IMPACT OF INFLATING OIL PRICES ON THE ECONOMY OF PAKISTAN

Author: Abdul Ahad Maud

Roll No. 111031 – 001

BBA VI – Morning



Supervisor: Mr. Khalid Mumtaz

Department of Management Sciences

Bahria Institute of Management and Computer Sciences - Islamabad

Abstract

The objective of this study is to examine the impact of the inflating oil prices prevailing in the market on the developing economy of Pakistan. Oil prices have become big news. Prices have risen rapidly in the past years. The research, that whether the inflating prices of oil have a positive or negative impact on the economy of developing or underdeveloped countries, has been going on globally for a while now. However, there is still doubt as to whether rising oil prices are the only variable which affects the economy directly. The objective of the study based on the literature review, is to evaluate whether inflating prices have an impact on the economy or not.

The data was collected through secondary sources i.e. through the websites of the respective Ministries and oil Regulatory Authorities operating in Pakistan. Data from the Economic Survey of Pakistan and Federal Board of Statistics was also utilized.

From the study we conclude that the economy of Pakistan is energy dependent and as oil makes up almost 80% of the energy consumption we can say that oil is necessary component in production and manufacturing so a sizable impact is noticed on the economy but on a few variables not all.

Acknowledgement

Customary to tradition I would like to thank God Almighty who gave me the strength to work hard throughout the semester for this research paper, which was quite a difficult task. I am grateful to Sir Khalid Mumtaz who from time to time assisted me and guided me through out the semester in the completion of this research. He very patiently listened to my queries and helped me in times of difficulty. Amongst my fellows, Akhlaq Ahmed, Faisal Subhan, and Nazia Khan guided me through difficulties in the completion of this research paper.

Abdul Ahad Maud

Table of Contents

ABSTRACT I
ACKNOWLEDGEMENT III
TABLE OF CONTENTS IV
LIST OF TABLES VI
LIST OF FIGURES VII

CHAPTER 1 1

INTRODUCTION 1
BROAD PROBLEM AREA 1
RATIONALE 6
PROBLEM STATEMENT 7
OBJECTIVES OF THE STUDY 8
RESEARCH QUESTIONS 9
LIMITATIONS OF THE STUDY 10

CHAPTER 2 11

LITERATURE REVIEW 11

CHAPTER 3 21

METHOD 21
SAMPLE 21
INSTRUMENTS AND DATA COLLECTION 22
PROCEDURE 23

CHAPTER 4 24

RESULT AND DISCUSSION 24

CHAPTER 5 39

CONCLUSION AND RECOMMENDATIONS 39
CONCLUSION 39
RECOMMENDATIONS 41

GLOSSARY 43

REFERENCES 45

List of Tables

Table 4-1: The nominal and real oil prices of Pakistan over the selected years..... 24

Table 4-2: The Real GDP Growth in percentage..... 26

Table 4-3: Pakistan’s Major Exports (Percentage Share)... 28

Table 4-4: Pakistan’s Major Imports (Percentage Share)... 30

Table 4-5: Unit Value Indices and Terms of Trade..... 32

Table 4-6: Table represents the Fiscal Deficit Indicators 34

Table 4-7: Table measuring Linear Regression between oil prices and GDP..... 36

Table 4-8: Table measuring Linear Regression between oil prices and BOP..... 37

Table 4-9: Table measuring Linear Regression between oil prices and Fiscal deficit..... 38

List of Figures

Figure 1-1: Global Oil Consumption Growth (Percentage) 4

Figure 2-1: Time series of Oil prices in Pakistan 15

Figure 2-2: Changes in World oil prices and inflation rates 18

Figure 4-1: The Bar chart represents the trend of Nominal and Real oil prices in Pakistan 24

Figure 4-2: The Bar chart represents the Real GDP Growth over the years 26

Figure 4-3: Bar Chart representing Pakistan’s Major Exports (Percentage Share) 28

Figure 4-4: Bar Chart representing Pakistan’s Major Imports (Percentage Share) 30

Figure 4-5: Bar Chart representing the Unit Value Indices and Terms of Trade 32

Figure 4-6: Chart represents the Fiscal Deficit Indicators 34

CHAPTER 1

INTRODUCTION

Broad problem area

Oil prices have become big news. Prices have risen rapidly in the past year, peaking at their early 1980s' levels. Previous episodes of rapid oil price inflation in 1974, 1979 and 1990 preceded global recession. Furthermore, the UK economy’s two worst episodes of post-war inflation - when it averaged 26% in 1975 and 22% in 1980 - both followed oil price shocks. Stagflation - weak output growth combined with rapid inflation - is a particularly nasty economic problem, and one to be avoided if at all possible. Little wonder, then, that concern about the impact of rising oil prices on the fledgling global recovery has increased.

Analysis suggests that even if oil prices were to rise to $80 per barrel in early 2005 and remain high for the following two years, the impact on the world economy would be serious, but not catastrophic. But this relatively positive overall conclusion relies critically on monetary authorities across the globe correctly anticipating the nature of the shock and calibrating interest-rate policy to avoid stagflation. Historical experience is not particularly encouraging, though central banks have scored a number of notable successes in recent years.

For some countries and sectors, of course, the negative effects of high oil prices would be more concentrated. In the short run, as household spending slows in response to the drag on incomes from higher energy prices, the hardest-hit sectors would be service and consumer-facing industries -particularly where spending is discretionary (e.g. electronics, automotive and travel services). In the longer term, sectors most adversely affected would be those that are most reliant on oil as an input to their production processes (e.g. utilities, transport services and agriculture). The negative impacts of rising oil prices would be amplified where firms are unable to pass on energy-cost increases because they face strong competitive pressures or cyclically weak demand conditions. In addition, where labor-market conditions are tight, the outcome of wage negotiations could add to firms' cost pressures as employees try to 'catch up' real income losses. Many of these longer-term negative impacts take time to work through the economy, and could therefore be anticipated (and mitigated) to some extent.

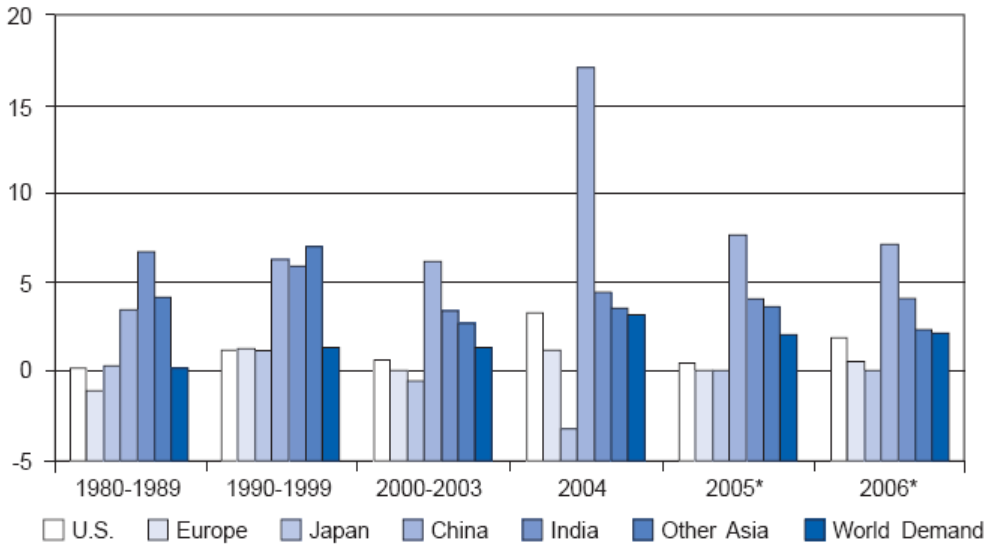
The current price hikes have sent shock waves across the region, and Governments are looking for ways to minimize its adverse economic and social effects without slowing down the pace of growth. The current real price of oil, adjusted for world export prices, is above the peaks of 1974 and 1985 and is almost equal to the highest level reached in 1980. Most experts are agreed that higher oil prices are here to stay, although short-term price fluctuations will continue to be part of the emerging scenario.

