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Measuring the Impact of Total Revenue, Total Labor Force and Oil Prices on Economic Growth of Pakistan

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Abstract
This study establishes the empirical relationship between GDP and total revenue, total labor force and oil prices. Numerous studies concluded profound impact of these variables on GDP of Pakistan as well as other economies. In this study, all the sources of revenue generating including tax and non-tax revenue and financial aid and grants are included. In total labor force, both male and female labor force are included. The impact of oil prices on GDP is also included in the model. This study is conducted to measure the impact and significance of these variables on GDP of Pakistan for years 1970-2012 using time-series data. Regression analysis results shows significant concluded coefficients. Unit root test verified the stationarity of the data. The results of co-integration test show long run association between the GDP and the independent variables. The empirical results conclude positive impact of total revenue, total labor force and negative impact of oil prices on GDP of Pakistan.

List of Acronyms and Abbreviations
1) GDP = Gross Domestic Product
2) tr = Total Revenue
3) tlf = Total Labor Force
4) OECD = Organization of Economic and Co-operation and Development
5) OPEC = Organization of Petroleum Exporting Countries
6) BOP = Balance of Payment
7) SBP = State Bank of Pakistan
8) OLS = Ordinary Least Square
9) ADF = Augmented Dicky-Fuller
10) TTX = Total Tax Revenue
11) IPCT = Income Profit and Capital Tax
12) GST = General Sales Tax

1.1 Introduction to Total Revenue

In developing countries like Pakistan government has to play an active role in promoting economic growth and development because private initiative and capital are limited. Fiscal policy has become an important instrument in promoting growth in such economies to collect revenues to finance public sector. The major sources of revenue are the taxes. Taxes are consist of income tax levied on income f peoples, on organizations as corporate tax, tax on goods and services, tax on wealth and assets, financial transactions, both as domestic and in international terms and tax on international trade. Revenue is also generated through financial aid and grants from other countries and large financial institutions. All these sources primarily contribute to the total revenue and enable the government to fuel up the economy.

The economic and political importance of taxation goes far beyond providing income to finance the public sector, investments, and the basic needs of the population. Historically, state building has been closely connected to the development of the tax system (Tilly 1992; Webber & Wildavsky 1986). However, the tax system has not only contributed to establishing states, but also to promoting the state's legitimacy and strengthening democracy, as well as to creating economic well-being for the general population. According to the International Monetary Fund (IMF) tax revenue equivalent to 15 percent of GDP is a "reasonable" minimum

level for low-income countries to secure the financing of basic government tasks such as law and order, health, and education (IMF 2005). Revenues collection in Pakistan is considerably low at 10.2 percent of GDP (World Bank 2012) as compared to average of 36 percent of GDP (OECD 2007). Revenues are the major domestic source to finance the public spending. In Pakistan, low revenue collection compels the government to finance their spending from other sources than taxation which leads to public debt and also widens the gap between public revenue and expenditures. An effective tax system is a key for Pakistan to escape borrowing, aid and scarce resource dependency.

In Pakistan, most of the revenue is deposited on consumption expenditures rather than investment expenditures which is causing continues increase in budget deficit. Along with the tax system adjustment, the revenues are needed to be allocated towards developmental projects to boost up the economy.

According to previous studies rich or high income countries collect total tax revenue as ratio of GDP (TTX) more than two times compared with the poor or low income countries, in which the rich countries collect revenue of 27.60% of GDP and poor countries only collected 11.89%. This is caused by the high per capita income and large amount of international companies in many rich countries that leads to high taxes on income, profit, and capital gain as fraction of total tax revenue (IPCT). Among the four different levels of income, taxes on goods and services (GST) is the main source of tax revenue for the low and middle income countries, in which 34.87% of total tax revenue was collected in upper middle income countries.

1.2. Introduction to Total Labor Force

Skillful labor force is crucial and backbone for economic growth. The human capital is just like physical capital and if we investing on this physical capital by means of education, health and training which turn them into valuable asset which will raise output and contribute to economic growth (Miner 1958). Pakistan is the world's sixth most populous country. With an estimated population of 176.7 million (World Bank 2011) and an annual growth rate of 1.8 percent (World Bank 2011), it is expected that Pakistan will become the fourth largest nation on earth in population terms by 2050. Despite high population growth, most of the population is under age and dependent. According to World Fact Book (2012), Pakistan has 5.84 million of labor force. 45 percent occupied in agriculture sector, 21.1 percent in industrial sector and 34.9 percent in services sector (2010 est.). Most of the Pakistan's labor is comparatively unskilled and contribute little to overall productivity. Pakistan needs a large sum of investment in human capital to boost up the economic growth and development.

