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Budget Deficit: A Dilemma of Pakistan's Economy

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ABSTRACT

The study has been carried out for investigating the effects of nominated independent variables on the budget deficit of Pakistan. For it, data has been collected for the period ranging from 1972 to 2019. ARDL Technique has been employed for carrying out the empirical analysis. The dependent variable is budget deficit; however, oil price hikes, work remittances, per capita income, corruption, and GDP deflator is marked as the independent variable. The fallouts of the empirical analysis reveal that there exists a direct association among the dependent and independent variables except for per capita income and work remittances as they are related indirectly.

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1. Introduction

For prospering of an economy, a healthy role is to be played by the macroeconomic indicators. In the case of Pakistan, the situation is a dismal one. Being the fifth populous is the race of global population; the Pakistan state is an agricultural-based with reviving the trade benefits with other economies of the world. Standing at fourth as the cotton producer and contributing in exporting major exports like cotton, fish, fruit, vegetables and import consumer goods and vegetable oil. A report by OEC World explores that Pakistan has exports of about $26.6B and imports of $52.8B respectively in 2019. For decades, budget deficit has remained a dilemma for the economy of Pakistan. Economic and political factors have played a role in worsening the situation more worst.

When moving towards GDP growth, it is also facing the doldrums of instability. Moreover, other challenges include crisis in the energy sector, unemployment, rising poverty, inflation, accelerating rate of illiteracy, rising fertility and mortality rate. The country is facing chaos due to these prevailing ills and thus fails to achieve the sustainable goals of development. Furthermore, the study comprises multiple objectives. It ensures the costs of debt burden and the effect of worker remittances on budget deficit. Additionally, it determines the impact of oil

prices on the budget deficit and estimates the causal association that exists among the indicators.

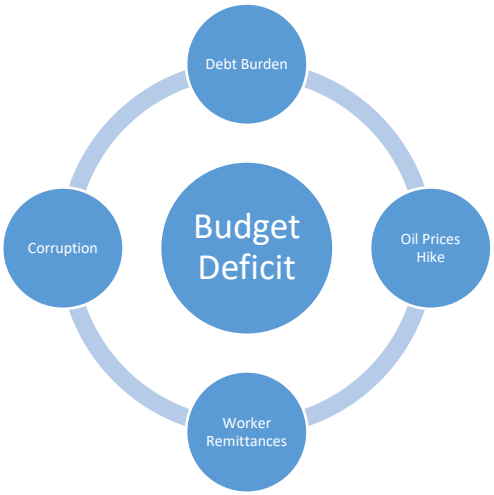

Figure 1: Relationship among Budget Deficit, Debt Burden, Corruption, worker Remittances and Oil Prices

These indicators are influencing the budget deficit robustly. The debt burden affects the budget deficit positively. It means that country is unable to meet its expenditures. Revenues are less than spending. The economy is borrowing both domestically as well as internationally. A large portion of the annual budget is spent on servicing of the debt. This leads again to the shortfall of budget for meeting the needs. Thus, it continues the chain each year with same pattern.

Insurgence in oil prices plays a crucial role in the budget deficit. It has a direct linkage with the budget deficit. The uprising in oil prices leads to an increase in general prices. Resultantly, it decreases the purchasing power parity of the consumers and makes them suffer and in severe cases of developing countries it widens the poverty gap. It makes the rich become richer and the poor to become poorer. It also creates crisis globally.

Consumption level decreases and ultimately aggregate demand falls. However, it results in budget deficit. Similarly, corruption leads to a budget deficit. It also plays a significant role to lead the budget deficit. Corruption, the abuse of power takes place when institutions are weak, there exists lack of accountability, political instability trails and a low level of coalition government exist. Resultantly, economic goals and targets are unable to achieve. It ultimately raises the budget deficit.

Worker remittances counter the budget deficit. An uprising in worker remittances decreases the budget deficit. Higher worker remittances mean foreign reserves are increasing and lower would lead the reserves to fall. More money would be added to the national account. However, it will decrease the budget deficit. All these variables are interlinked with each other and have consequences on the budget deficit. These macroeconomic indicators are influencing the budget deficit over the decades. Policymakers have introduced multiple policies to overcome the impact of these indicators, but due to political instability and weak coalition, they could not implement government policies. Every government centrally focuses on short-term policies, but no fruitful outcomes have received in long-term. These problems are mounting with every passing day.