WHY ARE OIL PRICES GOING UP?

A combination of changing supply and demand conditions is contributing to the recent oil price hikes. The global low spare capacity, caused by inadequate investments in both upstream and downstream activities (especially in refineries), contributed to the rise in prices. New oil fields are not adding to global capacity at the rates witnessed in the past. Political uncertainty in a number of oil-exporting countries added to supply owes. Hurricanes Katrina and Rita disrupted supplies at a time when supply constraints were having an impact on global oil prices.

It is perhaps demand conditions that seem to have had the upper hand in the current spate of oil price hikes. The annual global demand for oil grew by 3.2 per cent in 2004 (figure 1 below), the highest since 1976. Demand in the United States of America has been, and continues to be, one of the most crucial factors in determining global oil prices. In more recent times, fast growing China and India have emerged as major sources of demand for imported oil. The unexpected upturn in global air travel, despite airfare hikes and fuel surcharges, has also added to the rising demand for oil. The demand for oil is expected to remain strong, rising from 84.2 million barrels per day in 2005 to 86 million barrels per day in 2006.

Figure 1-1: Global Oil Consumption Growth (Percentage)



Sources: Energy Information Administration 2005, International Energy Annual 2003. Washington, DC, availa
http://www.eia.doe/gov/iea and UNESCAP staff calculations.

The economy of Pakistan picked up in Fiscal Year 2004, with GDP growth coming in at over 6% for the first time in 7 years. With sound macroeconomic fundamentals achieved and key sectors strengthened by reforms implemented in the past 4-5 years, the economy is well positioned to sustain 7% or more growth in the medium term. 2005 forecast an improvement in GDP growth (ended 30 June 2005), based on all-time-high cotton output, an expected bumper wheat crop, double-digit growth in large-scale manufacturing, and rapid expansion in the telecoms and financial sectors. On the downside, record private sector credit growth, strong domestic demand, and high oil prices were expected to add to inflationary pressures. High oil prices and strong economic growth were expected to worsen the balance-of-payments position.

The GDP growth outcome for Fiscal Year 2005 beat expectations, with output in manufacturing and agriculture surprising on the upside. But because of steeper than projected increases in oil prices, shortages of essential food items, and strong domestic demand, inflation was also higher than forecast. As expected, the current account surplus on the balance of payments turned into a deficit. This Update trims the GDP growth forecast for FY2006, and raises significantly the projections for inflation and the current account deficit as it takes into account much higher baseline oil prices.

International oil prices hit $70 a barrel in August 2005. Sustained, high oil prices above the baseline would pose a serious risk for the Fiscal Year 2006 forecasts of GDP growth, inflation, the balance of payments, and the fiscal deficit.

The current price hikes have sent shock waves across the region, and Governments are looking for ways to minimize its adverse economic and social effects without slowing down the pace of growth. The current real price of oil, adjusted for world export prices, is above the peaks of 1974 and 1985 and is almost equal to the highest level reached in 1980. Most experts are agreed that higher oil prices are here to stay, although short-term price fluctuations will continue to be part of the emerging scenario.

Rationale

This research aims to analyze the impact of rising oil prices on the economy of Pakistan. The biting fuel oil prices which are threatening to take steam out of the growth momentum of Pakistan, with forecasts suggesting bitter inflation and current account levels. Sustained, high oil prices above the baseline would pose a serious risk for the Fiscal Year 2006 forecasts of GDP growth, the balance of payments, and the fiscal deficit.

Problem Statement

The focus of the research is to study the impact of the rising global prices of oil and its affect on the economy of Pakistan. If international oil prices remain at current levels, or go higher, projections for imports, the fiscal deficit, and GDP Growth may have to be revised upward, while any negative impact on the global economy could lead to lower growth of exports.

Objectives of the Study

The objectives of the study are:

- To understand the concept and trend of inflating oil prices on the economy of Pakistan.
- To analyze the effect of oil prices on GDP growth, the balance of payments, and the fiscal deficit.
- To provide the foundations for future research by other researchers.

Research questions

- What is the importance of Oil sector in Pakistan economy?
- What is the scenario of Oil prices in Pakistan?
- What is the effect of inflating oil prices on the GDP growth, Balance of Payment and Fiscal deficit on the economy?
- What conclusions can be drawn from the entire study?

Limitations of the study

This research study has certain limitations that are not easy for the researcher to overcome at this level.

- There Are many other variables which are affecting the economy as a result it is difficult to analyze isolated impact of one variable on the economy.
- Taking into account that the trend of oil prices show an increase but there is a wide fluctuation in the prices due to which the increase is not persistent meaning the oil prices do not remain high for a constant period.
- The macro economic variables in the economy of Pakistan are in the process of establishment so the impact of oil cannot be quantified easily to implement changes in the economy.
- The limited experience in the research field is also a matter of consideration. This is the first study that goes to researcher’s credit. Hence, the researcher does not possess any experience in the field.

CHAPTER 2

LITERATURE REVIEW

Petroleum refers to crude oil and natural gas or simply oil and gas, found in petroleum reservoirs generally thousands of feet below the surface. Exploratory wells are drilled to discover petroleum wells, while development wells are drilled to produce a portion of previously discovered oil and gas. Estimated volumes of recoverable gas within the reservoir are called oil and gas reserves (Brock, Jennings & Feiten, 1990).

The oil and gas sector or the petroleum industry has the following four major segments:

- Exploration and Production or E&P where oil companies explore for underground reservoirs, and produce the discovered oil using drilled wells.
- Hydrocarbon processing which includes oil refineries.
- Transport, Distribution and Storage by which petroleum is moved from the producing well areas to crude oil refineries. Oil is moved by pipeline, truck, barge or tanker.
- Retail/Marketing which ultimately markets in various ways the refined products.

The projected global oil prices are to stay within the $28–30 a barrel (/bbl) range in 2004, or higher than the historic average, and easing to $24–26/bbl in 2005.