Despite the high amount of population growth, the inadequate skills and improper manpower planning in Pakistan leads to lower contribution of labor force to economic growth. Pakistan rank at 114 according to gross domestic product at purchasing power parity per person currently employed. (World Bank 1990-2010) The slower economic growth is also attributed due the disguised unemployment which contributes little to the total output. Beside the high rate of unemployment, there is a lack of investment in human capital and gender gap discrimination which is hindering the economic growth in Pakistan. Investment in human capital improves the economic and social opportunities of young individuals, thereby helping to reduce poverty and foster technical progress. In addition to the direct effects of education on economic participation, education also affects other societal outcomes such as child mortality, fertility, personal health outcomes, and greater investment in the education and health of future generations. In this context, investing in women's human capital is a key to economic growth and social structure, especially in developing countries where the gender gap in education is still large. In all, greater gender equality in investment in education gives both men and women the means to contribute to a better society.

Studies suggest that labor force is one of the top three economic indicators and have strong relation with the economic growth. European countries had achieved a greater success by increase in their population rate after these countries optimally utilized the labor force and continually invest in human capital along with reducing the gender gap discrimination which leads overall positive impact on productivity.

1.3. Introduction to Oil Prices

In the past decade, growth in oil production has plateaued and consumption continues to grow. No new sources of low cost supplies are known and the oil prices hikes continue to persist. Global oil consumption hits 87.4 million barrels a day. According to Enervates, this trend is supported by high demand and dependence on oil. For most of the last century, cheap oil has powered the global economic growth. But in the last decade, the price of oil has quadrupled, and that shift will permanently hinder the growth potential of the world's economies.

Oil provides more than a third of the energy we use on the planet every day, more than any other energy source. And there is a prominent relationship between oil consumption and gross-domestic- product growth. The more oil we burn, the faster the global economy grows. On average over the last four decades, a 1 percent bounce in world oil consumption has led to a 2 percent increase in global GDP. That means if GDP increased 4 percent a year -- as it often did before the 2008 recession -- oil consumption was increasing by 2 percent a year.

At $20 a barrel, increasing annual oil consumption by 2 percent seems reasonable enough. At $100 a barrel, it becomes easier to see how a 2 percent increase in fuel consumption is enough to make an economy collapse.

When prices rise to a level that causes an economic crash, lower prices inevitably follow. Over the last four decades, each time oil prices have spiked, the global economy has entered a recession. Consider the first oil shock, after the Yom Kippur War in 1973, when the Organization of Petroleum Exporting Countries' Arab members turned off the taps on roughly 8 percent of the world's oil supply by cutting shipments to the U.S. and other Israeli allies. Crude prices spiked, and by 1974 real GDP in the U.S. had shrunk by 2.5 percent.

The second OPEC oil shock happened during Iran's revolution and the subsequent war with Iraq. Disruptions to Iranian production during the revolution sent crude prices higher, pushing the North American economy into a recession for the first half of 1980. A few months later, Iran's war with Iraq shut off 6 percent of world oil production, sending North America into a double-dip recession that began in the spring of 1981.

As the recent oil prices hikes, world economies especially developing economies are struggling to keep up a steady economic growth rate because of the profound dependence on oil. Pakistan is not oil producing rather oil importing country. Oil prices hikes adversely affect the economic growth as increase in oil prices leads to inflation, increase budget deficit and downward pressure on exchange rate which makes the imports more expensive. The rising oil prices are the major concern for developing countries and Pakistan is suffering from it too and affecting the daily consumption pattern of household badly. Pakistan oil consumption is 410,000 bbl/day (The World Factbook 2010) and oil prices rise at 23 percent (SBP FY 2012).

This study aims at how and up to what extent the total revenue, total labor force and oil price changes is affecting economic growth of Pakistan.

1.4. Objectives of the study

Objectives of the study are given bellow

- To find the relationship of total revenue and GDP of Pakistan.
- To find the relationship of total labor force and GDP of Pakistan.
- To find the relationship of oil price and GDP of Pakistan.

1.5. Significance of the study

The study about the relationships of total revenue, total labor force and oil prices have great economic significance in very wider aspects. The total revenue and total labor force significantly affects the GDP growth rate and oil prices greatly affects the level of production and consumption of producers and consumers respectively.

