



ECONOMIC MIX OF EXPENDITURE, TAXATION AND GROWTH: A CASE OF PAKISTAN

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ABSTRACT

The purpose of this research analysis is to look at the influence of government expenditure and taxation on Pakistan's economic expansion. The research paper used annual time-series data to investigate the economy of Pakistan from 1979 through 2020. The pooled OLS analysis approach was used to perform the data analysis. As a result, it is found that Government's non- development spending and overall taxation either direct taxes or indirect taxes have a statistically significant and positive impact on economic expansion in while development spending and increasing population has a negative influence on economic expansion, moreover, trade liberalization has statistically insignificant impact on economic growth. Furthermore, the policy implications for the impact of government taxation and expenditures on Pakistan's economic growth include the fact that if policymakers incorporate a policy of government



spending funds on the expansion of the real investment sector, Pakistan's economy will be highly benefited.

Keywords: *Overall Taxation, Overall Expenditure, Economic Growth, Pakistan.*

INTRODUCTION

The most relevant determinant of economic welfare is believed to be economic growth. In both theoretical and applied research, economic growth and its determinants have been of considerable significance over the last two decades (Gebreegziabher, 2018). Economic growth is a sustained expansion of output possibilities, calculated over a given period, usually one year, as an improvement in actual gross domestic product (Dash & Sharma, 2008). Also, economic growth is an important condition for economic progress and is viewed as the key priority of the different policies adopted by the government. The explanation is that economic growth is crucial in deciding the welfare of the society. By generating higher levels of jobs and reducing poverty in a region, economic growth will reduce unemployment by rising per capita income (Pudjihardjo et al., 2020). Therefore, in order for every nation to experience economic growth, diverse considerations need to be taken into account when enforcing policies that impact the lives of the people.

Furthermore, government expenditures and revenues are used in recent literature as the main monetary policy tools used to achieve economic growth and prosperity (Chen et al., 2020). Government expenditure is the government's accumulated money expended on government operations in a given period. Government activities are categorized into separate categorizations, each of which has two key headings: recurrent and capital expenditure (Mokoena et al., 2020). Government expenditure is used by the government, according to Juma et al. (2018), to: redistribute citizens' income in the region, raise money in circulation, provide more jobs, assign resources and control the economy of the nation. Hence, this study has aimed to explore the conclusive effects of government expenditure and taxation on the growth of economy of Pakistan.

Similarly, government spending is aimed at accelerating economic growth and development with the ultimate goal of transforming the country into a developed economy and raising people's living standards. The influence of government spending on economic development depends on what the government spends money on and how well the structural framework for handling spending functions to provide value for money (Hussain et al., 2017).



Likewise, in the growth of an economy, tax collections around the world play a crucial role; this also encouraged the implementation of value added tax on goods and services by several nations (Kareem et al., 2020). Taxing imposition and selection depend more on the economic system of a region, its economic structure, the growth process, the expansion of its service sector, the degree to which the nation has been industrialized, and its level of employment (Chan et al., 2017). Taxes thus influence the scale of government spending, the efficiency and level of corporate operations, the pattern of individual consumption, the tendency to save and spend, and the economy's growth path (Kalaš et al., 2017).

Pakistan is a developing country and, like all other developing nations, it is also trying to control its fiscal deficit by matching its revenues and expenditures. Since government revenues and government expenditures are closely related to economic growth, and poor control of those revenues and expenses has an adverse influence on Pakistan's economic growth (Rehman et al., 2020). This research aims to understand the effect of shifts in the sources of government revenue on Pakistan's expansion of economy. In spite of the attempts of numerous emerging and developing countries to introduce markets to the other nations, expansion of the economy and progress remain vulnerable to reservations about the advantages of relaxation in terms of trade (Mireku et al., 2017) and Pakistan is no special case. This has lead economist and academicians to a disagreement if economic growth is indeed promoted by trade openness (Duodu & Baidoo, 2020) . In spite of that, the effect of trade openness on economic development in Pakistan as well as other areas of the globe has been empirically investigated by academics. Some scholars report that openness to trade has a direct progressive effect on economic growth (Makun, 2017; Nketiah et al., 2019). While others argue that openness to trade has an adverse or insignificant effect on economic expansion (Akpan & Atan, 2016; Duodu & Baidoo, 2020). Such contradictory (inconclusive) findings thus appear to persist and thus call for more study to fill the knowledge gap.