However, oil prices in 2004 have already breached these levels and prices are likely to stay relatively high for some time. Brent crude oil prices have risen to a record high, approaching the $45/bbl mark in August 2004. Oil prices at this level could threaten the present global economic recovery. Developing Asia's economies (also "the region" or "Asia") are particularly vulnerable to an oil shock as most of them are highly dependent on oil imports, and are more energy intensive and less energy efficient than most industrial countries. In addition, Asia is growing much faster than other regions, and although it now produces 11% of world crude oil supply it consumes about 21% of it. As a result, Asia now imports more than 44% of the oil it consumes, up from 7% during the 1970s and 1980s and 32% in the 1990s. Overall, the region's oil dependency ratios leave much to be desired. Oil consumption in Asia is equivalent to 4.5% of its GDP. This is much higher than in industrial countries, which averaged 1.6% of GDP in 2003 (International Energy Agency Higher Global Oil Prices: Implications for Developing Asia in 2005 Development Outlook 2004 Update : III. Economic Scenarios for Asia).

After the relatively low prices seen in the first half of the 1990s, when the price of crude petroleum rarely exceeded $20/B, the price of oil began to rise in 1999 and culminated at $60/B in mid-2005. This surge in oil prices worries governments in many oil-importing countries, who fear the detrimental effects of a substantial and long-lasting rise in energy prices on output growth. This is a special concern for many developing countries which have become increasingly dependent on oil imports as industrialization has progressed.

The consequences of a rise in oil prices are usually separated into first- and second-round effects. Under any normal circumstances, consumer prices rise (or stop falling) immediately after petroleum products, such as gasoline and heating oil, become more expensive because the elasticity of demand is rather low at most stages of the production chain. On the other hand, second-round effects occur if workers try to compensate their real income loss by bargaining for higher nominal wages. The occurrence of second-round effects becomes more likely the larger the impact of first-round effects of a rise in oil prices – or energy prices more generally on the overall price level. A higher rate of inflation implies a loss of real income unless nominal wages rise alongside consumer prices. If, however, workers successfully bargain for higher wages in order to compensate for real income losses, the result is an additional upward pressure on the price level as firms will seek to pass rising labor costs on to consumer prices. Workers may thus find that their recently negotiated wages do not keep up with the rising price level, and consequently enter the next round of wage bargaining with yet augmented aspirations. In the worst case, such a scenario may lead to a wage-price spiral resulting in accelerating inflation. At best, it will still cause inflationary expectations to become embedded in the economy’s wage bargaining processes, involving a permanently higher inflation rate compared to the initial situation.

Apart from the consequences on inflation, the effects of an oil price shock on the overall economic activity in importing countries are more difficult to disentangle. The

most obvious impact stems from the deterioration in the terms of trade. An oil price increase shifts the terms of trade between net-importing and net-exporting economies in favor of the latter. Essentially, this implies a real income transfer from consuming to producing countries. Shrinking real incomes in countries facing larger oil bills, in turn, mean less income to spend on other products, which translates into lower domestic demand unless matched by reduced domestic savings and/or higher export demand. To date, the evidence suggests that the propensities of oil-producing countries to consume from current income are low relative to consuming economies. Oil price increases have historically been accompanied by swelling current-account surpluses in oil-exporting countries, implying that the windfall revenue accruing to producers is typically not immediately spent to its full extent a pattern that can also be observed in the current situation (David Fenton, Middle East Economic Survey, VOL. XLVIII, No 36, 5-September-2005, Oil Prices Hikes In Perspective, Trade And Development Report, 2005 published by the United Nations Conference On Trade And Development (UNCTAD)).

Pakistan’s oil cartel OCAC’s price increases when international oil prices go up have been a major factor behind inflation. Oil price increases lead to higher input prices, thus raising the cost of production and administration that, in turn, increases the prices of output. So, on one hand the IMF shows concern about inflation and on the other hand it supports a major factor that, inter alia, causes increase in the rate of inflation. The IMF supports increases in oil prices primarily to

narrow the budget deficit. But, narrowing the budget deficit may conflict with the desire to contain or decrease the rate of inflation. (Dr Mahnaz Fatima, IMF dismay over inflation, poverty, DAWN the internet Edition)

DIESEL (US CENTS PER LITER)

SUPER GASOLINE (US CENTS PER LITER)

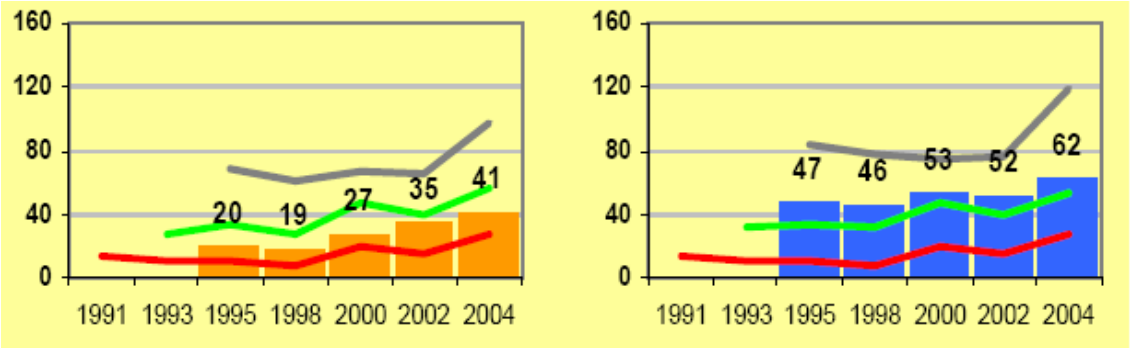


Figure 2-1: Time series of Oil prices in Pakistan

Grey Benchmark Line = Retail Fuel Prices of LUXEMBOURG = approx. Minimum Entrance Level for new EU Accession Countries

Green Benchmark Line = Retail Fuel Prices in the UNITED STATES = aver. Cost-Covering Retail Prices incl. Industry Margin, VAT and incl. approx. 10 US Cents for the 2 Road Funds (Federal and State). This Fuel Price being without other Specific Fuel Taxes may be considered as the International Minimum Benchmark for a non-subsidized Road Transport Policy.

Red Benchmark Line = CRUDE OIL Prices on World Market ("Brent" at Rotterdam).

(Dr Gerhard P. Metschies International Fuel Prices 2005 4th Edition)

According to analysis by the International Energy Agency (IEA), the effect of a sustained $10/B increase in oil prices from $25/B to $35/B would lower world GDP, other things being equal, by at least 0.5% in the following year (*MEES*, 10 May). However, the effects on oil importing countries are not uniform. The higher prices would reduce the GDP of OECD member countries by 0.4% in the first and second years, with Euro zone countries losing 0.5% of GDP, says the IEA. But developing countries would be hit particularly hard since on average they use twice as much oil to produce a unit of output as more developed countries. According to IEA estimates, the loss of GDP in Asia from the $10/B increase would be 0.8% and 1.6% in poor, highly indebted countries. The effect on sub-Saharan Africa could be as high as 3% of GDP, says the IEA. Using the IEA's analysis as a yardstick, the current level of oil prices is not a devastating blow to the world's economic recovery, particularly if such levels are not sustained and they return to around the OPEC target band of $22-28/B. It does suggest cause for concern for developing countries, however, and the need for support for those countries from the developed world.