1.6. Scope of the study

This study has a great importance in findings about the relationship of total revenue, total labor force and oil prices on the economic growth of Pakistan. So it is much needed to find out about the impact of these variables on GDP and open ways for further elaboration.

1.7. Limitations of the study

The limitation of conducting this study is the short time span and lack of experience which greatly affect the completion of this study in a better way. The difficulties in finding of large sample size may result not good empirical results.

1.8 Organization of the Study

The study has been organized as the chapter one contain introduction to total revenue, total labor force and oil prices. The literature review about the variables has been included in chapter two. The chapter three contain research design and sample design. In chapter four, the data is analyzed and results are concluded. Finally, in chapter five, the estimated results are briefly discussed and recommendations are put forward.

Literature Review

Several empirical studies have been undertaken in order to find out the relationship of total revenues, total labor force and oil price changes to economic growth across different countries.

2.1. Literature Review on Total Revenue

Bilquees (2004) measured the elasticity of tax revenue system in Pakistan over the time period of 1974 to 2003 by using Divisia Index Approach and analyzed the factors responsible for the resulting size of elasticity coefficients. Her estimated results suggested that changes in tax did not lead to significant revenue augmentation. However high coefficient of sales tax with respect to GDP base reflected the inclusion of service sector and

utilities in sales tax net, which has serious effects the poor.

Lutfunnahar (2007) conducted a study for identified the determinants of tax share and revenue performance for Bangladesh along with 10 other developing countries for the 15 years through a panel data analysis. His obtained results suggest that international trade, broad money, external debt and population growth to be significantly determinants of tax efforts. The study also concluded that Bangladesh and other developing countries or countries have low tax efforts and are not utilizing their full capacity of tax revenue and therefore have the potential for budgetary imbalance through raising tax revenue.

Shafqat Rasool et al studied the effect of taxation on economic growth on the basis of comparative analysis of different countries in the region. By comparing their tax revenues and GDP, there study concluded that 80 percent of the total revenue is collected through different taxes in Pakistan. And also for generation of more revenues Government has to increase indirect taxes, so prices of basic Utilities and petroleum to meet the expenditures required in modern era.

2.2 Literature Review on Total Labor Force

Eric A. Hanushek and Dongwook Kim (1995) worked on the importance of labor force quality, measured by linking international test scores across countries and a direct measure of quality is developed and this proves to have a strong and robust influence on growth.

Malik (2006) using OLS to find relationship between human capital and economic growth but his study fails to find positive association between human capital and economic growth in Pakistan and when he uses 2SLS estimation technique the results are totally opposite. Peck and Abbas (2008) also used OLS technique for finding the relationship between output, education and health over a time period of 1960 to 2003. There study find positive impact of education and health on output. Qadri and Waheed (2011) investigate the impact of human capital on Pakistan's economic growth during 1978-2007 and find it a highly significant determinant of economic growth.

Nabila Asgher and Asma Awan (2012) attempt to investigate the role of human capital in terms of education and health on economic growth of Pakistan during 1974-2009. Using annual data, ADF, PP and Ng-Perron tests are utilized to check the stochastic properties of the variables. Long-run relationship among variables is confirmed through Johansen and Juselius co integration test whereas the long-run and short-run dynamics are observed by VECM specification. For causality purpose both VECM based causality and Toda-Yamamoto causality tests are employed. Stability of the model is confirmed through CUSUM and CUSUMSQ. The results indicate strong positive impact of human capital on economic growth despite the fact that Pakistan has been spending less percentage of GDP on education and health facilities to create human capital. The study concludes that in order to reap maximum benefits from human capital there is a need to formulate and implement effective economic policies related to the provision of education and health facilities to the people.

2.3. Literature Review on Oil Price

Malik, (2008) studied the possible outcomes and confronts presented of increase in oil prices in Pakistan. There estimates suggests that the continuous increase in the international oil prices had affected negatively the BOP (balance of payment) and the budgetary position of Pakistan and added inflationary pressures on the economy.

Hamilton (1983) empirically establishes a negative relationship between oil prices and macroeconomic variables. Hamilton conducted a series of studies on the subject (in 1983, 1996 and 2003) established a vital role of oil price increase in most of the US recessions. He has stressed on the importance of oil prices on the macroeconomic activities.