Furthermore, tax is one of the key sources of government revenue, but this opportunity is not effectively exploited by any government as a way of producing income (Cyril et al., 2019). This research is therefore intended to explore the performance of taxation on Pakistan's economic growth for the period 1990-2020, with a view to adding to existing literature.

This study has provided several beneficial findings that would be helpful for their studies in the future like this research has provided several significant additions to the existing body of research works related to this topic. The research model applied in this study has provided a very detailed analysis of the financial market and the researchers can take help



from this model to prepare their study in the future. Further the literature reviews presented in this study would help the academicians to understand how the model works and they can analyze the findings more in detail by reviewing the past studies conducted in the same segment. Also the present study is based on Karachi, Pakistan and the researchers can use this model in their study on other regions too so that they can easily generalize the findings.

The practitioners, with the help of this study, would be able to identify the research model and can easily understand the significant relationship between the studied variables. Furthermore, they would understand how different and important factors act in the financial market of a developing nation that is Islamic republic of Pakistan in this study and particularly in the Karachi region. They can understand the market behavior and can utilize the findings of this study in their region as well. Further the study results would be helpful to develop and maintain some important policy implications and they can develop some important strategies that could be helpful to improve their financial stability.

Moreover, since our study has examine the tax revenue both direct and indirect and disaggregated indirect taxes in two categories and conducted time series analysis the practitioners will be guided by this study regarding the time series properties of each variables and its impact on economy growth. As this study is the most recent that empirically investigated the components of economic growth in developing country given intentional government measures by way of taxation.

The practitioners are provided help by which they can estimate the percentage of taxes that would be needed to identify the growth within economy for any emerging or developing country around the world.

The current paper has been developed based on five sections; the first is introduction based on background, problem statement, significance of the study; the second section will be based on theoretical background, and hypothesis development; the third section will be based on research design, sampling design, and data analysis technique; the fourth section will be based on results and findings and their discussions; the fifth section will be based on conclusion, policy implications, and future recommendations.

LITERATURE REVIEW

One of the main contributors in endogenous growth theory is Romer (1986) since this theory of endogenous growth is presented by him (Siddiqui, 2004). Besides, capital



accumulation and technology transfer the labor training and skill acquisition takes on a major part in economic expansion and growth and this whole process is controlled by the role of government expenditure, this complete concept is revealed by the Endogenous growth theory. The endogenous growth theory states that through training and skills of labor the ascending of technology transfer and development of the level of knowledge can be done. Similarly, it helps in emulation of domestic firms can also be done by the initiation of substitute management applications and organizational exhibition. Hence, by escalating total factor productivity with the help of perceived spread of technology and escalated competency through the improved marketing, managerial design, and superlative technology the proper implementation of government expenditure might lead to output growth (Borensztein et al., 1998; de Mello Jr, 1996, 1997; Lipsey et al., 1996).

Moreover, since government expenditure and taxation consist of a vital and principle role in developing countries as it helps them in development. Besides many reasons the main reason is that the host countries takes insight of advance technology and increases its employment levels with the help of transferring information characteristics (Bissoon, 2012). It is commonly believed by economists that taxation exerts pressure on domestic firms and at the same time makes market competitive by its new technologies and high standard managements (Hu & Jefferson, 2002). In addition to this, in developing countries the significant and positive influences within the labor managements, training opportunities and increase standard of the production function is associated by these variables. Besides, by technology transfer, it enhances the economies of the developing and emerging countries to upgrade and establish themselves by the benefits of technology spill over (Bauer, 1991; Easterly, 2008).

