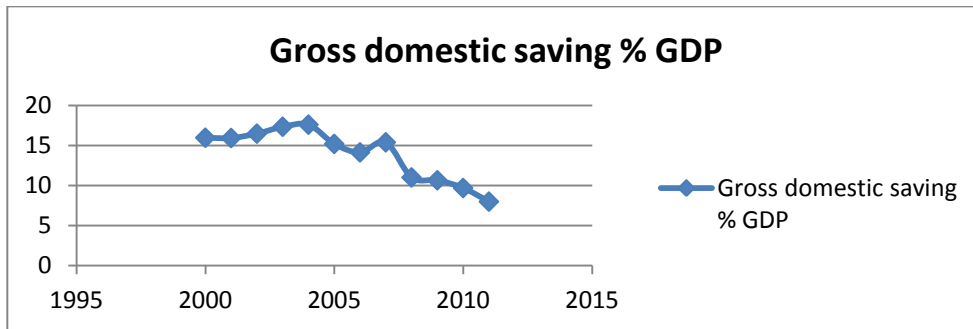
The result shows that government final consumption expenditure % of GDP was greater in after energy crisis as compare to the pre-crisis. After 2007 the government of Pakistan initiative to overcome the crisis and that's why government final consumption expenditure increased. The empirical results demonstrate that expansion of government expenditure since Asian financial crisis has exerted a significance influence on energy intensity. Our data also shows that results.

Graph 7



The GDP deflator (implicit price deflator for GDP) is a measure of the level of prices of all new, domestically produced, final goods and services in an economy. Our result shows upward trend. It is a sign of price rising. In the pre energy crisis we see that price rise but not sharp after crisis price rise sharply. So we conclude that energy also impact on GDP deflator.

Graph 8



According to our data before energy crisis Gross domestic savings are greater than after energy crisis. In 2005 Gross domestic savings are more than 15% of GDP after this in 2006 ratio decrease but in 2007 it will increase to 15% of GDP. Then a decreasing trend will start. We can say that energy crisis have major impact on gross domestic savings and there is negatively relationship between energy crisis and gross domestic saving. In 2011 GDS ratio will very low and in this session energy crisis was severe. After energy crisis there is not a big problem of politically instability, but big problems was terrorism and energy crisis and that's why savings decrease and investment also decrease.

Table 3: Overall results of study through three year averages

Year	2000-02	2003-05	2006-08	2009-11
GDP growth (annual %)	3.1	6.56	4.4	3.3
Real interest rate	4.25	-2.40	-0.69	0.11
inflation consumer price	3.6	6.45	11.93	13.47
Unemployment rate % LF	7.58	7.98	6.19	6.19
Government Consumption Expenditure as percentage of GDP	8.36	8.26	10.8	7.96
FDI.net inflow	0.69	1.26	3.58	1.06
FDI.net outflow	0.031	0.159	0.411	0.032
Exports % of GDP	14.43	16.01	14.08	13.52
Imports % of GDP	15.23	16.77	22.80	19.68
GDP deflator	106.14	124.33	163.14	254.01
GDS % of GDP	16.13	16.72	13.52	9.45

As we know that the data is collected from World Bank and because of unavailability of data in this study horizontal analysis exists. The above table shows average figure and according to the average values easily concluded that average values

of post crisis is greater than pre crisis and this leads that energy crisis have a strong association with economic indicators.

Objective	Hypotheses	Results	Status
The objective of the particular study is to compare the economic indicators value before and after the energy crisis.	H ₁ : Energy crisis has a great impact on economic indicators. H ₀ : Energy crisis has no impact on economic indicators.	After the complete analysis the study concludes that energy crisis has great impact on economic indicators in the case of Pakistan.	H ₁ : PROVED Hence, H ₁ accepted.

This particular study is conducted to investigate the impact of energy crisis on economic indicators. The study contain a twelve year period from 2000 to 2011 and divide the whole period into two parts 1st part is pre-crisis and the second part known as post crisis. The trend of all the major indicators of economics goes down after 2006 and afterward. In this study H₁, hypotheses is accepted which is, “energy crisis has a great impact on economic indicators” because after the energy crisis huge negative change exist in the particular economic indicators and that’s why H₁ accepted.

VII. SUMMARY AND CONCLUSION

Energy can be defined as a power or heat that is driven from the utilization of physical or chemical resources, for the purpose of light or other industrial work. Pakistan is a developing country but have a lot of resources of energy production but unfortunately bad governance, terrorism and corruption are the main drawbacks of Pakistan economy and current load shedding. Previous literatures are also investigating that Pakistan economy disrupts because of energy crisis, Javaid (2011). Many reasons behind this scenario, poor infrastructure, lack of Dams, poor transmission lines etc. This study trying to explore the impact of energy crisis and for this purpose economic indicators are used and get results. In the decade of energy crisis all variables are severely affected by this crisis. Every person is clearly know that load shedding is a key indicator of energy crisis but still economic survey of Pakistan shows that there is no gap between power supply and demand. So the study get results and explore or point out that if economic survey report is ok then completely crisis is because of poor transmission system and this is the main point of this research and study also concluded that economic indicators fluctuations are also because of poor transmission system.

Recently, Minister of water and power issue a statement that if we increase the reasonable load on these transmission lines then all over the Pakistan will go into the shadow condition. They think transmission lines are not able to bear more load. This particular study is conducted to investigate the impact of energy crisis on economic indicators. The study contain a twelve year period from 2000 to 2011 and divide the whole period into two parts 1st part is pre-crisis and the second part known as post crisis. The trend of all the major indicators of economics goes down after 2006 and afterward. In this study H1, hypotheses is accepted which is, "energy crisis has a great impact on economic indicators" because after the energy crisis huge negative change exist in the particular economic indicators and that's why H1 accepted.

If Govt. of Pakistan wants to remove the energy crisis then it should build dams to store the huge quantity of water and use it for electricity production because the study conclude that this is the cheapest way to produce the electricity in the country.

Pakistan has a great stock of coal but unfortunately, Pakistan doesn't have the resources to utilize this stock of coal. These stocks of coal exist in those areas where the Govt. of Pakistan has not complete control because of terrorism. Govt. of Pakistan should remove terrorism to get complete control over those areas and to utilize the stock of coal to produce electricity. If Govt. of Pakistan produces electricity through water and coal then Govt. has no need to provide subsidy on electricity because water and coal energy is very cheapest as compared to oil and other resources. And this will lead to enhance Govt. savings as well as investment.

Peoples of Pakistan should convert their attention to alternative resources of electricity such as bio gas, solar energy projects, etc. This will also lead to the reduction in unemployment. And Govt. should promote it and provide subsidy to peoples for these projects. The transmission and distribution system of electricity in Pakistan is very poor and because of these poor system line losses is very high in Pakistan. For the reduction of line losses, Govt. of Pakistan should adopt the latest and new system of distribution of electricity.

The law and order situation of Pakistan is very poor and this poor situation of law and order is a big cause of loss by theft of electricity. Govt. should improve law and order situation to overcome these losses. Circular debt is also a big problem in the country of

Pakistan in 2010 it was reached huge level. If the Govt. of Pakistan wants to increase their electricity capacity it should pay more attention and take steps to overcome the circular debt. Corruption is main factor which is direct effect the energy production, because we know that a major part of energy is produced from oil, gas etc. and corruption ratio in these fields is very high and that's why a part of resources cannot utilize in these fields. The Govt. of Pakistan should create check and balance among these fields.

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