Adiqa Kiani tried to explore the relationship of sharp rise in the prices of oil with GDP growth of Pakistan for the period of 20 years (1990-2009) and data was collected from IFS, Pakistan Economic Survey and Energy Year Book. She uses The Ordinary Least Square (OLS) technique and has been tested for stationarity using Augmented Dickey-Fuller (ADF) unit root test. She concluded that sharp rise in the prices of crude oil affects the output negatively.

Muhammad Arshad Khan and Ayaz Khan examines the impact of global food and oil price shocks and their transmission channels to selected macroeconomic variables including inflation rate, output, money balances, interest rate and real effective exchange rate for Pakistan. They uses monthly data over the period 1990M1-2011M7. An empirical analysis is carried out by employing structural vector autoregressive (SVAR) framework. Generalized impulse response functions and generalized forecast variance decompositions are employed to track the impact of oil and food price shocks to Pakistan's economy. The results suggest that oil price shocks negatively affect industrial production, appreciates real effective exchange rate and positively affect inflation and interest rate.

Methodology

The purpose of this study is to measure the impact of total revenue, total labor force and crude oil price changes

on the economic growth of Pakistan. Where the GDP is dependent variable while the total revenue, total labor force and oil prices are independent variables. In this study, we applied the OLS Regression to estimate the co-efficients and calculate the significance of the co-efficients that whether the co-efficients of the variables have significant effect on GDP or not. Then we used the Dicky-Fuller Test for unit root to find out about the stationarity of the data and Johansen test for co-integration that whether the variables have long run association or not.

3.1 Model Specification

To examine the relationship of total revenue, total labor force and oil prices on economic growth, we specified the following multiple linear regression model.

$$GDP = \alpha + \beta_1 (tr) + \beta_2 (tlf) + \beta_3 (op) + \mu$$

where
tr = Total revenue
tlf = Total labor force
op = Oil prices

3.2 Sample Design and Data Description

In this study, we used time series data for a period of 43 years from 1970 to 2012. The data is secondary and obtained from various sources including World Data Bank, State Bank of Pakistan, Induxmundi, CIA World Factbook and internet.
The sample of data for study includes the 14 year annual data of total revenue receipts, total labor force and oil price changes, where independent variables are total revenue receipts, total labor force and oil price changes. The dependent variable is the annual GDP of Pakistan.

3.3. Variables of the study

In this study, the following are included, in which GDP is the dependent variable and the remaining three are independent variables.

1. GDP = Gross Domestic Product
2. tr = Total revenue
3. tlf = Total labor force
4. op = Oil prices

3.4. Hypothesis of the study

1) H_0 = there is no relationship between GDP and tr, tlf, op.
2) H_1 = there is relationship between GDP and tr, tlf, op.

Means that the Hypothesis of the study are as follows,
$H_0 = \beta_1 = \beta_2 = \beta_3 = 0$
$H_1 = \beta_1 \neq \beta_2 \neq \beta_3 \neq 0$

Data Analysis

4.1. Regression Analysis

```
. reg gdpus tr tlf op
```

Source	SS	df	MS	Number of obs =	43
				F(3, 39) =	965.87
Model	1.3308e+23	3	4.4359e+22	Prob > F =	0.0000
Residual	1.7911e+21	39	4.5926e+19	R-squared =	0.9867
				Adj R-squared =	0.9857
Total	1.3487e+23	42	3.2111e+21	Root MSE =	6.8e+09

gdpus	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
tr	.0451934	.0036618	12.34	0.000	.0377867	.0526002
tlf	2212.757	154.4031	14.33	0.000	1900.448	2525.067
op	1.84e+08	4.88e+07	3.76	0.001	8.48e+07	2.82e+08
_cons	-4.23e+10	5.27e+09	-8.02	0.000	-5.29e+10	-3.16e+10

Interpretation

The regression analysis shows the impact of different variables on GDP which are included in the model. Coefficients show the direction of the variables that they are positively or negatively affecting the dependent variable. Constant term is the intercept of the model shows that if all the variables are zero then -4.23+10 dollars will be the level of GDP. T-statistic for tr (total revenue) is 12.34 and p-value is 0.000 which is very less than 0.05 shows that tr has a significant positive impact on GDP with co-efficient .0451934, which mean that if there is a unit increase in tr then there will be .0451934 units rise in GDP. The tlf (total labor force) has a also positive co-efficient 2212.757 with t-value of 14.33 and p-value is 0.0000 which is significant on the basis of rule of thumb that t-value is greater than 2 and p-value is less than 0.05. The co-efficient of op (oil prices) also shows positive impact on GDP that if there is a rise in op by one unit it will lead to rise in GDP by 1.84 units. F-statistic shows the overall significance of the model and it is 965.87 and R^2 is 0.9867 which means that independent variables are explaining 98.67% variation in the dependent variable GDP. The R^2 sounds too high in the model which may be due to time series analysis and so due to Multicollinearity, but the adjusted R^2 value is 0.9857 is also high which shows that the high R^2 value is not due Multicolinearity and the problem of Multicollinearity will be defended with tests.