Considering the independence of Pakistan it exhibited on the map of globe after attaining freedom from India in 1947. From the time of independence till today the Islamic Republic of Economic instabilities and political challenges have always been a prominent issue for Pakistan. Since, according to a pre proportion agreement the country has not acquired reserves from the neighboring country India (Talat & Zeshan, 2013). The principle cause is the nonexistence of proper organized institution, such as Central Bank at that time After the demise of the founder of Pakistan Muhammad Ali Jinnah in 1948, Pakistan had many political and economic problems to resolve. Along with that it also had to tackle the issue on the effects of the war with India on its economy. (Cohen, 2013). Furthermore, from the day of independence the history of Pakistan is consists of two phase. The first phase is the “war phase” and this phase directed from 1947 to 1971 since this stage belonged to two substantial confrontations with India and the outcome were disastrous as Pakistan lost fifty percent of its resources by ending the borders with Bangladesh i.e. the East Pakistan. The following stage belonged to the year 1972 and



beyond. In this stage, Pakistan encountered again twin wars, terrorism situations and issues and highly political vulnerability (Siddiqui, 2004). Significantly, the Pakistan's economy was negatively influenced by the American-Afghan conflict and continuous political vulnerability. Likewise, testing of nuclear bombs which highly restricted the International trade has puts the economy of Pakistan at vulnerability and seriously damaged it. Therefore, the consequence of government spending and taxation on the economic expansion of Pakistan from different approaches fluctuates since all this time the inflow of fiscal policy sharply went up and down at the amount of per year (Iqbal & Zahid, 1998). Due to inexplicable results from further studies the main aim of this study is to observe government expenditure and taxation impact on the extension of the economy (Pesaran et al., 2001).

HYPOTHESIS DEVELOPMENT

Relationship between taxation and economic growth

The basic concept of taxation refers to the process in which Government gathers tax money from the public for the services provided to the public (Schwerhoff et al., 2020). Besides, taxation plays an important role in developing the country's economy as it is based on the money that provides different expenditures or services to the public. According to Milasi and Waldmann (2018) taxation has been found having a significant effect on economic growth as it leads towards having a better economy and providing effective public services as well. Also, Wasylenko (1997) stated that when there is low tax rates in a country than it can leads towards better and developed economic growth as it can help in increasing the economic conditions of the people. Hence, this research has hypothesized that:

H1a: Overall tax has a positive effect on economic growth.

The direct tax consists of such tax that is paid by the people directly to an entity or Government for different elements that includes property tax and asset tax (Avenancio-León & Howard, 2019). According to Đurović-Todorović et al. (2019) direct tax has been found having a positive effect on economic growth as it provides an increase in Government money for and eventually gives higher economy. Besides, there has been a high debate that direct taxation should be given high priority and importance for the positive development of the economic growth (Ahmad et al., 2018). Therefore, this research has hypothesized that:

H1b: Direct tax has a positive effect on economic growth.



The indirect tax refers to such tax that can be collected by different individual varying time-to-time and is based on entertainment, sales and excise taxes (Samantara, 2020). According to Baiardi et al. (2019) indirect taxation can provide positive effects in the economic growth as it helps the country in providing better services towards their citizens. Also, indirect tax has been a positive factor of economic growth because it leads to the process in which people pays taxes on the products that has been used (Egbunike et al., 2018). According to McNabb (2018) indirect tax can be a relatively more positive factor towards economic growth as compared with the direct tax. However, de Almeida and de Mendonça (2019) stated that indirect tax has been a negative factor towards economic growth as it can leads towards achieving high taxes through different entertainment and sales taxes. Hence, this research has hypothesized that:

H1c: Indirect tax has a positive effect on economic growth.

Relationship between government expenditure and economic growth

The basic concept of Government expenditure refers to the services and goods provided by the public sector to their citizens that include education, healthcare and protection as well (Lewis, 2019). According to Dudzevičiūtė et al. (2018) overall government expenditure has been a positive factor towards economic growth as both development and non-development expenditures are necessary for the economic growth. Besides, when government increases their investments in the overall scenario of the services to the people than it can help in positively affecting the economic conditions of the country (Lee et al., 2019). Therefore, this research has hypothesized that:

H2a: Overall expenditure has a positive effect on economic growth.