2. Assessment of the Literature

Reed, Najarzadeh, and Sadati (2019) explored a relationship among budget deficit, government debt and current account deficit. The outcomes of his probe indicate that there exists a stable and long-term connotation between the aforementioned variables. It was investigated that mayhem was created due to extreme dependence on oil prices. Furthermore, Savage (2019) in his study shed light on a fact that the recession of 2008 led to the decline in expenditures. It was explored further that economic that social expenditures were depending on economic conditions. Further studies explored that economic activity can be influenced by a reduction in the budget deficit (Molocwa, Khamfula, & Cheteni, 2018). On discussing the political instability, the deficit-GDP ratio remains high during times of election (Ifere & Okoi, 2018). The results of a study indicate that labor productivity influences economic growth positively whereas there exists a negative correlation between economic growth and government budget (Arjomand, Emami, & Salimi, 2016). Roubini and Sachs (1989) discussed the political and economic determinants in the case of industrial democracies. They suggested that slow growth and larger deficits of budget can be tackled with effective political management. Additionally, for determining the level of inflation, the Asian countries should lay their focus on government expenditure, fiscal deficit, and monetary supply (Nguyen, 2015). The countries that are facing a dearth of development have deficits that are linked directly to inflation (Ishaq & Mohsin, 2015).

Then, the investment is overwhelmed by diverse changes where are positive results are obtained during the election (Klomp & De Haan, 2013). A study by Anwar and Ahmad (2012) determined a political choice affecting Pakistan's financial deficit. Political, financial, and institutional options provided by Javid, Arif, and Arif (2011) where the results show that the range of GDP price and sales is related to budget volatility. The political economic system and financial crisis were mentioned through (Eslava, 2011). Political choices for finances deficits also are discussed via Edin and Ohlsson (1991). Possibilities for re-election are being investigated through Brender and Drazen (2008) also mentioned that the economic crisis turned into contributing to financial boom.

A weaker fiscal scenario leads to enhance, rapid, or gradual fiscal adjustments with posed significant fiscal effects on the economy. The investigation by Alt and Lassen (2006) analyzed the aftermaths of political polarization and fiscal transparency. A pattern of electoral cycle is said to persist in countries with lower transparency however no such pattern exists in those with higher transparency levels. The political economy of financial institutions was investigated by Hagen (2005) and recommended that in order to sustain overall financial performance the names of institutional structures require more than one institutional solution to address political and constitutional instability. Financial and political choices have been studied with the help of De Haan and Sturm (1997). They revealed that neither government spending nor government debt is related to the index of R&S power dispersion.

The primary monetary influences of the price range deficit had been mentioned with the aid of Chaudhary and Shabbir (2005) in Pakistan's foreign area. They explored the effects of budget deficit posed on money supply, inflation, budget deficit, and foreign reserves. The decline in the highlighted variable plays a vital role in improving the balance of payments and it would enhance the level of economic prosperity. The liberalization of capital account disciplines budget deficit as investigated by Kim (2003). He explored the tightening of budget deficit by the government in case of being feared from free mobility of capital in the international market. The outcomes of the study reveal that even controlling the factors might result in the posing of the disciplinary effect of capital account liberalization on budget deficit. In the case of stable economies, the disciplinary effect was strong, and the case was the opposite in the case of countries with the same effect but weaker independence of the central bank.

A comparable evaluation of debt instability, debt collection, and price range deficits was performed through Bilquees (2003). Here, the main finances deficit is considered to be the main aspect in the finances deficit. Debt instability and debt accumulation were the factors that enhanced the deficit. So, reducing the latter the formers are deemed necessary to be handled carefully. On studying the economic and political determinants of budgetary consolidations, Mulas-Granados (2003) identified that effective coalitions, huge cabinets, near-about elections, and the leftist government played a positive role in accelerating the public expenditures and party's ideology is the most vital determinant among them all the determinants. In the case of developing industrial countries, the determinants of the current account have been explored by Chinn and Prasad (2003). The results of the study reveal that current account balances and the ratio of openness have a negative association in the case being discussed. Their association between current accounts and capital controls is missed in the case of an industrial country. Stabilization when competing with growth-oriented policy, the current account deficit declines significantly, and the saving-investment gap declines negatively (Bengali, Ahmed, & Hijazi, 2001).