World demand for oil has been fuelled not only by growth in the US, but also by strong demand from other countries. China's imports of crude oil have increased by more than 40 per cent since the beginning of 2004. This is not all for

current consumption rather it reflects stockpiling by the Chinese government, a shift from holding excess dollar reserves to holding oil reserves. (The Impact of Higher Oil Prices on the Global Economy, prepared by the Research Department, approved by Michael Mussa December 8, 2000, International Monetary Fund IMF).

Asian economists have been even more pessimistic. Kim Hak-Su, the Executive Secretary of UN-ESCAP (has suggested that oil prices of around $40 per barrel would mean a 0.5 percentage point reduction of growth in the region, and $50 per barrel would mean a 1 percentage point reduction. (Kim Hak-Su, the Executive Secretary of the United Nation's Economic and Social Commission for Asia and the Pacific)

Such projections usually hinge around the perceived trade-off between growth and inflation, and are predicated on the assumption that oil prices increases will lead to more general inflation. Governments attempting to combat inflation will then embark upon contradictory fiscal and monetary policies, which will bring down inflation but also imply lower rates of aggregate economic growth.

Certainly it is true that for a very long period in fact almost the whole of the second half of the 20th century oil prices showed a strong relationship to aggregate inflation rates in the world economy. Between 1970 and 2000, for example, world trade prices and oil prices were strongly positively correlated and in the largest economy, the US, the Consumer Price Index inflation tracked movements in world oil prices. However, there is evidence that such a relationship may be changing. Figure 3 indicates the annual percentage changes in world oil prices and average

inflation rates in industrial and developing countries, especially since 1996.

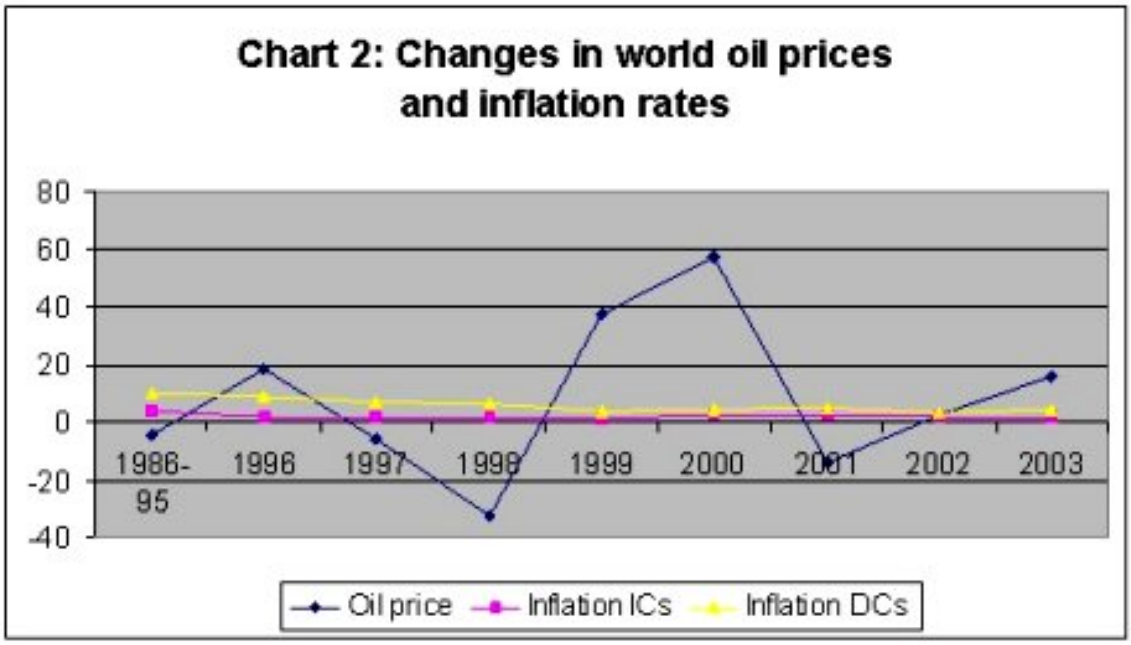


Figure 2-2: Changes in World oil prices and inflation rates

Two things stand out quite sharply in this chart. The first is that oil prices were exceptionally volatile over this period, rising and falling dramatically. The second is that such fluctuations appear to have had little impact on aggregate inflation rates in either developed or developing countries. Rather, such inflation rates have been relatively stable and even fallen slightly compared to the earlier decade.

The first important factor is the reduced dependence of the industrial economies upon oil imports, at least in quantitative terms. For the group of industrial countries in the OECD, net oil imports accounted for 2.4 per cent of

GDP in 1978, but have since fallen continuously, to amount to only 0.9 per cent of GDP in 2002.

But the second factor may be even more significant. This is a distributional shift, whereby the burden of adjustment to higher oil prices is essentially borne by workers across the world and non-oil primary commodity producers in the developing countries. This means that even though energy is a universal intermediate good, its price rise does not cause prices of many other commodities and especially the money wage - to increase accordingly. This in turn enables aggregate inflation levels to remain low even though oil prices may be increasing. (INTERNATIONAL MONETARY FUND PAKISTAN Staff Report for the 2005 Article IV Consultation Prepared by the Staff Representatives for the 2005 Consultation with Pakistan (In consultation with other departments) Approved by Amor Tahari and Michael T. Hadjimichael October 11, 2005).

“The global economy has so far handled higher oil prices without major economic disruption, “ said Kip Beckman, Principal Research Associate. “Strong corporate profits, the rise of the global service industry and quick actions by central banks are cushioning the impact. But if oil prices remain above US $55 per barrel for an extended period, GDP growth will weaken further, although a global recession is unlikely.”(Kip Beckman, Principal Research Associate)

After expanding by almost four per cent in 2004, the world economy is expected to post real gross domestic product (GDP) growth of three per cent this year, led by the United States and China. The Chinese economy expanded by almost 10

per cent in 2004 and its government is attempting to ease the pace of growth. Still, China's economy is expected to average eight per cent growth over the next two years.

Rising Oil Prices in the Current Global and Regional Economic Context

The impact of an oil shock generally depends on the size and duration of the shock, as well as on an economy's dependence on oil (and on energy more generally). In analyzing the size of the shock, it is necessary to consider oil prices in real terms and the extent of the price increases. With Brent averaging about $40/bbl in the third quarter, the oil price now is high. While it has not gone past the average real levels reached during the previous oil shocks (of 1973, 1979, and 1990), it is dangerously close to the level reached during the third oil shock of 1990. On the other hand, the price of oil now is still well below the peak seen in the fourth quarter of 1979, when in real terms it breached the $100/bbl mark. Oil prices are therefore now about 40% of 1979's all time high in real terms. In nominal terms, oil prices have risen by more than 108% since the fourth quarter of 2001, slightly more than the rate of increase seen during the 1990 oil shock, which was brief and had a substantially slower rate of increase than the first and second oil shocks (Oil Market Report, 11 August).

CHAPTER 3

METHOD

Sample

This research aims to analyze the trend of GDP growth, Balance of Payments and Fiscal Deficit for the past years starting from 1994 up to 2005. The variables mentioned are compared to increasing oil prices. The result for the whole period is thus generalized. Because the research requires an analysis, it can be classified as a descriptive study.