The development expenditure refers to investing and developing in such aspects that can increase the real income of the country (Kuntari et al., 2019). Like, Adedoyin et al. (2020) stated that development expenditure has been a positive factor towards the development of economy. According to Choi and Yi (2018) the presence of development expenditure can help in positively affecting their economy as an enhanced industrialization creates real income in the country. Besides, Paul and Furahisha (2017) also identified a positive relationship between development expenditure and economic growth as it can positively increase the real income and industrialization of the country. So, this research has hypothesized that:

H2b: Development expenditure has a positive effect on economic growth.



The non-development expenditures are those that cannot create direct development in the economy that includes defense and tax collection expenditures (Richard et al., 2020). Besides, non-development expenditure has been found having a positive effect on the economic growth (Seshaiah et al., 2018). According to Gupta (2017) non-development expenditure can be a positive factor towards economic growth as it provides salaries, interest payment and wages. However, (Gupta, 2017; Kanwal, 2017) stated that non-development expenditure has been a negative factor towards economic growth and it should be curbed for better and adequate growth of the economy. Hence, this research has hypothesized that:

H2c: Non-development expenditure has a positive effect on economic growth.

METHODOLOGY

Study Design

The research approach has been based on two types named as deductive and inductive approach. The deductive approach has been identified as an approach that involves the process of examining the theory and develop hypothesis through it (Kothari, 2004). The presence of deductive approach in a research can effectively help in generating logic-based results. Similarly, this approach consists of reasoning from different statements to statements to build a relatively more effective logical conclusion (Blessing & Chakrabarti, 2009). Hence, deductive approach had been applied in this research as it helped the researcher to generate quantifiable results and can generalize the results as well.

The research choice has been based on two types named as quantitative and qualitative. The quantitative choice refers to statistical data that can be gathered through questionnaire or using secondary sources (Bahari, 2010). The quantitative choice further can be explained as a systematic process through which the researcher can conduct data collection in a relatively more effective and efficient way (Saunders et al., 2009). Besides, Backhouse et al. (1997) stated that use of quantitative choice has been highly implemented in economics researches and it can be relatively more essential in generating useful results. Therefore, quantitative choice had been used in this research as it helped the researcher in conducting the economic research in an effective and efficient way and generated generalized results as well.

The research design is based on two types named as experimental and non-experimental design. However, correlational design refers to a non-experimental one in which the



relationship between the variables can be examined in a natural setting (Sekaran & Bougie, 2010). In addition, Angrist and Pischke (2010) identified that using effective research design is highly necessary and essential for generating credible results for revolution in empirical economics. Similarly, research design should be chosen appropriately so that it can help in creating beneficial results as well. Hence, correlational design had been applied in this research as it helped in examining the relationships in natural environment without having any manipulative factors.

Sample and Population

The current research has focused on Pakistan economy during the period from the years 1979 to the year 2020 based on annual time-series data.

Model Specification

The study has estimated the following function equation while different combinations have been estimated for final analysis that has been explained as follows.

$$GDP = f (GE, DE, NDE, OT, DT, IDT, POP, TO)$$

The above function equation has denoted economic growth of Pakistan as GDP, overall expenditure as GE, development expenditure as DE, non-development expenditure as NDE, overall taxation as OT, direct taxation as DT, indirect taxation as IDT, population growth as POP and trade openness or trade liberalization as TO. However, *Model 1* estimated the effect of overall government expenditure, overall taxation, population, and trade liberalization on economic expansion of Pakistan. *Model 2* estimated development expenditure, overall taxation, population, and liberalization on economic expansion of Pakistan. *Model 3* estimated non-dependent expenditure, overall taxation, population, and trade liberalization on economic expansion of Pakistan. *Model 4* estimated overall government expenditure, direct taxation, population, and trade liberalization at economic expansion of Pakistan. *Model 5* estimated development expenditure, direct taxation, population, and trade liberalization on economic expansion of Pakistan. *Model 6* estimated non-development expenditure, direct taxation, population, and trade liberalization on economic expansion of Pakistan. *Model 7* estimated overall government expenditure, indirect taxation, population, and trade openness on economic expansion of Pakistan. *Model 8* estimated development expenditure, indirect taxation, population, and trade openness on economic expansion of Pakistan. *Model 9* estimated non-development expenditure, indirect taxation, population, and trade liberalization on economic expansion of Pakistan.