With reference to the analysis of the monetary deficit at the diverse sides of Pakistan, Ishfaq, Chaudhary, and us Saqib (1999) stated that home economic belongings may be high by restructuring tax revenue, elevating growth costs, and tendencies. Production of manufacturing goods had a high impact. Hallerberg and Von Hagen (1999) compared multiple institutions and suggested that a strong finance minister can help achieve suitable ends with appropriate means. Research led by Chaudhary, Ahmad, and Siddiqui (1995) presents that inflation, money supply, and deficit is significant. Moreover, the price equation depicts that import price, lagged money supply and output are also significant. Additionally, another study by Shabbir, Ahmed, and Ali (1994) highlights that the coefficient estimates of a budget deficit is significant and positive. Effects of similar nature are posed on inflation. Foreign exchange reserves and bank credit affect money supply positively. The exchange rate and budget deficit of the government have been in sight by Burney, Akhtar, and Qadir (1992) where the latter has a significant, direct, and indirect impact on the price level whereas the former has impacts on the interest rate. The budget deficit affects real exchange rates directly and indirectly through the price level.

The interest charge and price range deficit have also been investigated with the aid of Burney, Yasmeen, and Niazi (1989). They discover that outstanding and full-size affects are posed by way of the expected inflation rate on a nominal interest price of Pakistan. The finances deficit on being financed through borrowing from the banking channel leads to augmented nominal interest fee, consumption expenditure, and private funding. The Ricardian method to budget deficit was explored with the collaboration of Barro (1987) wherein he has precipitated the damaging effects of budget deficit on a couple of variables which include modern-day account, monetary boom, saving, and real interest charge.

3. Data Source and Methodological Issues

In this study, secondary and time-series data from 1972-to 2019 has been taken from several resources which include the Government of Pakistan Economic Survey, the State Bank of Pakistan, IMF, World Development Indicator, and Handbook of Statistics. The dependent variable is the budget deficit. ARDL technique has been employed as variables are stationary at the first level of differences. A model is a mix of variables; therefore, it is specified in the Autoregressive Distributive Lag Model (ARDL). Moreover, for exploring the level and nature of association Pair-wise correlation is used. The analysis is based on multiple steps including the unit root test, co-integration, and criterion of lag selection. Lastly, ARDL is applied for determining the association between the dependent and independent variables.

$$BD = f(DB, WR, OPH, PCI, GDPD, CR) \quad (1)$$

$$LBD = \beta_0 + \beta_1 LDB + \beta_2 LWR + \beta_3 LOPH + \beta_4 LPCI + \beta_5 LGDPD + \beta_6 LCR + \varepsilon \quad (2)$$

We have used log-log model and equation 2 represents it. Where, BD expresses budget deficit which is the dependent variable in the given model. The independent variables are the independent ones and are a mixed order of integration.

Table 1
Variable's Depiction

Variable	Definition	Expected relation	Measurement unit
BD	Budget deficit	As Dependent variable	Million Rupees
DB	Debt Burden	Positive	Million Rupees
WR	Worker remittances	Negative	Million Rupees
OPH	Oil prices hike	Positive	Rupees
PCI	Per capita income	Negative	Million Rupees
GDPD	GDP deflator	Positive	Million Rupees
CR	Corruption	Positive	Score

The various collected variables are defined as follows:

- **A budget deficit (BD)** is faced by a country when government exceeds its expenditures from revenues. It represents the financial condition of an economy.

- **Debt Burden (DB)** Borrowing debt from external sources like IMF, World Bank Asian Development Bank, etc. as well as internal sources like Commercial Banks, etc. is called debt burden. It increases the budget deficit and is also one of the main factors behind the budget deficit.

- **Worker Remittances (WR)** are the payments led by individuals inhabiting and working abroad. People who are doing jobs in different countries send their salaries to their homes through a proper banking channel which is considered as worker remittances.

- **Oil Prices Hike (OPH)** is measured by taking into account the spot price of the standard crude oil. It is determined at the point where demand and supply equate with each other. It has direct impositions on the level of the budget deficit.

- **Per capita income (PCI)** measure of the income of an individual and purchasing power parity. It is measured by dividing the GDP of an economy over the total population residing in the country.

- **GDP deflator (GDPD)** highlights persisting inflation in the economy. A rise in general price results in inflation in the economy and resultantly budget deficit increases.

- **Corruption (CR)** is regarded as a core factor in the determination of budget deficit. It is the abuse and misuse of power for attaining personal benefits. It can be measured by Corruption Perception Index (CPI).