Instruments and Data Collection

The data being used in the research mainly consist of figures taken from the Economic Survey of Pakistan for the years under study 1994-2005. Information has also been taken from several articles and research papers from the internet conducted in the past relating to oil price hike and their affects on different economies. This research is therefore a constructed by using secondary data only.

Procedure

Sources of information used in the research conducted pertain to secondary data only. The procedure involved collection of data for the period 1994-2005 from the Economic survey of Pakistan. The data was then sorted out thoroughly. As it was difficult to identify the impact of inflating oil prices on the economy of Pakistan from the literature review a regression analysis was carried out to develop the relationship. Economy as a whole could not be taken into analysis therefore three major variables namely Gross Domestic Product (GDP), Balance of Payments (BOP) and Fiscal Deficit are taken into account as the prominent variable being affected by inflating oil prices. The analyzed data was then used to derive a conclusion.

CHAPTER 4

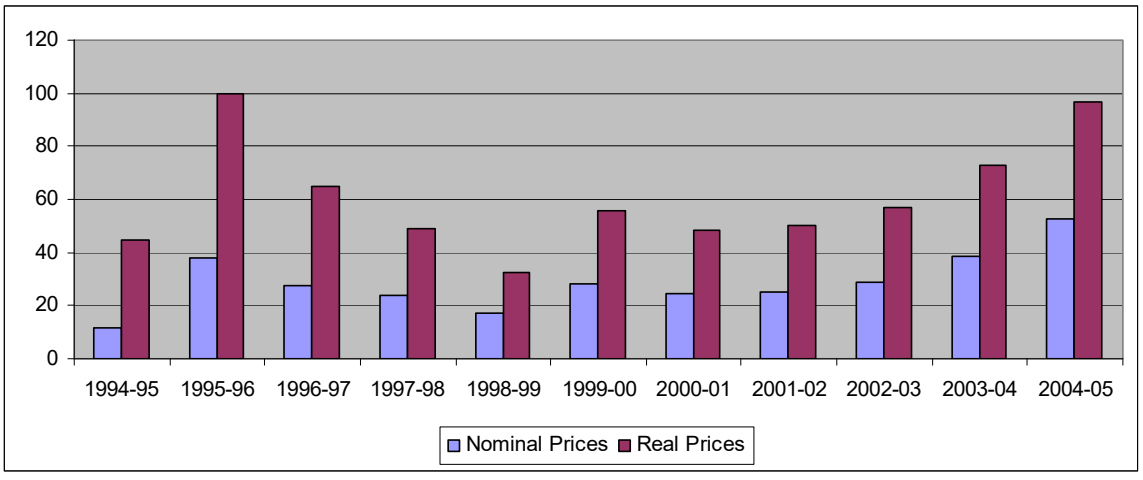
RESULT AND DISCUSSION

Table 4-1: The nominal and real oil prices of Pakistan over the selected years

Years	Nominal Prices	Real Prices
1994-95	11.5	44.9
1995-96	37.9	100
1996-97	27.6	64.6
1997-98	23.7	48.9
1998-99	17.1	32.3
1999-00	28.3	55.7
2000-01	24.4	48.4
2001-02	25	50.1
2002-03	28.9	57
2003-04	38.3	72.8
2004-05	52.4	97

Source: Federal Bureau of Statistics

Figure 4-1: The Bar chart represents the trend of Nominal and Real oil prices in Pakistan



Oil prices reached $54 by end-November 2005. This round of oil price increase is unprecedented in that it has doubled since 2004 and trebled since 2000. The trend of oil prices shows a persistent increase since 1998-99. However this

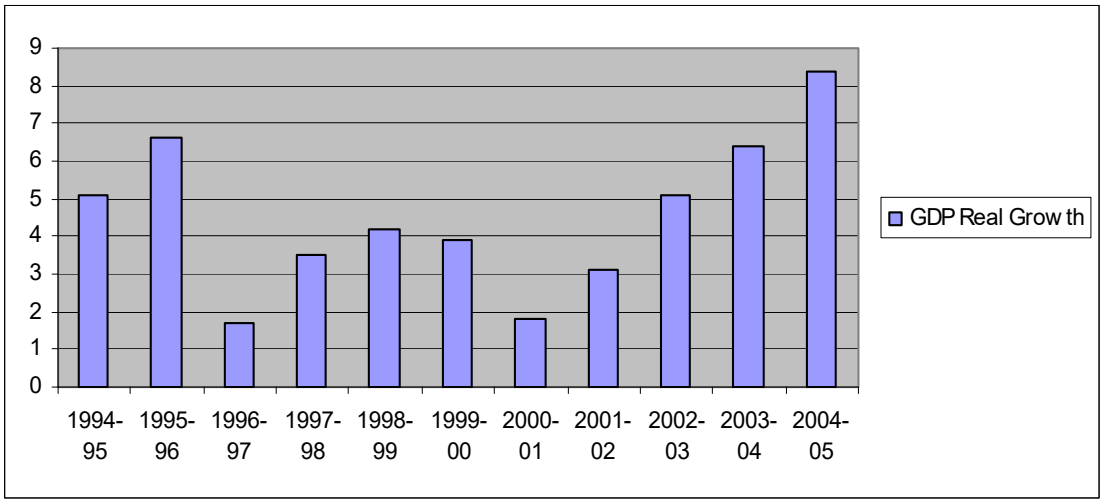
does not mean that oil prices remain high for a consistent period they tend to fluctuate. In 1995-96 oil prices increased drastically as shown in the graph above but this change was only temporary as the oil prices started to decrease in the next period 1996-97.

Table 4-2: The Real GDP Growth in percentage

Years	GDP Real Growth
1994-95	5.1
1995-96	6.6
1996-97	1.7
1997-98	3.5
1998-99	4.2
1999-00	3.9
2000-01	1.8
2001-02	3.1
2002-03	5.1
2003-04	6.4
2004-05	8.4

Source: Federal Bureau of Statistics

Figure 4-2: The Bar chart represents the Real GDP Growth over the years



GDP growth gradually diminished during the 1990's. Over the years, with heavy consumption of oil in the country the figure escalated to a growth of 8.4%, more than double the amount since 1999. Pakistan's real GDP growth of 8.4

