Determinants of Private Investment in Pakistan: Empirical Investigation

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Abstract

The study investigates the relationship between private investments in Pakistan and the three key determinants of interest rate, exchange rate, and political instability. Using secondary data from January 2011 to 2015, the quantitative method is used, and the regression analysis is used to assess the impact of these variables on private sector investment. The finding reveals that high interest rates negatively affect private investments by increasing borrowing costs, while favourable exchange rates boost investments by promoting exports. However, exchange rate volatility creates uncertainty, deterring long-term investment decisions. Political instability is identified as a significant deterrent. As it fosters economic uncertainty, discouraging both domestic and foreign investors. The study offers valuable insights for policymakers on promoting a more macroeconomic environment to enhance private investments, which is crucial for Pakistan's economy..

Keywords: ***IPrivate investments, interest rate, exchange rate, and political instability***

JEL Classification: E22, F31, G18, P16

INTRODUCTION

Background of the study

In Pakistan, interest rates significantly impact private investments. When these rates go up, the cost of borrowing also increases, deterring companies from securing loans for investments. Research findings affirm the link between high interest rates and decreased private investment, suggesting that when interest rates drop, investments are bolstered due to capital becoming less costly. Conversely, inflated interest rates discourage investment by escalating borrowing costs and shrinking profit scope (A. Ali, 2023)

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Fluctuations in exchange rates also hold considerable sway over private investment. If the Pakistani rupee depreciates, it can boost investment by raising the competitiveness of local goods in foreign markets and restricting imports, spurring domestic production. Research endorses the positive correlation between exchange rates and private investment in Pakistan, indicating an export-focused growth strategy at work. However, unpredictability in exchange rates creates roadblocks for solid investment strategies due to the uncertainty it creates; it hampers businesses' ability to plan and project profits effectively (A. Khan & Ejaz, 2023)

Political stability is another element shaping private investment trends in Pakistan. When political ambiguity overshadows market conditions, it leads to lower investment levels by escalating the possibility of policy shifts or disruptions harmful to business processes. This environment is a deterrent for offshore and local investors who do not wish to risk significant capital during such volatile times. Although state-led investments and variable aspects like trade liberalization have some potential to mitigate this impact, the existing political environment often dictates the course of private investments (Batool & Goldmann, 2021)

Private capital is vital for propelling economic expansion and progress in Pakistan. Given multiple economic hurdles, understanding what drives private investment is increasingly important. Elements such as interest rates, exchange rates, and unrest combine to define the canvas of investment.

Interest rates are notable because they affect borrowing costs. High rates can discourage investment by elevating the price of finance, while diminished rates can stimulate commercial growth and infuse capital into fresh ventures (N. Ali et al., 2022; Khan & Ahmed, 2021). The State Bank of Pakistan shapes these rates through its monetary policy decisions, thus crafting the backdrop for investors and the economy alike.

Exchange rates hold significant importance, especially in an economy largely dependent on importing raw materials and capital goods. Exchange rate changes can impact the return on investments, especially for overseas investors. Constant currency generally promotes a good investment atmosphere while instability can spark doubt and risk avoidance in investors (N. Ali et al., 2022).

Political turmoil greatly impacts private investment in Pakistan. Frequent government shifts, inconsistent policies, and security issues can result in a volatile environment discouraging investing. Studies indicate a positive relationship between political stability and investment rates; nations with consistent governments tend to draw more foreign direct investment (FDI) (Dewick et al., 2020)

Due to the importance of private investment, every government aims its policies to promote investment and growth. Government policies have a direct impact on private investment. For example, one factor that crowds out private investment is what sources the government selects to finance public sector expenditure. If public expenditure is financed by increasing taxes, then it may obstruct private sector investment, and on the other hand, it may increase interest rates and reduce credit availability for private investors if the government finances its public expenditure from market borrowing. When the government finances budget deficits through borrowing from the market or selling its bonds in the market, it also crowds out private investment because it increases demand for money and interest rates, and thus, the increased interest rates decline private investment in the economy. Therefore, it is crucial for the government to determine what factors are most significant in improving the net inflow of private investment in the economy. (Salman & Ahmad, 2014)

Considering the importance of private investment for the economy, the question arises: what are the factors that private investor takes into account before making an investment? As per the theory, the Business motivation and incentive behind any investment is profit only, i.e., a business will invest only where there is a profit incentive, whereas according to another theory, the business will invest as long as the increase in the value of their shares is higher than the increase in the replacement cost of their physical assets.