4. Outcomes and Debate

The descriptive statistics for some of the selected variables, are discussed in the below-mentioned table in which, 11.54 and 11.70 are average values and a budget deficit respectively. The skewness sign indicates that it was badly sentenced to a value of 0.18. Although, the amount of kurtosis indicates that it is platy-kurtic. The probability value of Jarque-Bera 0.35 means that

the null hypothesis will be accepted. However, data remains are often distributed. Medium and average credit load rates are 10.03 and 10.17 respectively. Platy-kurtic nature is characterized by a degree of kurtosis. The probability value is 0.16 indicating that the null hypothesis will be accepted means that the remnants of the data are usually distributed. Worker remittances have average and average values of 7.80 and 7.68 respectively. It is skewed negatively and has a value of 0.36. It is meso-kurtic. The null hypothesis will be accepted as the probability number is 0.58. Thus, data residues are often distributed. The rise in oil prices has averages between 3.29 and 3.30 respectively. The mark of skewness indicates that it was sentenced to a maximum of 0.59. It is leptokurtic. The odds ratio is 0.08 so the null hypothesis will be rejected, and data residues are rarely distributed. Per capita income has a median and average value of 9.68 and 9.69 respectively. It was badly sentenced to a value of 0.02. The amount of kurtosis indicates that it is platy-kurtic. A probability value of 0.27 indicates that the null hypothesis will be accepted. Residues of data are usually distributed. The GDP deflator has an average value of 5.16 and 5.06 respectively. The skewness indicates that it is positive with a value of 0.48. Although, the amount of kurtosis indicates that it is platy-kurtic. The probability value is 0.21 so the null hypothesis will be accepted and that the remnants of the data are often distributed. Corruption has an average of 4.10 and 3.84 respectively. It has positive skewed value of 0.13. The amount of kurtosis indicates that it is platy-kurtic. The probability value is 0.07 so its null hypothesis will be rejected. Residues of data are usually no longer distributed.

Table 2
Descriptive Statistics and the Nominated Variables

	DB	WR	OPH	PCI	GDPD	CR	BD
Mean	10.03	7.80	3.29	9.68	5.16	4.10	11.54
Median	10.17	7.68	3.30	9.69	5.06	3.84	11.70
Maximum	11.00	9.89	4.69	12.20	6.08	4.96	14.42
Minimum	8.15	4.69	0.59	6.76	4.60	3.17	8.02
Std.Dev	0.73	1.31	0.87	1.58	0.40	0.62	1.79
Skewness	-0.66	-0.36	-0.59	-0.02	0.48	0.13	-0.18
Kurtosis	2.83	3.00	4.03	1.86	2.22	1.41	0.04
Jarque-Bera	3.54	1.07	5.01	2.57	3.08	5.18	0.08
Probability	0.16	1.58	0.08	0.27	0.21	0.07	0.35
Sum	481.84	374.71	158.10	464.99	247.70	197.04	554.26
Sum Sq. Dev	25.23	81.46	35.60	118.05	7.90	18.42	151.08
Observations	48	48	48	48	48	48	48

Source: Authors own calculations

Table 3
Pair-wise Correlation Coefficient

	BD	DB	WR	OPH	PCI	GDPD	GDP
BD	1						
DB	0.97	1					
WR	0.86	0.90	1				
OPH	0.80	0.82	0.88	1			
PCI	0.98	0.97	0.88	0.80	1		
GDPD	0.28	0.27	0.11	-0.02	0.25	1	
CR	0.92	0.89	0.79	0.79	0.95	0.09	1

Source: Authors own calculations

The budget deficit has 97pc, 86pc, 80pc, 98pc, and 92pc strong and positive association with DB, WR, OPH, PCI, and CR respectively, however, a weaker with GPD. When it comes to the interdependency of DB with WR, OPH, PCI, and CR, it has a stronger and positive interdependence of about 90pc, 82pc, 97pc, and 89pc respectively, and a weak interdependence with GDPD of 27pc. Then, WR has 88pc, 88pc, and 79pc stronger and positive relation with OPH,

PCI, and CR respectively, however, 11pc with GDPD. Additionally, OPH has an 80pc strong interdependence with PCI and same with a percentage of about 79 with CR and a negative and weaker of 2pc with GDPD. In the case of PCI, a weaker association persists between PCI and GDPD and 95pc between PCI and CR. GDPD and CR have a positive and low interdependence of about 9pc.