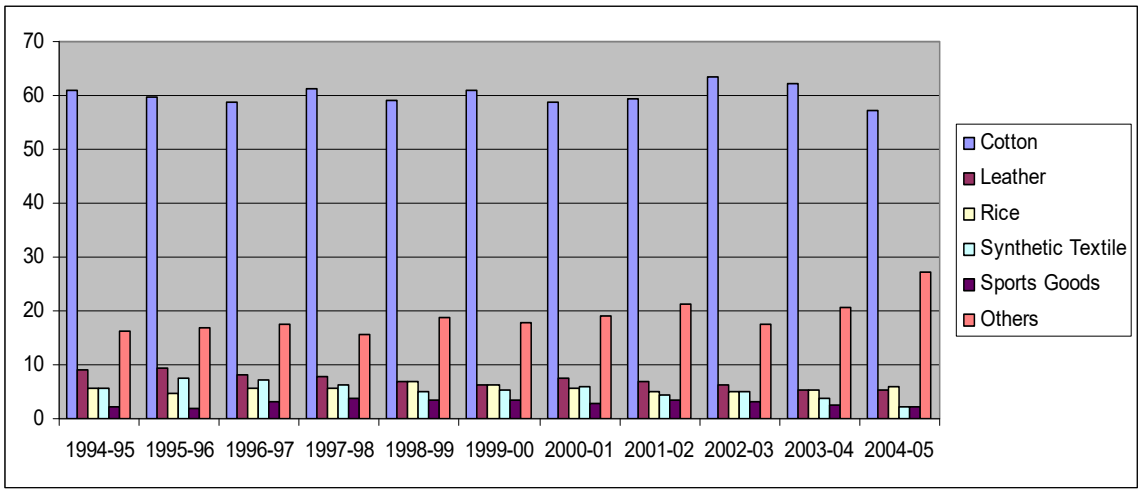
percent in 2004-05 is the fastest pace in two decades; the fifth time in the country’s history that it exceeded 8 percent growth mark; Pakistan positioned itself as the second fastest growing economy after China in 2004-05. Pakistan’s economic recovery has gained further traction during the fiscal year 2004-05, with the economy expanding at its fastest clip in two decades.

Table 4-3: Pakistan's Major Exports (Percentage Share)

Years	Cotton	Leather	Rice	Synthetic Textile	Sports Goods	Others
1994-95	61	9.1	5.6	5.7	2.2	16.4
1995-96	59.8	9.3	4.7	7.4	1.9	16.9
1996-97	58.7	8	5.6	7.1	3.2	17.4
1997-98	61.3	7.7	5.6	6.1	3.7	15.6
1998-99	59.1	6.9	6.9	5.1	3.3	18.7
1999-00	61	6.3	6.3	5.3	3.3	17.8
2000-01	58.9	7.5	5.7	5.9	2.9	19.1
2001-02	59.4	6.8	4.9	4.5	3.3	21.1
2002-03	63.3	6.2	5	5.1	3	17.4
2003-04	62.3	5.4	5.2	3.8	2.6	20.7
2004-05	57.3	5.4	5.9	2.2	2.1	27.1

Source: Ministry of Commerce & FBS

Figure 4-3: Bar Chart representing Pakistan's Major Exports (Percentage Share)



Pakistan's exports are highly concentrated in a few items namely, cotton, leather, rice, synthetic textiles and sports goods. These five categories of exports accounted for 79.3 percent of total exports during 2003-04 with Cotton alone contributing 62.3 percent, followed by leather (5.4%), rice (5.2%) and synthetic textiles (3.8%). The

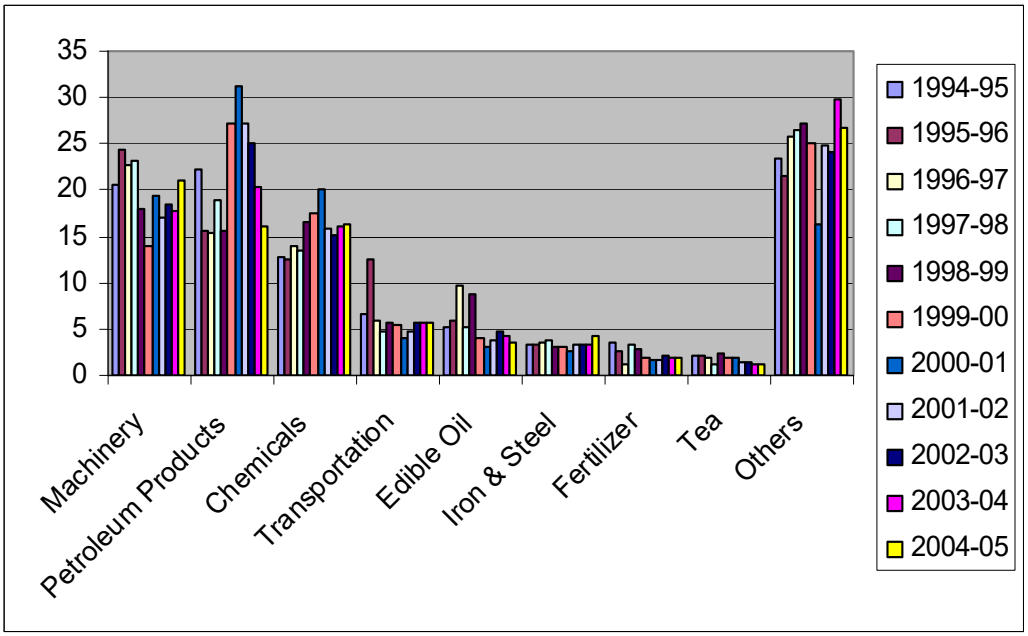
degree of concentration remained almost unchanged during the current fiscal year. Further disaggregating reveals that almost all the export earnings of cotton group have originated from textile and clothing. The same degree of concentration, by and large, persisted during 2004-05. Such a high degree of concentration of exports in a few items is a major cause of instability in export earnings.

Table 4-4: Pakistan's Major Imports (Percentage Share)

Commodities	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Machinery	20.5	24.3	22.8	23.1	17.9	13.9	19.3	17.1	18.5	17.8	21.1
Petroleum Products	22.2	15.5	15.3	19	15.5	27.2	31.3	27.1	25.1	20.3	16.1
Chemicals	12.8	12.5	14	13.4	16.6	17.5	20	15.9	15.1	16.1	16.3
Transportation	6.7	12.5	5.9	4.7	5.7	5.5	4	4.8	5.6	5.6	5.6
Edible Oil	5.3	5.9	9.6	5.1	8.7	4	3.1	3.8	4.8	4.2	3.6
Iron & Steel	3.3	3.2	3.6	3.9	3.1	3	2.6	3.3	3.3	3.3	4.3
Fertilizer	3.5	2.5	1.2	3.2	2.8	1.9	1.6	1.7	2.1	1.8	1.8
Tea	2.2	2.1	1.8	1.1	2.4	2	1.9	1.5	1.4	1.2	1.2
Others	23.5	21.5	25.8	26.5	27.3	25	16.2	24.8	24.1	29.7	26.8

Source: Ministry of Commerce & FBS

Figure 4-4: Bar Chart representing Pakistan's Major Imports (Percentage Share)



Like exports, Pakistan's imports are also highly concentrated in a few items namely, machinery, petroleum & petroleum products, chemicals, transport equipments, edible oil, iron & steel, fertilizer and tea. These eight