STATISTICAL ANALYSIS

The unit root analysis examines the time series data and identifies the presence of non-stationary variable through it. Besides, augmented Dicky-Fuller can be used in unit root to examine the null hypothesis and identify the presence of unit root (non-stationary) (Cheung & Lai, 1995). In addition, Johansen co-integration test can be identified as an analysis that can help in identifying the presence of three or more time series are co-integrated. Also, it helps in identifying and measuring the validity of these relationships through using estimates of maximum likelihood approach (Dwyer, 2015).

Moreover, OLS analysis refers to test the presence of unknown parameters in regression model and identify the minimum variance and unbiased mean as well. Also, it simply examines the relationship between two variables (Zhang et al., 2016). Besides, heteroscedasticity can be used in OLS analysis for examining the standard deviations of the dependent variable through using different values in the independent variables with different time periods as well (Cook & Weisberg, 1983). In addition, another OLS assumption is multicollinearity that examines the relationship between two variables in multiple regression and identifies their linear relationship (Daoud, 2017).

DATA ANALYSIS

Descriptive statistics

The following table 1 has showed the results of descriptive statistics.

Table 1: Descriptive Statistics

Variables	Mean	Std. Dev.	Min.	Max.	Obs.
Economic Growth	12.767	0.233	12.306	13.123	42
Government Expenditure	5.674	0.633	4.475	6.575	42
Overall Tax	5.538	0.673	4.371	6.585	42
Population Growth	2.632	0.458	2.029	3.364	42
Trade Openness	0.325	0.035	0.253	0.385	42
Development Expenditure	4.684	0.783	3.664	5.945	42
Direct Tax	4.973	0.815	3.535	6.187	42
Indirect Tax	5.384	0.619	4.302	6.377	42
Non-Development Expenditure	5.614	0.615	4.402	6.460	42



The above table has showed that economic growth has a mean value (12.767), standard deviation (0.233), minimum value of (12.306), maximum value of (13.123) and 42 observations. The government expenditure has a mean value (5.674), standard deviation (0.633), and minimum value (4.475), maximum value (6.575) and 42 observations. The overall tax has a mean value of (5.538), standard deviation (0.673), and minimum value (4.371), maximum value (6.585) and 42 observations. The population growth has a mean value od (2.632), standard deviation (0.458), minimum value (2.029), maximum value (3.364) and 42 observations. The trade openness has a mean value (0.325), standard deviation (0.035), and minimum value (0.253), maximum value (0.385) and 42 observations. The development expenditure has a mean value (4.684), standard deviation (0.783), and minimum value (3.664), maximum value (5.945) and 42 observations. The direct tax has a mean value (4.973), standard deviation (0.815), and minimum value (3.535), maximum value (6.187) and 42 observations. The indirect tax has a mean value (5.384), standard deviation (0.619), and minimum value (4.302), maximum value (6.377) and 42 observations. The non-development expenditure has a mean value (5.614), standard deviation (0.615), and minimum value (4.402), maximum value (6.460) and 42 observations.

Stationarity Analysis

The study has used Augmented Dickey and Fuller (1979) technique (i.e., ADF statistics) to test the stationarity in the series. The null hypothesis of stationarity test was there is no unit root in the series and the estimation was based on 5 percent statistical significance.

Table 2: Unit Root Analysis

Variables	C		C & T	
	<u>I(0)</u>	<u>I(1)</u>	<u>I(0)</u>	<u>I(1)</u>
Government Expenditure	-2.190	-5.634*	-0.912	-4.346*
Development Expenditure	-0.431	-5.466*	-2.015	-5.401*
Non-Development Expenditure	-2.434	-3.913*	-0.345	-6.257*
Overall Tax	-1.655	-4.136*	-1.342	-4.212*
Direct Tax	-0.735	-3.813*	-2.172	-3.809*
Indirect Tax	-1.373	-5.805*	-2.307	-5.831*
Population Growth	-1.491	-4.690*	0.496	-4.759*
Trade Openness	-2.135	-6.979*	-2.826	-6.891*
Economic Growth	-1.929	-1.663	-0.891	-2.377

* Stationarity was manifested based on the *t*-Statistics less than 3.29.