Table 4: Long-Run ARDL Estimates

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DB	2.288	0.625	3.659	0.000
WR	-0.317	0.180	-1.752	0.088
OPR	0.682	0.269	2.537	0.015
PCI	-0.211	0.381	-0.554	0.582
GDPD	0.389	0.238	1.636	0.110
CR	0.642	0.515	1.247	0.220
C	-13.717	3.998	-3.430	0.001

Source: Authors own calculations

The above table highlights the long-run ARDL approximations of the budget deficit model. The products of co-integration divulge that in the long run, debt burden, oil prices hike, GDP deflator, and corruption are directly associated with the dependent variable whereas worker remittances and per capita income are linked indirectly.

First, the coefficient of debt burden is positively influencing the budget deficit and is significant statistically. An increase of 1pc in it would lead to a boost of 1pc in the Budget Deficit. Second, worker remittances have a significant but negative association with the dependent variable. An augment of 1pc in it would lead to a decline of 31pc in the dependent variable. Third, in the case of oil prices, there exists a positive and significant association between the dependent and independent variables. It means a 1pc rise in the latter would lead to an enhancement of 68pc in the former. Then, there persists a negative association between the two variables being handled and a positive between GDP deflator and corruption with a budget deficit. The thing that is common concerning the dependent variables with dependent is that the nature of the association is insignificant as can be predicted by their probability values. 1pc acceleration in PCI would lead to a decline of 21pc in the budget deficit and a rise of 38pc and 64pc in GDPD and CR respectively.

In reality, there exists a positive relationship between debt burden and budget deficit. This study proved it empirically and statistically. As the debt burden increases, we face a budget deficit. The major part of the budget is spent on paying the debt. The country is unable to meet its revenues and expenditures. Additionally, there is a negative relationship between budget deficit and worker remittances. It is proved empirically and statistically. The continuous flow of worker remittances would add up to the national account. The foreign reserves will increase. It will counter the budget deficit of any economy. Then, oil prices hike shows a direct linkage with the budget deficit. It is proved both statistically and empirically. An increase in oil prices leads extra amount on import of oil. However, the current account will be affected and resultantly it leads budget deficit. Furthermore, corruption also leads to a budget deficit and it is proved statistically and empirically. Selected economic targets like tax collection, documentation of the economy cannot be achieved due to corruption. Corruption also leads the political instability and weak institutional performance. Ultimately, it leads to a budget deficit. Moreover, a negative relationship prevails between per capita income and budget deficit. The increment in per capita income is the result of higher economic growth. Higher economic growth means the GDP of any economy is increasing. So, it will counter the budget deficit. Lastly, a positive relationship prevails between GDP deflator and budget deficit. GDP deflator leads the price level up so inflation generates in any economy. A small portion of the country's residents will enter the tax

net. The government will be unable to meet the targets of revenues. Low revenue means expenditures are greater. However, the budget deficit will increase.

Table 5
Short-Run Results of the Budget Deficit Model

Cointegrating Form				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
D(DB)	1.082	0.354	3.054	0.004
D(WR)	0.185	0.190	0.974	0.336
D(WR(-1))	-0.320	0.175	-1.830	0.075
D(OPR)	0.323	0.104	3.102	0.003
D(PCI)	-0.100	0.171	-0.584	0.562
D(GDPD)	0.184	0.111	1.646	0.108
D(CR)	0.304	0.232	1.306	0.199
CointEq(-1)	-0.473	0.115	-4.081	0.000

Source: Authors own calculations

In the short-run results of the deficit model, a direct relationship exists between debt burden and budget deficit. It points out that a rise in debt burden will lead to an augment in the budget deficit. Similarly, in the short run, the budget deficit has a direct association with GDP-deflator, worker-remittances, oil prices, and corruption. However, it is inversely related to the per capita income. The probability value in the case of debt burden depicts that the null hypothesis of t-statistics would be rejected, and it has a significant association with the dependent variable in the short run. The budget deficit has a statistically insignificant association with worker remittances, per capita income, and corruption in the short run. Their alternative hypothesis would be rejected as determined by the probability value of t-statistics. Furthermore, the dependent variable has a significant association with GDP deflator and oil prices.

The outcomes of short-run results further reveal that a 1pc rise in debt burden would lead the budget level to fall by 1.08pc. An enhance of 18pc, 32 pc, 18pc, and 30pc would be undergone in the dependent variable with a rise of 1pc in worker remittances, oil prices, GDP deflator, and corruption respectively. Conversely, there would be a decline of 10pc in budget deficit with the rise of pc in the per capita income.