Scope of the study

This exploration investigates the impact that interest rates, exchange rates, and volatility have on private investment within Pakistan. With a well-defined time frame from January 2011 to July 2015, it relies on quantitative techniques to evaluate the way significant economic and political elements affect investment decisions. Concentration on such variables strives to shed light on their importance in sculpting private investment patterns, all condensed within Pakistan's financial reality. However, comprehensive parameters such as inflation and taxes are outside the purview of this specific investigation.

Objectives of the study

The objective is to identify important determinants of private investment in Pakistan and their contribution to private investment.

Statement of the problem

This study intends to find out the determinants of private investment in Pakistan.

Hypotheses

H1: Interest rates have no impact on private investment

H2: Exchange rates have no impact on private investment

H3: Political instability has no impact on private investment

LITERATURE REVIEW

Interest rates are generally considered a vital factor influencing individual investment. Many believe that a high interest rate discourages investment as the cost of borrowing increases. This is especially true in Pakistan, where businesses often rely on credit. Historical data has shown that high rates can slow down private investment and this matches standard economic theories but conflicts with McKinnon-Shaw's assumption about developing economies like Pakistan. (Suleman et al., 2020)

Although the relationship can be complicated, currency rates also play a major role in private investment. When the Pakistani Rupee loses its value, local products can be more attractive to foreign buyers urging local industry to invest more. On the other hand, unpredictable fluctuations in exchange rates can make investors hesitant due to the uncertain return on investment. Research points out that while a lower exchange rate can nudge investments towards industries that export goods, care needs to be taken due to the associated risks, especially for sectors that depend on imported goods.(Alshubiri, 2022)

Political turbulence is another critical factor that deters private investment in Pakistan. Irregular changes in political leadership often lead to inconsistent economic strategies, discouraging investors from thinking long-term. Studies from 2023 suggest that periods of political unrest are associated with slowdowns in investment as businesses fear potential changes in policies and disruptions in operations. Some research suggests that enhancing infrastructural growth and government investment can balance out the negatives of political instability by restoring investor confidence. However, current uncertainties often curb this positive impact.

Pakistan is facing problems in attracting adequate private investment in the economy. The main factor responsible for continuously declining investment in Pakistan is interest rates. According to the research, interest rate appears as a significant determining factor of investment. The detailed sector-wise analysis showed that private investment in the agriculture sector is affected by infrastructure and nominal interest rates. Private investment in the service and manufacturing sectors is affected by real interest rates and prices of imported machinery. Low investor confidence is also another important factor with regard to private investment in Pakistan, and to attract more investment, investor confidence should be restored. To restore investor's confidence, such economic policies can be formulated that encourage economic activities and also reduce real interest rates. (Hyder & Masood Ahmed, 2004).

As per the study, private investment in Pakistan is affected by factors like interest rates, exchange rates, the impact of public investment and inflation, whereas private investment in Pakistan does not show any significant relation with debt servicing, worker's remittances and private sector credit (Nisa, 2023).

According to the research, GDP growth, government investments, and credit available to the private sector are factors that positively affect private investment. Although government investment had a positive impact on private investment when government investment is bifurcated into non-infrastructural and infrastructural categories and their effects on private investment is analyzed, the result showed that infrastructural investment by the government has a positive impact on investment whereas non-infrastructural-government-investment is in fact negatively correlated with private investment (Suleman et al., 2020).

Government investment has a negative effect on private investment because of the crowding-out effect. On the other hand, private investment has a significant positive impact on government investment. Aid received by the government, on government investments also affects private investment. To increase private investment, the government should try to utilize the aid received on development projects (Saghir & Khan, 2012).

In the case of Pakistan, traditional economic determinants of investment proved insignificant, or they have no significant effect on private investment. For instance, as per the research, the real interest rate has an insignificant impact on private investment both in the long and short run. External debt negatively affects private investment both in the short and long run. However, private investment in Pakistan is affected by factors like governance, quality of institutions and entrepreneurial skills. The main reason for low private sector investment in Pakistan is the poor quality of institutions. However, we cannot measure the institution's quality reliably due to its qualitative nature. Moreover, the definition and good quality of institutions measurability differs from individual to individual. Time series comparison of the quality of worldwide institutions is also impossible due to the fact that institutional changes take a longer time (S. Khan & Khan, 2007).