The above showed that all series were found statistically insignificant at level ($t < 3.29$) in constant (C) and constant with trend (C&T) accepting the null hypothesis of no unit root in the series. However, all series have found statistically significant at first difference ($t > 3.29$) manifesting the presence of unit root and therefore, series were found stationarity at first difference.

OLS ANALYSIS

Table 3 indicates the result of OLS analysis for hypothesis-testing while the findings for each model have been discussed below.

In *model 1*, government expenditure and overall taxation have statistically significant and positive effect on economic growth. However, population growth, and trade openness have no significant influence on economic growth of Pakistan.

In *model 2*, development expenditure has statistically significant and negative effect on economic growth while overall taxation has statistically significant and positive effect on economic growth of Pakistan. However, population growth has statistically significant and negative while trade openness has no significant effect on economic growth of Pakistan.

In *model 3*, non-development expenditure and overall taxation have statistically significant and positive effect on economic growth of Pakistan. On the contrary, population growth and trade openness have no effect on economic growth of Pakistan.

In *model 4*, overall government expenditure and direct taxation have statistically significant and positive on economic growth of Pakistan. Conversely, population growth and trade openness have insignificant effect on economic growth of Pakistan.

In *model 5*, development expenditure has statistically insignificant effect on economic growth, while direct taxation has statistically significant and positive effect on economic growth of Pakistan. Nevertheless, population growth has statistically significant and negative effect on economic growth, whereas trade openness has insignificant effect on economic growth of Pakistan.

In *model 6*, non-development expenditure and direct taxation have statistically significant and positive effect on economic growth of Pakistan while population growth and trade openness have insignificant effect on economic growth of Pakistan.



In *model 7*, overall government expenditure and indirect taxation have statistically significant and positive effect on economic growth of Pakistan. Conversely, population growth and trade openness have insignificant effect on economic growth of Pakistan.

In *model 8*, development expenditure has negatively significant effect on economic growth while indirect taxation has statistically significant and positive effect on economic growth of Pakistan. Contrarily, population growth has statistically significant and negative effect on economic growth, whereas trade openness has insignificant effect on economic growth of Pakistan.

In *model 9*, non-development expenditure and indirect taxation have positively significant effect on economic growth of Pakistan, whereas population growth and trade openness have negatively insignificant effect on economic growth of Pakistan.

Furthermore, it is also noted that indirect taxes have more influence on economic growth as compared to other variable.

Table 3: Hypothesis-Testing using OLS Analysis

Independent Variables	Dependent Variable: Economic Growth								
	1	2	3	4	5	6	7	8	9
Government Expenditure	0.124**			0.162**			0.123**		
Development Expenditure		-0.039*			0.009			-0.050**	
Non-Development Expenditure			0.110**			0.128**			0.113***
Overall Tax	0.207***	0.336***	0.225***						
Direct Tax				0.128***	0.215***	0.150***			
Indirect Tax							0.234***	0.382***	0.250***
Population Growth	-0.034	-0.085*	-0.032	-0.056	-0.116*	-0.069	-0.024	-0.081*	-0.020
Trade Openness	-0.008	0.185	-0.016	-0.056	0.125	-0.046	-0.009	0.189	-0.023
R-Square	0.990	0.989	0.991	0.987	0.982	0.986	0.992	0.991	0.993
Adjusted R-Square	0.989	0.988	0.990	0.986	0.980	0.985	0.991	0.990	0.992
F-Statistics	940.11***	830.00***	994.94***	702.76***	504.32***	661.91***	1142.32***	1052.77***	1262.07***

*** Prob. < 0.001; ** Prob. < 0.01; * Prob. < 0.05. Otherwise, the relationship between variables found insignificant statistically.