4.2. Unit Root Test for GDP

```
. dfuller gdpusD1

Dickey-Fuller test for unit root                    Number of obs   =        41

                                 ------------ Interpolated Dickey-Fuller ------------
                 Test         1% Critical       5% Critical      10% Critical
               Statistic           Value             Value            Value
------------------------------------------------------------------------------
 Z(t)            -3.025            -3.641            -2.955           -2.611
------------------------------------------------------------------------------
MacKinnon approximate p-value for Z(t) = 0.0327
```

Interpretation

The series of GDP is not stationary at the level, that's why a 1st difference of the series is taken and tested again using Dicky-Fuller test for unit root. The resulted test statistic value of -3.025 is greater than the critical values of -2.955 and -2.611 at 5% and 10% of confidence levels respectively, and the p-value of 0.0327 is less than 0.05. It concludes that there is no unit root and the data is stationary at 1st difference.

4.3. Unit Root Test for Total Revenue

```
. dfuller trD1

Dickey-Fuller test for unit root                    Number of obs   =        41

                                 ------------ Interpolated Dickey-Fuller ------------
                 Test         1% Critical       5% Critical      10% Critical
               Statistic           Value             Value            Value
------------------------------------------------------------------------------
 Z(t)            -3.977            -3.641            -2.955           -2.611
------------------------------------------------------------------------------
MacKinnon approximate p-value for Z(t) = 0.0015
```

Interpretation

In the unit root test of total revenue, the data is not stationary at the level, that's why a 1st difference of the series is taken and tested again using Dicky-Fuller test for unit root. The resulted test statistic value of -3.977 is greater than the critical values of -3.641, -2.955 and -2.611 at 1%, 5% and 10% of confidence levels respectively, and the p-value of 0.0015 is less than 0.05. It concludes that there is no unit root and the data is stationary at 1st difference.

4.4. Unit Root Test for Total Labor Force

```
. dfuller tlfD1

Dickey-Fuller test for unit root                   Number of obs   =        41

                                 ------------ Interpolated Dickey-Fuller ------------
                 Test         1% Critical       5% Critical      10% Critical
               Statistic           Value             Value            Value
------------------------------------------------------------------------------
 Z(t)            -3.445            -3.641            -2.955           -2.611
------------------------------------------------------------------------------
MacKinnon approximate p-value for Z(t) = 0.0095
```

Interpretation
The series of total labor force is also not stationary at the level, that's why a 1st difference of the series is taken and tested again using Dicky-Fuller test for unit root. The resulted test statistic value of -3.445 is greater than the critical values of -2.955 and -2.611 at 5% and 10% of confidence levels respectively, and the p-value of 0.0095 is less than 0.05. It concludes that there is no unit root and the data is stationary at 1st difference.

4.5. Unit Root Test for Oil prices

```
. dfuller opD1

Dickey-Fuller test for unit root                   Number of obs   =        41

                                 ------------ Interpolated Dickey-Fuller ------------
                 Test         1% Critical       5% Critical      10% Critical
               Statistic           Value             Value            Value
------------------------------------------------------------------------------
 Z(t)            -6.558            -3.641            -2.955           -2.611
------------------------------------------------------------------------------
MacKinnon approximate p-value for Z(t) = 0.0000
```

Interpretation
The series of oil prices is also not stationary at the level, that's why a 1st difference of the series is taken and tested again using Dicky-Fuller test for unit root. The resulted test statistic value of -6.558 is greater than the critical values of -3.641, -2.955 and -2.611 at 1%, 5% and 10% of confidence levels respectively, and the p-value of 0.0000 is less than 0.05. It concludes that there is no unit root and the data is stationary at 1st difference.