For highlighting the long-run relationship, light is shed on the value of the error correction term. In the consulting study, the short run will converge with a speed of 47pc in two years towards the long run. A study carried out by Mierau, Jong-A-Pin, and De Haan (2007) points out that there exists stable relation between other variables and budget deficit.

Similar effects between inflation and budget deficits were presented by Molocwa et al. (2018). In order to identify economic recovery, it is considered to be a strong competitor to inflation (Mierau et al., 2007). There, the high debt situation and budget deficit are facing governments with weak indicators (Edin & Ohlsson, 1991). The high cost of debt repayment also affects the budget deficit (Roubini & Sachs, 1989). The positive impact is reflected in the discussed trend of inflation (Shabbir et al., 1994).

The budget deficit on decline improves the deficit of the balance of payment and leads the economy to prosper (Chaudhary & Shabbir, 2005) and for maintaining this level debt instability and burden are to be reduced (Bilquees, 2003). For doing so, an effective role is to be played by the institutions (Hallerberg & Von Hagen, 1999). Thus, the price level is affected significantly directly and indirectly by the government budget deficit (Burney et al., 1992).

5. Conclusion

The study has explored the impacts of debt burden, worker remittances, and oil prices on the budget deficit of Pakistan. The analysis is based on secondary and time-series data. The autoregressive Distributive Lag Model is employed as methodology. The study reveals that independent variables except per capita income and worker remittances have a direct association with a budget deficit in the long as well as short run. The study can further focus on finding the association of selected variables about various other including political instability, terrorism, and corruption. Moreover, focus can also be laid on crucial indicators of worker remittances that decline the budget deficit and raise the foreign reserves. The role of fiscal policy can also be enhanced in this perspective. Based on the outcomes, the government can adopt the following measures for minimizing the levels of the faced budget deficit:

- Tax reforms to be carried out.
- Selling of bonds domestically as well as internationally.
- Facilitating workers who are working abroad, for enhancing foreign reserves.
- Focusing more on documentation of economy.
- Effective launching of fiscal policies including contractionary and expansionary.
- Provide substitutes in the form of advanced automobiles for coping with the impacts of oil prices.

References

Alt, J. E., & Lassen, D. D. (2006). Transparency, political polarization, and political budget cycles in OECD countries. *American Journal of Political Science, 50*(3), 530-550. doi:https://doi.org/10.1111/j.1540-5907.2006.00200.x

Anwar, M., & Ahmad, M. (2012). *Political determinants of budget deficit in Pakistan: An empirical investigation*. Retrieved from Hamburg:

Arjomand, M., Emami, K., & Salimi, F. (2016). Growth and Productivity; the role of budget deficit in the MENA selected countries. *Procedia Economics and Finance, 36*, 345-352. doi:https://doi.org/10.1016/S2212-5671(16)30046-6

Barro, R. (1987). The Ricardian Approach to budget deficit? Henry Thornton Lecture. In. London: City University Business School.

Bengali, K., Ahmed, Q. M., & Hijazi, S. T. (2001). Stabilisation policy vs. growth-oriented policy: Implication for the Pakistan economy [with comments]. *The Pakistan Development Review, 40*(4), 453-466.

Bilquees, F. (2003). An analysis of budget deficits, debt accumulation, and debt instability. *The Pakistan Development Review, 42*(3), 177-195.

Brender, A., & Drazen, A. (2008). How do budget deficits and economic growth affect reelection prospects? Evidence from a large panel of countries. *American Economic Review, 98*(5), 2203-2220. doi:https://doi.org/10.1257/aer.98.5.2203

Burney, N. A., Akhtar, N., & Qadir, G. (1992). Government budget deficits and exchange rate determination: evidence from Pakistan [with Comments]. *The Pakistan Development Review, 31*(4), 871-882.

Burney, N. A., Yasmeen, A., & Niazi, M. K. (1989). Government budget deficits and interest rates: An empirical analysis for Pakistan [with Comments]. *The Pakistan Development Review, 28*(4), 971-980.

Chaudhary, M. A., Ahmad, N., & Siddiqui, R. (1995). Money Supply, Deficit, and Inflation in Pakistan [with Comments]. *The Pakistan Development Review, 34*(4), 945-956.