DISCUSSIONS

Government expenditure and overall taxation has conferred to have a statistically significant and positive effect on economic growth of Pakistan. Likewise, Shafuda and De (2020) have concluded that there is a significant and positive association between overall government expenditure and economic growth in Namibia. However, Dudzevičiūtė et al. (2018) have establish a negative significant relationship between overall government expenditure and economic growth of European union countries Furthermore, a previous study has found a positively insignificant affiliation between overall government expenditure and the economic growth in Nigeria (Iheanacho, 2016). However, another study has found a negatively insignificant association between overall government expenditure and economic growth of Northeastern countries (Hassan & Mishra, 2017).

Overall tax revenue has conferred to have statistically significant and positive cause on economic growth of Pakistan. Likewise, Babatunde et al. (2017) have found a positive significant relationship between overall tax revenue and economic growth in Africa. However, Baiardi et al. (2019) has found a negative significant relationship between overall tax revenue and economic growth of OECD countries. According to Yahaya (2019) has found a positively insignificant relationship between overall tax revenue and economic growth in Nigeria. A previous study has found a negatively insignificant relationship between overall tax revenue and economic growth in Nigeria (Abomaye-Nimenibo et al., 2018).

Development expenditures have determined to vie a negatively significant effect on the economic growth of Pakistan. However, Hajamini and Falahi (2014) have found a negatively significant relationship between development expenditure and economic growth of low middle income and low-income countries. Hussin et al. (2012) have found a positive significant relationship between development expenditure and economic growth in Malaysia. According to Durusu-Ciftci et al. (2017) have found a positive significant relationship between development expenditure and economic growth in Turkey. A previous study has found a negatively insignificant association between development expenditure and economic growth in Nigeria (Nworji et al., 2012).

Non-development expenditure has determined to have a significant and direct effect on the economic growth of Pakistan. Sessaiah et al. (2018) have found a significant and positive association between non-development expenditure and economic growth in India. However, Madni (2013) has found a insignificant relationship between non-development expenditure and economic growth in Pakistan. According to Adams (2020)



there is a significant and negative association between non-development expenditure and economic growth in African and Asian countries (Nirola & Sahu, 2019). However, according to, Nirola and Sahu (2019) output there is a significant and negative association between non-development expenditure and economic growth in India.

Direct tax has been determined to attribute a significant and positive cause on the economic growth of Pakistan. Babatunde et al. (2017) have identified a significant and positive link between direct tax and economic growth in Africa. However, Baiardi et al. (2019) have recognized a significant and negative connection between direct tax and economic growth of OECD countries. Ogundana et al. (2017) have explored insignificant relationship between direct tax and economic growth in Nigeria. A previous study by (Muduli & Manik, 2020) has explored insignificant relationship between direct tax and economic growth in India.

Indirect tax has attributed a India (Muduli & Manik, 2020) positively significant effect on economic growth of Pakistan. Ogundana et al. (2017) have identified a significant and positive association between Indirect tax and economic growth in Nigeria. However, Munir and Sultan (2018) have concluded insignificant relationship between indirect tax and economic growth in Pakistan. Ahmad et al. (2018) have concluded a significant and negative affiliation between Indirect tax and economic growth in Pakistan. A previous study (Ogundana et al., 2017) has concluded insignificant relationship between Indirect tax and economic growth of sub-Saharan African countries.

Population growth has attributed the relation to be negatively insignificant in terms of effect on economic growth of Pakistan. According to Mamo (2012) has explored insignificant relationship between population growth and economic growth in Sweden. Ogunleye et al. (2018) have discovered a significant and positive association between population growth and economic growth in Nigeria. However, according to Rehman (2019) there is a statistically significant and negative association between population growth and economic growth in Pakistan. Moreover in previous study (Wu et al., 2019) have recognized insignificant relationship between population growth and economic growth in China.

CONCLUSION AND IMPLICATIONS

Conclusion

This research identifies the factors affecting the government expenditure and taxation on economic growth of Pakistan. The study is conducted with non-experimental design in



the context of correlation design. The relationships of the variables are conferred in a natural setting. The sample population for this study is based on Pakistan's economy from 1979 to 2020. The data is determined to be in annual time series.