While analyzing investment in Pakistan, the results showed no long-term relationship between investment and domestic saving. Capital mobility is one of the main reasons behind the non-existence of the relationship between saving and investment in Pakistan besides other reasons (Suleman et al., 2020)

For the last decade, the economy of Pakistan has been adversely affected due to a consistent decline in investment and a declining growth rate. As per the research, since the interest rate is significantly inversely related to private investment in Pakistan, interest rates should be controlled to attract private investment (Muhammad et al., 2013).

Pakistan’s economic growth rate can be increased if private investment is increased. The study showed that GDP and worker remittance positively impact private investment. In Pakistan, worker’s remittance is the third most important source of capital that influences private investment. Therefore, the government should try to create more lucrative investment opportunities in order to attract more inflow of remittances through formal banking channels, as the right policies can streamline remittances towards productive investment activities (Yasmeen et al., 2019).

Significant factors that determine private investment in Pakistan include GDP, public investment, credit to private sector and real exchange rates. However, real exchange rates and external debt are negatively related to private investment in Pakistan. To increase private investment in Pakistan, variables showing a positive relation should be increased and variables having a negative relation with private investment should be reduced (Dewick et al., 2020) (Khalid, 2014)

Portfolio investment is a category of private investment. It is considered one of the important components of private investment in Pakistan because it fills the gap that exists between investment and saving. According to the research conducted, trade openness, market capitalization, growth rate of M2, and weighted average rate of return on deposits have a positive impact on net portfolio investment. However, according to the results of research, market capitalization has a significant impact, whereas trade openness and the growth rate of M2 have an insignificant impact on net portfolio investment in Pakistan (Sharif Chaudhry et al., 2022).

According to the study conducted to determine the economic factors of foreign direct investment (FDI) in less developed countries, the factor that plays the most important role in attracting FDI is the per capita GDP of the country. Besides GDP, the investment climate of the host country and the cost factors also influence FDI. According to the study, more public aid inflow and increased market size attract FDI inflow. In contrast, the factors that decrease the inflow of FDI are poor investment environment, economic instability, and high wages. (Shamsuddin, 1994).

According to the research, FDI in Pakistan is positively affected by the higher growth rate of GDP. Besides the GDP growth rate, export demand is another important determinant that influences the inflow of FDI in Pakistan. Therefore, Pakistan's national trade policy should promote exports and for promote exports, Pakistan can increase export processing zones, adjust its fiscal policies to encourage exports and focus on global market orientation (R. E. A. Khan & Nawaz, 2010).

Pakistan is unable to attract foreign direct investment unlike many eastern and south-eastern countries although it offers better geographical location, many competitive incentives and comparatively large population size. Many factors are responsible for low FDI in Pakistan, including poor law and order situation, political instability, sluggish economic activity, macroeconomic imbalances, and unpredictable and unreliable economic policies. Another factor which hinders FDI in Pakistan is labour-related issues that include the unavailability of trained and educated labour along with difficult labour laws and an overprotective labour force. Besides these factors, slow bureaucratic procedures, inappropriate business atmosphere and improper infrastructure are also responsible for discouraging FDI in Pakistan. Moreover, the unwelcoming attitude of government agencies towards foreign investors also discourages FDI (un-Nisa, 2022)

Foreign direct investment in Pakistan increases due to an increase in market size. As the government of a country plays an influential role in promoting investment in that country, the government of Pakistan should attempt to restore investors' confidence in order to increase FDI inflow in Pakistan. To restore investors' confidence, government should frame such policies that encourage investment in Pakistan and also try to provide a stable political atmosphere to boost investors' confidence. The government should also focus on increasing per capita GNP by utilizing the full capacities of the country. (Islam & Beloucif, 2024). As per another study, tariff rate, exchange rate, tax rate, and credit to the private sector affect the inflow of foreign direct investment in Pakistan. (Geddafa, 2023)

According to another study, during the 80s and '90s, IMF and World Bank provided loans to least developing countries (LDCs) to improve their economic structure. According to the IMF and World Bank, increasing fiscal deficit and vast amounts of inefficiency in public sectors are the main causes of uncertainty in economic conditions. IMF and World Bank instruct the government to reduce expenses and increase revenues to reduce budget deficits. Without proper guidance from the IMF and World Bank, LDC's countries are struggling with an imbalanced economic structure. These countries want to reduce the fiscal deficit, but they do not have clear guidance on how to do this without hurting their long and short-term economic plans. The government of LDCs does not know which part of spending they should reduce and which tax they should raise to increase private investment. Usually, the government makes the wrong decision by increasing taxes on production-related commodities like gas, oil, and electricity, which increases production costs and can cause a reduction in private investment. (Al-Kasasbeh, 2023).