Chaudhary, M. A., & Shabbir, G. (2005). Macroeconomic impacts of budget deficit on Pakistan's foreign sector. *Pakistan economic and social review, 43*(2), 185-198.

Chinn, M. D., & Prasad, E. S. (2003). Medium-term determinants of current accounts in industrial and developing countries: an empirical exploration. *Journal of international economics, 59*(1), 47-76. doi:https://doi.org/10.1016/S0022-1996(02)00089-2

De Haan, J., & Sturm, J.-E. (1997). Political and economic determinants of OECD budget deficits and government expenditures: A reinvestigation. *European Journal of Political Economy, 13*(4), 739-750. doi:https://doi.org/10.1016/S0176-2680(97)00033-5

Edin, P.-A., & Ohlsson, H. (1991). Political determinants of budget deficits: Coalition effects versus minority effects. *European Economic Review, 35*(8), 1597-1603. doi:https://doi.org/10.1016/0014-2921(91)90021-A

Eslava, M. (2011). The political economy of fiscal deficits: a survey. *Journal of Economic Surveys, 25*(4), 645-673. doi:https://doi.org/10.1111/j.1467-6419.2010.00647.x

Hagen, J. v. (2005). Political economy of fiscal institutions. In *Oxford Handbook on Political Economy*.

Hallerberg, M., & Von Hagen, J. (1999). Electoral institutions, cabinet negotiations, and budget deficits in the European Union. *Fiscal institutions and fiscal performance, 1*, 209-232. doi:https://doi.org/10.7208/9780226676302

Ifere, E. O., & Okoi, O. B. (2018). Political economy of fiscal deficits in a democracy. *Economia, 19*(1), 12-23. doi:https://doi.org/10.1016/j.econ.2017.10.002

Ishaq, T., & Mohsin, H. M. (2015). Deficits and inflation; Are monetary and financial institutions worthy to consider or not? *Borsa Istanbul Review, 15*(3), 180-191. doi:https://doi.org/10.1016/j.bir.2015.03.002

Ishfaq, M., Chaudhary, M., & us Saqib, N. (1999). Fiscal Deficits and Debt Dimensions of Pakistan [with Comments]. *The Pakistan Development Review, 38*(4), 1067-1080.

Javid, A. Y., Arif, U., & Arif, A. (2011). Economic, political and institutional determinants of budget deficits volatility in selected Asian countries. *The Pakistan Development Review, 50*(4), 649-662.

Kim, W. (2003). Does capital account liberalization discipline budget deficit? *Review of International Economics, 11*(5), 830-844. doi:https://doi.org/10.1046/j.1467-9396.2003.00420.x

Klomp, J., & De Haan, J. (2013). Political budget cycles and election outcomes. *Public Choice, 157*(1), 245-267. doi:https://doi.org/10.1007/s11127-012-9943-y

Mierau, J. O., Jong-A-Pin, R., & De Haan, J. (2007). Do political variables affect fiscal policy adjustment decisions? New empirical evidence. *Public Choice, 133*(3), 297-319. doi:https://doi.org/10.1007/s11127-007-9189-2

Molocwa, G., Khamfula, Y., & Cheteni, P. (2018). Budget Deficits, Investment and Economic Growth: A Panel Cointegration Approach. Investment Management and Financial Innovations, 15 (3) 182-189. In.

Mulas-Granados, C. (2003). The political and economic determinants of budgetary consolidation in Europe. *European Political Economy Review, 1*(1), 015-039.

Nguyen, B. (2015). Effects of fiscal deficit and money M2 supply on inflation: Evidence from selected economies of Asia. *Journal of Economics, Finance and Administrative Science, 20*, 49-53.

Reed, M., Najarzadeh, R., & Sadati, S. Z. (2019). Analyzing the relationship between budget deficit, current account deficit, and government debt sustainability. *Journal of WEI Business and Economics, 8*(1), 20-31.

Roubini, N., & Sachs, J. D. (1989). Political and economic determinants of budget deficits in the industrial democracies. *European Economic Review, 33*(5), 903-933. doi:https://doi.org/10.1016/0014-2921(89)90002-0

Savage, L. (2019). The politics of social spending after the great recession: The return of partisan policy making. *Governance, 32*(1), 123-141. doi:https://doi.org/10.1111/gove.12354

Shabbir, T., Ahmed, A., & Ali, M. S. (1994). Are government budget deficits inflationary? evidence from pakistan [with comments]. *The Pakistan Development Review, 33*(4), 955-967.