Furthermore, the analysis examined through unit root analysis determines the variance of non-stationary variables corresponded in the study. Moreover the prior analysis is conserved through OLS- analysis that is determined for hypothesis testing. Overall government expenditure and economic growth has been determined to be positively significant, while the effect on economic growth comprised by population growth and trade openness is comprised with no effect. Moreover the consequential effect of development expenditure has been determined to be significantly negative over the economic growth of Pakistan. Positively significant effect has also been determined with the variance of non-developmental expenditure and taxation (overall). Conversely the effect varied by population growth and trade openness is conversed to be negatively significant biased on the economic growth of Pakistan. Additionally the study found that non-development expenditure has conversed with indirect taxation that vies the statistically significant and positive cause on economic growth of Pakistan.

POLICY IMPLICATIONS

The policy implication for the impact of government taxation and expenditures on the economic growth of Pakistan includes that if the policy makers add the policy of government spending funds on the growth of real investment sector there is a greater chance that the economy of Pakistan will be greatly benefit from it. Considering the investments by the government it is advised that the sectors especially the growth-enhancing sectors that carried out growth activities should be invested, accordingly. Moreover, it should be added in the policy to provide investment for activities like domestic public funding that crowds-in private investment such as targeted economic infrastructure development.

The policy makers should look in to the matter where government should spend funds on social capital expenditure such as health, housing, and welfare which will certainly affect the economy of Pakistan in long term. It is also advisable to invest on capital infrastructure which will eventually positively influence the real growth; similarly the government should spend directly on productive capital expenditures also since it has influence of real growth as well.

Moreover, it is implicated to the policy makers to observe the relationship between economic growth and government expenditure since the government should supply



financial funds to trade accessibility and investment/ inflation public spending this will positively effects the economic growth. As investment has a significant and positive bearing on economic growth the government is advised to promote investments on trade openness.

Furthermore, the government is advised to ensure that the share of recurrent expenditure in total expenditures is kept within a reasonable proportion by preventing all leakages and wastage in public financing within the country. As a result, some significant initiatives should be taken, such as merging several public agencies with comparable functions and reviewing the excessive emoluments granted to political public officers, among other things, in order to reduce the enormous expense of government.

In addition, in order to increase the economy of Pakistan, it is necessary to adequately harness the expected returns of public capital spending in the economy. To achieve this, policymakers are advised to ensure that the government is decisive and transparent in its fight against financial corruption and diversion of public funds, particularly those allocated for the execution of projects. Furthermore, it is advised to the government that debts should not be taken for the sole purpose of financing recurrent expenditures, as public debts cause recurrent expenditures in Pakistan and will almost certainly result in the economy collapsing.

Given the importance of tax revenues to the Pakistani economy, it is recommended that economic efficiency be prioritized over political determination when determining new outlays. It is therefore advised that the country urgently requires an expenditure reform curriculum in which comprehensive cost benefit analyses for government expenditures are conducted, as well as analyses of adopting the optimal approach for gradual shifting and reformation. Since setting targets for tax collections and revenue utilization will be economically efficient.

LIMITATIONS OF THE STUDY

Though this study has included a detailed analysis of economic growth and has covered a detailed model to present the research findings and the relationship between variables. However like all other studies, this one also has certain limitations that should be considered in future studies. The first and most important thing is that this study has included data only from one country that is Pakistan. Secondly, the research model also included limited variables that could have been expanded based on the findings and models utilized in previous studies. Furthermore, this research is only based on a particular theory i.e. endogenous growth theory, but there may be several other variables



that have not been taken into consideration. It would be important if future studies might integrate the some other theories for the same reason of studying growth factors. Also, study is solely rely on the secondary data which also limits the findings. Additionally, the study has covered the data from the period of 1979-2020 only.

FUTURE RESEARCH DIRECTIONS

The current research has faced some limitations during the research and it should be identified properly so that the future researches can be effectively conducted. The future researches should be examined or studied based on the data from different countries and includes the panel data. Also, future researches should work on including some other variable as well like human capital, FDI and health and safety. Besides, future researches should also use different theories for studying the concepts of the variables and not only rely on the endogenous theory. The future researches should also study on the primary data and even qualitative that can be gathered from the people specific to the industry. Similarly, the future researches should also work on including more years in the dataset that can enhance the significance and implications of the results as well.

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