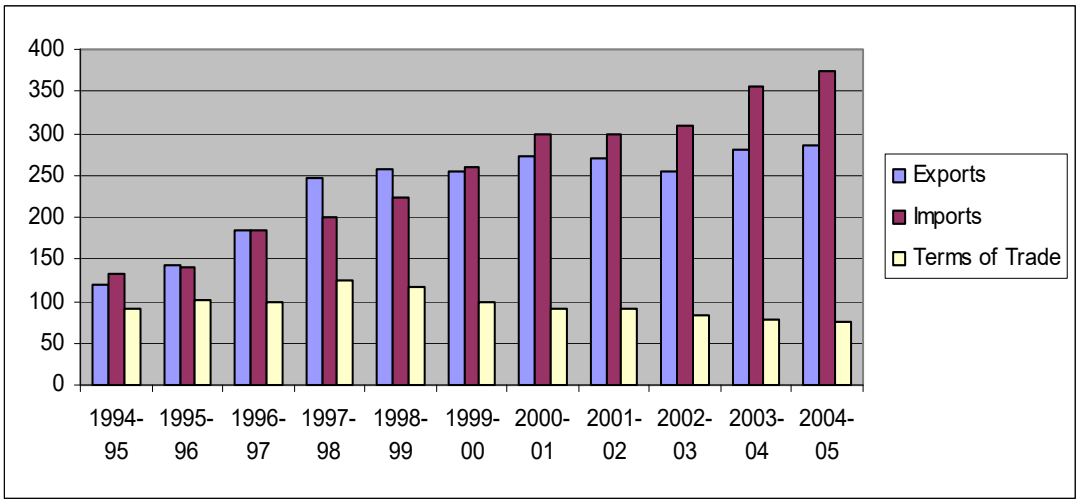
categories of imports accounted for 70.3 percent of total imports during 2003-04. Among these categories machinery, petroleum & petroleum products and chemicals accounted for 54.2 percent of total imports. Considerable structural changes have also taken place in some subsets of these imports over the years. The declining trend in the share of machinery has reversed owing to higher level of investment in the country. The share of chemicals depicted a gradual rising trend till 2000-01 after which it tapered off but increased again during the current fiscal year due to higher imports of fertilizer, insecticides and plastic material. The share of edible oil and petroleum & petroleum products has started to decline – mainly on account of higher domestic production in the case of former and rising international prices as well as higher domestic production in case of latter.

Table 4-5: Unit Value Indices and Terms of Trade

Years	Exports	Imports	Terms of Trade
1994-95	119.9	131.9	90.9
1995-96	142.9	141.2	101.2
1996-97	185.4	185.5	99.9
1997-98	245.6	198.9	123.5
1998-99	258.4	223.3	115.7
1999-00	253.8	259	98
2000-01	271.5	298.4	91
2001-02	271.2	298.6	90.8
2002-03	254	309.5	82.1
2003-04	279.6	355.4	78.7
2004-05	285.2	372.8	76.5

Source: Federal Bureau of Statistics

Figure 4-5: Bar Chart representing the Unit Value Indices and Terms of Trade



Pakistan is gradually improving its international trade performance. While it still lags the merchandise trade driven Asian economies, Pakistan is slowly getting its act together, with exports and imports graduating to a higher growth trajectory. The terms of trade aggregated to 78.7 during 2003-04 as compared to 82.1 of 2002-03, showing a

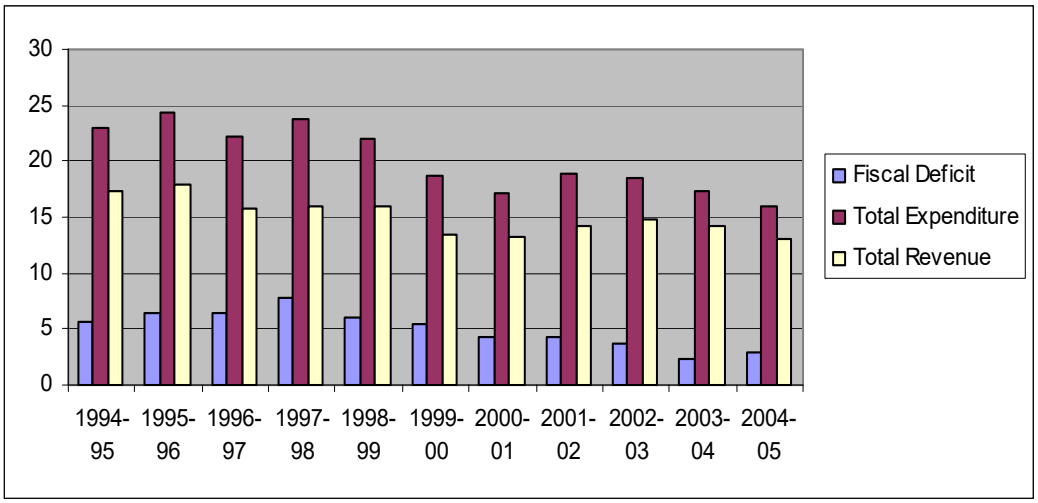
deterioration of 4.1 percent. The increase in unit prices of petroleum, chemicals and metal groups caused terms of trade to deteriorate.

Table 4-6: Table represents the Fiscal Deficit Indicators

Years	Fiscal Deficit	Total Expenditure	Total Revenue
1994-95	5.6	22.9	17.3
1995-96	6.5	24.4	17.9
1996-97	6.4	22.3	15.8
1997-98	7.7	23.7	16
1998-99	6.1	22	15.9
1999-00	5.4	18.7	13.5
2000-01	4.3	17.2	13.3
2001-02	4.3	18.8	14.2
2002-03	3.7	18.6	14.9
2003-04	2.3	17.3	14.3
2004-05	3	16	13

Source: Federal Bureau of Statistics

Figure 4-6: Chart represents the Fiscal Deficit Indicators



The above table and graph shows the stagnation of fiscal efforts over the last decade. As consequence, Pakistan sustained a large budget deficit throughout the 1990's. The importance of a prudent fiscal policy cannot be overemphasized. A sound fiscal policy is essential for preventing macroeconomic imbalances and realizing the full

growth potential. Pakistan has witnessed serious macroeconomic imbalances in the 1990s mainly on account of its fiscal profligacy. Persistence of large fiscal deficit resulted in unsustainable levels of public debt, adversely affecting the country’s macroeconomic environment. Pakistan accordingly paid a heavy price for its fiscal indiscipline in terms of deceleration in economic growth and investment, and the associated rise in the levels of poverty. Considerable efforts have been made over the last six years to inculcate financial discipline by pursuing a sound fiscal policy. Pakistan’s hard earned macroeconomic stability is underpinned by fiscal discipline.

Table 4-7: Table measuring Linear Regression between oil prices and GDP

		Adjusted R	Std. Error of		
R	R Square	Square	the Estimate	F Change	Sig. F Change
.675	.455	.395	1.60324	7.527	.023

The table above shows the relationship between oil prices the independent variable and GDP the dependent variable. R, the multiple correlation coefficients, is the correlation between the observed and predicted values of the dependent variable. The value of R produced by the regression procedure range from 0 to 1, larger values of R indicate stronger relationships. In this case it is .675 which means there is a strong positive relationship between oil prices and GDP. R squared is the proportion of variation in the dependent variable and its values range from 0 to 1. Small values indicate that the model does not fit the data well. In this case .455 shows a favorable relationship between inflation of oil prices and GDP. If the significance value of the F statistic is small (smaller than 0.05) then the independent variables do a good job explaining the variation in the dependent variable which according to our table means that GDP varies with change in Oil prices.