As per the study, when the government makes new policies, especially those related to macroeconomics and structure features, and if investors make more investments in private sectors after implementing new policies, it is a signal of successful policy reforms. Policy reform should meet the economy's ground needs and reduce investors' doubts. The study shows that if the policy is uncertain, investors will hold their investment until the uncertainty is successfully eliminated. Even if the uncertainty percentage of the policy is low, its impact on tax could be high, and investors withhold their investment decisions until their doubts are cleared. (Rodrik, 1989)

According to classical economists, public investment crowds out private investment. However, as per Keynesian economists, public investment crowds in private investment due to the impact of the multiplier effect. To determine the relationship between public and private investment in Pakistan, a sector-wise analysis of the impact of public investment is studied, which showed that an increase in public investment encourages private investment in the agriculture sector. However, public investment and private investment in the manufacturing sector is negatively related due to the existence of the crowding-out effect. Moreover, private investment in Pakistan is not significantly affected by interest rates (Shamsuddin, 1994)

Crowding out effect on private investment in Pakistan exists when the public sector utilizes a country's financial and physical resources. Therefore, public investment has a negative impact on private investment. Private investment in Pakistan is positively affected by the inflow of capital to the private sector, whereas real interest rate has a significant negative impact on private investment. Therefore, low interest rates are required to attract private investors to invest. Moreover, public-private partnerships can also help in attracting private investment in Pakistan (Suleman et al., 2020).

Analyzing the role of infrastructure on private investment in Pakistan, it appears that in the case of Pakistan, private investment shapes public infrastructure instead of public infrastructure influencing private investment. That is public infrastructure is developed as a result of an increase in private investment due to needs stimulated by private investment in the manufacturing industry, although generally, the development of infrastructure creates opportunities for private investment (Looney & Frederiken, 1997).

Private investment in developing countries is limited by the availability of finance; therefore, increasing credit to the private sector can increase private investment. Moreover, tight monetary policy can have adverse effects on private investment in developing countries. (Bleje & Khan, 1984) Government investment can encourage private investment. Therefore, research is conducted to evaluate the effect of government investment in Pakistan, and the results show that selective forms of government investment influence private investment in the manufacturing sector of Pakistan (Looney & Frederiken, 1997).

METHODOLOGY

Data and variables

This study is based on secondary data. The Dependent variable was Private Investment, and the independent variables were Interest rates, Exchange rates and Political instability.

Sampling

This study used monthly data from January 2011 to July 2015. Monthly Data for Private Investment is taken from the SBP website. For Interest Rates, monthly data of 6 months of

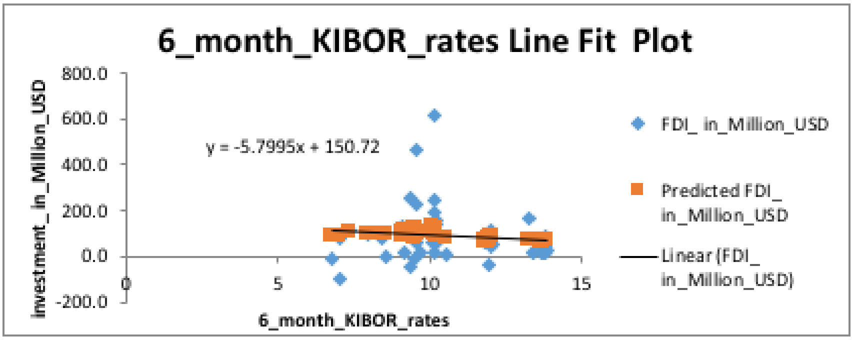
KIBOR rates from the SBP Website. For exchange rates, monthly weighted average USD exchange rates. Monthly foreign portfolio investment from the SBP Website is needed to identify the impact of political instability. A total of 55 observations were studied in respect of each variable.

Model

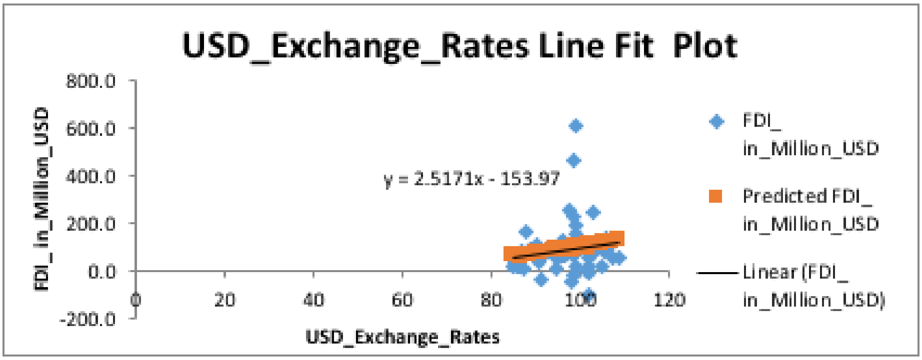
The regression testing model was used to determine the relationship between each variable and private investment. Excel data analysis is used to develop models and test regression.