4.6. Pair Wise Regression

	lgdp	ltr	ltlf	lop
lgdp	1.0000			
ltr	0.7587	1.0000		
ltlf	0.8255	0.7834	1.0000	
lop	-0.1861	0.1819	-0.0864	1.0000

Interpretation
The spearman pair wise regression is applied to find out about the multicolinearity between the included variables. The result shows that there is a correlation between GDP and TR and TLF, between TR and TLF For

this, further tests are applied.

4.7. Auxiliary Regression Analysis for Multicolinearity

Source	SS	df	MS		
Model	16.7424036	2	8.3712018	Number of obs	43
Residual	8.4203871	40	.210509678	F(2, 40)	39.77
				Prob > F	0.0000
Total	25.1627907	42	.599114064	R-squared	0.6654
				Adj R-squared	0.6486
				Root MSE	.45881

ltr	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
ltlf	1.231307	.1409353	8.74	0.000	.9464666	1.516148
lop	.852109	.3247658	2.62	0.012	.1957328	1.508485
_cons	.4699262	1.233951	0.38	0.705	-2.023982	2.963835

Interpretation

The Auxiliary regression is being run for testing of Multicollinearity. It is a Klein Rule of Thumb that if the R^2 of Auxiliary regression is greater than the R^2 of overall model then there is the problem of Multicollinearity in the model. According to the computed results, the R^2 value of Auxiliary regression is 0.6654 which is less than the R^2 value of the overall regression which is 0.77. It concludes that there is no Multicollinearity problem in the model. And so all the t-values in the overall model are significant, which means that high R^2 does not matter in our model.

4.8. Co-integration Test

Johansen tests for cointegration

Trend: constant — Number of obs = 41
Sample: 1972 - 2012 — Lags = 2

maximum rank	parms	LL	eigenvalue	trace statistic	5% critical value
0	20	-2813.8062	.	89.5179	47.21
1	27	-2787.5812	0.72176	37.0679	29.68
2	32	-2775.0004	0.45865	11.9063*	15.41
3	35	-2771.6057	0.15261	5.1168	3.76
4	36	-2769.0473	0.11733		

Interpretation

Co-integration test is used to know about the long run association between dependent variable and all independent variables. Long run association is concluded on the basis of trace statistic and critical values. Here in our study the trace statistic values from rank 0 to 1 are greater than 5% critical values which conclude that there are two co-integrating equations in the model and long run association exist in the model.

5.1. Conclusions

In the past, numerous studies been conducted on the relationship of total revenue with GDP, the role of total labor force in the economy and the impact of oil prices on economic activities. All the previous studies concluded a significant positive impact of total revenue and total labor force on GDP. But the high oil prices volatility have negative impact on GDP most of the time.

In this study, it is concluded that total revenue has highly significant positive impact on GDP with significant t-statistic value of the coefficient in the regression analysis. It concludes that improvements in total revenue can greatly improve the GDP by enabling the economy to increase public expenditures.

According to the results, the total labor force has a significant positive impact on GDP. It shows that labor force participation is essential for the economic growth of the country.

The computed results of oil prices impact on GDP of Pakistan shows negative relationship with GDP

which is accord to most of the previous studies. It concludes that oil prices have negative impact on Pakistan's economy.

Co-integration test concludes that there is long run association of the variables and have significant role in affecting the GDP.

So it is concluded that total revenue, total labor force and oil prices are playing important role in economic growth of the country.

5.2. Implications of the research

The conducted study about different variables enables different economic sectors to look for the importance of these variables. The significance of total revenue contribution to the GDP can leads to changes and strong implication of means and ways of increasing the revenue collection from all sources and finding of new sources to generate revenues. The study also implied the improvement of labor force participation and highlighted the labor force role and great need for better and effective manpower planning in the country.

5.3. Recommendations of the study

- According to the study results that total revenue has highly significant positive impact on GDP. Therefore the fiscal policy makers should give great importance for the improvement of total revenue and should try to bring much needed changes in the revenue collection practices which will eventually leads to increase public expenditures for the development of different economic sectors.
- As the total revenue receipts are not on par with the developed countries. Therefore misconduct in the revenue department should be eliminated to increase total revenue.
- On the basis of results about total labor force, it is recommended that better manpower planning is required in order to increase the role and impact of labor force in the country.
- It is suggested that better entrepreneurship is needed for better labor division in the different sectors of the economy which will results in labor specialization and increase labor productivity.
- The participation rate of female labor force need great attention which can support the uplifting of impact of total labor force in the country.
- A check on oil prices hikes is also recommended as it leads to inflation and it negatively affects the domestic savings.

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