Table 4-8: Table measuring Linear Regression between oil prices and BOP

R	R Square	Adjusted R Square	Std. Error of the Estimate	F Change	Sig. F Change
.431	.186	.096	13.89908	2.057	.185

The table above shows the relationship between oil prices the independent variable and BOP the dependent variable that how much BOP is dependent on the oil prices. R, the multiple correlation coefficients, produced by the regression procedure indicates a .431 relationship between the variables. This does show a positive relationship between oil prices and BOP but it is not so strong compared to GDP. R squared is the proportion of variation in the dependent variable and the model show a .186 favorable relationship between inflation of oil prices and BOP but it is not very significant. The significance value of the F statistic is small which means that there is relationship between the variables and the dependent variable varies with the independent variable but the relationship is not so strong.

Table 4-9: Table measuring Linear Regression between oil prices and Fiscal deficit

		Adjusted R	Std. Error of		
R	R Square	Square	the Estimate	F Change	Sig. F Change
.270	.073	-.030	1.67323	.709	.422

The table above shows the relationship between oil prices the independent variable and Fiscal Deficit the dependent variable. R, the multiple correlation coefficients, reveals a slight relationship between the variables only .270 which means Fiscal Deficit hardly depends on the Oil prices prevailing in the economy. R squared is the proportion of variation in the dependent variable in this case only .073 which means the fiscal deficit is not dependent on oil prices. The significance value of the F statistic is .422 which is far greater than .05 which means the dependent variable Fiscal Deficit does not vary as per change in oil prices the dependent variable.

CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

Conclusion

From the study we conclude that the economy of Pakistan is energy dependent and as oil makes up almost 80% of the energy consumption we can say that oil is necessary component in production and manufacturing so a sizable impact has been noticed on the GDP but comparatively lesser affect on BOP and Fiscal deficit. BOP and Fiscal Deficit are affected by oil prices but it is not the major variable affecting them. The production methodologies lack efficiency and are outdated due to which they require more oil and our economy being an energy dependent economy is affected by any fluctuations in the oil prices so any increase in oil prices will have sizable impact on the economy as a whole affecting a few macro economic variables not all.

In the foreseeable future oil shall remain a driving force for various economic variables in the economy. As the economy of a developing country grows there will be more production which requires a greater consumption of oil and most of the economic macro variables which make up the economy will be affected by any variation or fluctuations in the oil prices as a result.

Mega economic growth in neighboring countries especially India and China shall eventually result in uplifting of regional economies resulting Pakistan’s economy becoming more energy starved. India and China are the fast growing

economy and they are acquiring different energy sources to meet there increasing production demand which also includes oil fields as a result there will be a strong impact on Pakistan because it falls in the same region.

Realization of the fact of energy dependent economy is growing grounds in political and government circles. The government has realized the fact that the economy is energy dependent as a result Pakistan is currently leading oil and gas sector reforms in South Asia (Economic Survey of Pakistan 2004-2005).

Recommendations

- As oil and gas account for almost 80% of energy consumed and a rise in oil prices has a significant impact. In order to reduce this impact the government should come up with alternative energy sources to fill the requirements.
- Government cannot directly restrict the import so it should focus on restricting the oil imports by channeling it through the third party so as to minimize the import commission.
- The government is at present charging nearly 12.5 per cent royalty charges which should be reduced further.
- The government should take measures to attract foreign investment in exploration and production sector which would increase the local production. The government should also focus on off shore drilling.
- The government should not subsidize oil prices and transfer the affect to the consumer so that the consumer can realize the price and control demand.
- In order for the oil exploration/ production Companies to be able to operate in areas controlled by tribal chiefs, the Federal as well as Provincial Governments role is very important and without their input the oil companies will not be able to do anything in such areas. In Pakistan exploration is only possible in Balochistan province which is under the control of tribal chiefs. The hold of the tribal chiefs must be broken. This could be accomplished by enforcement of law and order in the country rather than laws of the tribal chiefs and improve physical communication system especially access by roadways. Encourage the

tribal chiefs to establish some sort of industry in their areas in partnership with entrepreneurs. This will help to open up the areas as relevant executives, professionals/engineers, skilled operators will move in from other areas and locals will be influenced by their presence.

GLOSSARY

Gross Domestic Product (GDP)

In economics, the gross domestic product (GDP) is a measure of the amount of the economic production of a particular territory in financial capital terms during a specific time period. It is one of the measures of national income and output. It is often seen as an indicator of the standard of living in a country. It can also be defined in simple words as the total value of all goods and services produced within that territory during a specified period.

Balance of Payments (BOP)

Balance between all payments out of a country within a given period and all payments into the country, an outgrowth of the mercantilist theory of balance of trade. Balance of payments includes all payments between a country and its trading partners and is made up of the balance of trade, private foreign loans and their interest, loans and grants by governments or international organizations, and movements of gold (capital account). A chronically unfavorable balance of payments, when debits exceed credits, may affect the stability of the nation's currency, particularly where exchange rates are no longer fixed.

Terms of Trade

International trade, terms of trade are the ratio of the price of an export commodity(s) to the price of an import commodity(s). An improvement in a nation's terms of trade is good for that country in the sense that it has to pay

less for the products it imports, that is, it has to give up fewer exports for the imports it receives.

Fiscal Deficit

The term fiscal refers to government debt, expenditures and revenues, or to finance (particularly financial revenue) in general. Fiscal deficit is the budget deficit of federal or local governments.

Inflation

Inflation is the rise in the level of prices. It is the increase in general price level of commodities.

Stagflation

A term coined in the early 1970’s describing the coexistence of high unemployment or stagnation with persistent inflation. Its explanation lies primarily in the inertial nature of the inflationary process.

REFERENCES

- BROCK, JENNINGS, FEITEN .*Petroleum Accounting, Principles, Procedure, and Issues* (1996). Connecticut, USA: Financial Accounting Standards Board (FASB).

- David Fenton, Middle East Economic Survey, VOL. XLVIII, No 36, 5-September-2005, Oil Prices Hikes In Perspective, Trade And Development Report, 2005 published by the United Nations Conference On Trade And Development (UNCTAD).

- Dr Gerhard P. Metschies International Fuel Prices 2005 4th Edition

- Dr Mahnaz Fatima, IMF dismay over inflation, poverty, DAWN the internet Edition.

- Economic Survey of Pakistan

- International Energy Agency Higher Global Oil Prices: Implications for Developing Asia in 2005 Development Outlook 2004 Update : III. Economic Scenarios for Asia.

- INTERNATIONAL MONETARY FUND PAKISTAN Staff Report for the 2005 Article IV Consultation Prepared by the Staff Representatives for the 2005 Consultation with Pakistan (In consultation with other departments) Approved by Amor Tahari and Michael T. Hadjimichael October 11, 2005.

- Kim Hak-Su, the Executive Secretary of the United Nation's Economic and Social Commission for Asia and the Pacific

- Kip Beckman, Principal Research Associate

- Ministry of Petroleum

- Oil and Gas regulatory Authority

- Oil Market Report, 11 August.

- The Impact of Higher Oil Prices on the Global Economy, prepared by the Research Department, approved by Michael Mussa December 8, 2000, International Monetary Fund **IMF**