RESULTS AND DISCUSSIONS

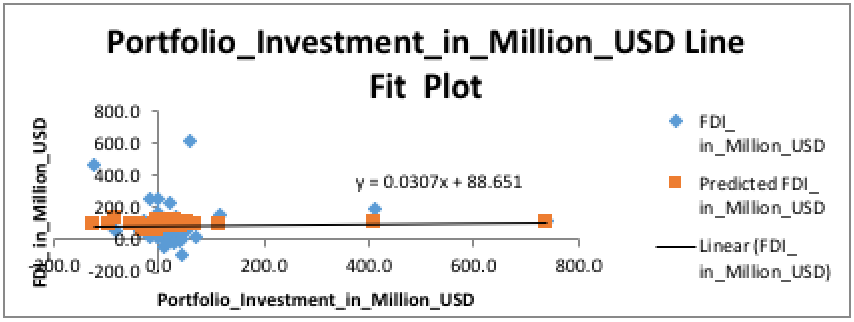
Graphical Analysis



The Y-axis shows investment, and the X-axis shows interest rates. As per the graph and trend line equation, Investment is negatively related to interest rates. When the interest rate increases, investment falls, and vice versa. However, the relationship between interest rates and private investment is insignificant in influencing private investment in Pakistan.



The Y axis shows investment, and the X axis shows exchange rates. As per the graph and trend line equation, Investment is positively related to exchange rates. When the exchange rate increases, investment also increases, and vice versa. However, the relationship between exchange rates and private investment is insignificant; therefore, exchange rates do not influence private investment in Pakistan.



The y-axis shows investment, and the X-axis shows portfolio investment. As per the graph and trend line equation, investment does not show much relationship with portfolio investment. Portfolio investment is used to test the impact of political instability on private investment. As per the regression test, the relationship between portfolio investment and private investment is insignificant; therefore, political instability does not influence private investment in Pakistan.

Descriptive Analysis

FDI in Millions USD		**6-month KIBOR rates**		**USD Exchange Rates**		**Portfolio Investment in Millions USD**	
Mean	89.54	Mean	10.55	Mean	96.74	Mean	29.11
Standard Error	15.06	Standard Error	0.25	Standard Error	0.90	Standard Error	15.94
Median	65.05	Median	10.17	Median	98.56	Median	16.49
Mode	#N/A	Mode	10.17	Mode	95.98	Mode	0.00
Standard Deviation	111.72	Standard Deviation	1.89	Standard Deviation	6.68	Standard Deviation	118.21
Sample Vari-ance	12481.88	Sample Vari-ance	3.55	Sample Variance	44.68	Sample Variance	13973.80
Kurtosis	9.95	Kurtosis	-0.52	Kurtosis	-0.99	Kurtosis	26.36
Skewness	2.65	Skewness	0.21	Skewness	-0.36	Skewness	4.75

FDI in Millions USD		**6-month KIBOR rates**		**USD Exchange Rates**		**Portfolio Investment in Millions USD**	
Range	706.10	Range	7.07	Range	23.94	Range	862.70
Minimum	-93.92	Minimum	6.76	Minimum	84.76	Minimum	-122.00
Maximum	612.18	Maximum	13.83	Maximum	108.70	Maximum	740.69
Sum	4924.96	Sum	580.17	Sum	5320.90	Sum	1601.15
Count	55	Count	55	Count	55	Count	55
Confidence Level (95.0%)	30.20	Confidence Level (95.0%)	0.51	Confidence Level (95.0%)	1.81	Confidence Lev-el(95.0%)	31.96

Inferential Analysis

Regression Statistics	
Multiple R	0.159504027
R Square	0.025441535

Adjusted R Square	-0.031885434
Standard Error	113.4895301
Observations	55

Since R and R Square are close, that means that the sample size is adequate. Since the Coefficient of determination is low and close to 0, the model explains none of the variability of the data around its mean.

ANOVA

	df	SS	MS	F	Significance F
Regression	3	17148.14613	5716.04871	0.443796963	0.722717055
Residual	51	656873.5453	12879.87344		
Total	54	674021.6914			

F value is < 0.44379, and the P value is > 0.001. This means that the average variation between groups is lesser than within groups.

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	-334.94	540.26	-0.62	0.538	-1419.5	749.68
6-month KIBOR rates	5.601	15.006	0.3733	0.7105	-24.525	35.727
USD Exchange Rates	3.7707	4.1478	0.9091	0.3676	-4.5564	12.098
Political Instability	0.0208	0.1355	0.1538	0.8784	-0.2512	0.2929

In the case of Interest Rates, the T stats is less than 2, the P value is more than 0.05 (Alpha), and the lower limit is negative, whereas the upper limit is positive; therefore, the model is insignificant, and so the first null hypothesis is to be rejected. For Exchange Rates, the T stats is less than 2, the P value is more than 0.05 (Alpha), and the lower limit is negative, whereas the upper limit is positive; therefore, the model is insignificant, and the second null hypothesis is not rejected. For Political instability, the T stats are less than 2, the P value is more than 0.05 (Alpha), and the lower limit is negative, whereas the upper limit is positive; therefore, the model is insignificant and the third null hypothesis is not rejected. As all the null hypotheses are not rejected, therefore, interest rates, exchange rates, and political instability have no impact on private investment in Pakistan.

DISCUSSION

Regression test results on data from January 2011 to July 2015 show that interest rates, exchange rates and political instability do not determine private investment in Pakistan. The result of this study conforms with the result of the study that concluded that private investment in Pakistan and interest rates are not significantly related to each other. According to (S. Khan & Khan, 2007) real interest rates have a negligible impact on private investment in Pakistan in the long and short run.

However, the study conducted by (Hyder and Masood Ahmed, 2004) concluded that nominal interest rates affect private investment in the agriculture sector of Pakistan, and real interest rates affect private investment in the manufacturing and services sectors of Pakistan. According to the research (Suleman et al., 2020), exchange rates and interest rates affect private investment in Pakistan. The study done by (Muhammad et al., 2013) also supports the impact of interest rates on private investment and recommends controlling interest rates to attract investment in Pakistan. The impact of exchange rates has a significant relationship with private investment in Pakistan.

CONCLUSION

The study examined the impacts of variables such as interest rates, exchange rates, and political flux on private investment in Pakistan, which was the focus of the study. The outcomes confirmed that there's a profound negative correlation between interest rates and private investment, a conclusion that resonates with the traditional economic perception. Ascending interest rates amplify the expense of borrowing and sap investment activities. The role of exchange rates cannot be understated - with depreciation in the value of the Pakistani rupee favouring domestic investment as it augments the competitiveness of exports. Still, erratic fluctuations in exchange rates inject an element of uncertainty, putting a cap on investments. Political instability, too, has surfaced as a significant obstacle hindering private investments; this owes much to the unpredictability in governance, which gives way to disparate policies, thus withholding long-term pledges from investors.

Limitation

A significant constraint of the investigation manifests in the limited span of scrutinized evidence, confining itself purely to the years between 2011 and 2015. Such a restriction, may not adequately present a true reflection of existing financial circumstances and any potential amendments to policies. Particular attention within the study is bestowed upon a distinct cluster of variables: interest rates, exchange rates, and politics. Yet, considerable influencers such as inflation, state-provided architecture, and fiscal allocation by the governing body are not taken into account. Complementing this, the reliance on secondary information could result in an incomplete understanding of the unique ambience that surrounds real-time investment conditions.

Recommendation

In an effort to fuel private investment, decision-makers in Pakistan should emphasise striking a balance in interest rates- a task achievable through the implementation of reliable and enticing policies for investors. The suppression of erratic exchange rate fluctuations through sound fiscal administration and the bolstering of foreign exchange intrusions stands to be equally beneficial. It's crucial to bear in mind that the harmonious kinship between political equilibrium and propitious investment circumstances is irrefutable. Formulation of durable strategies, indifferent to political vagaries, lays the foundation for fostering investor faith. Furthermore, it is incumbent upon the government to hone the calibre of institutional framework and governance; this will undoubtedly act as a shield ensuring utmost safety for native and offshore investors planning to anchor their financial sails into Pakistan's private sector waters. The incorporation of a vast spectrum of variables, such as inflationary trends and credit accessibility, in future investigations will guarantee a more thorough dissection of elements impacting private investment.

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