The Impact of Foreign Direct Investment and Exports on the Real GDP Growth Rate of Pakistan (1971 – 2017)

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Abstract

In this research, I will study the relationship between GDP growth rate and Foreign Direct Investment and Exports in Pakistan. Political instability in the region has slowed down economic growth as compared to neighboring countries. I will analyze how the country's GDP growth rate has grown as a result of Foreign Direct Investment and Exports.

Introduction

Decades of internal disputes in political ideologies and low levels of foreign investment has led to underdevelopment in Pakistan. In 2013, Pakistan embarked on a $6.3 billion IMF Extended Fund Facility, which focused on reducing energy shortages, stabilizing public finances, increasing revenue collection, and improving its balance of payments position. Through this program, Pakistan restored macroeconomic stability, improved its credit rating, and boosted growth.

Pakistan has established itself as a strong trading partner with countries like United States, United Kingdom, China, Germany, UAE, Spain and is known for exporting textiles, rice, leather goods, sporting goods, chemicals, manufacturing equipment, surgical instruments, carpets and rugs amongst other goods.

Economic Theory

Pakistan has been in transition from a centrally planned economy to a market oriented economy since December 1996. Since policies were implemented in 1986, FDI has been imperative to growing the economy. The growth of FDI in Pakistan is one of the factors that caused Pakistan's change in economic policy from a planned economy to a market-oriented economy.

Pakistan expects net foreign direct investment (FDI) to jump about 60 percent in 2018/2019. This is mostly due to the Chinese investments. Chinese companies are building roads, power stations and a deep-water port in Pakistan after Beijing offered more than $60 billion in funding for Pakistani infrastructure as part of China's vast Belt and Road initiative. Trade Openness in its simplest terms is the ratio of trade to GDP. Results show that the impact of trade openness on economic growth is not clearly visible in short run. However, studies suggest that developing countries like Pakistan need to consider trade openness policy as a long term plan.

Data & Empirical Models

$Y = \alpha + \beta_1 \, FDI + \beta_2 X + \mu$ (1)

$\boldsymbol{Y = \alpha + \beta_1 \, FDI + \beta_2 X + \beta_3 TO + \beta_4 IN + \beta_5 UR + \mu}$ **(2)**

$Y = \alpha + \beta_1 \, FDI + \beta_2 X + \beta_3 TO + \mu$ (3)

$Y = \alpha + \beta_1 \, FDI + \beta_2 X + \mu$ when Year >= 2000 (4)

The main purpose of this research is to investigate the causality between FDI, exports and economic growth rate of Pakistan. The study uses annual data from 1971 – 2017. The main source of data is The Global Economy. The data used in the analysis is based on six variables; real GDP growth rate, Foreign Direct Investment, Exports, Inflation, Unemployment Rate and Trade Openness. The sample consists of 48 observations.

Results

GDP Growth Rate

	(1) Model 1	(2) Model 2	(3) Model 3	(4) Model 4
fdi	0.955	0.925*	0.946	0.933*
	(0.478)	(0.424)	(0.475)	(0.354)
exports	-0.0418	0.0638	-0.130	-0.118
	(0.227)	(0.202)	(0.236)	(0.178)
trade_open~s		-0.0656	0.109	
		(0.134)	(0.0859)	
inflation		-0.0226		
		(0.122)		
unemployme~e		0.154		
		(0.182)		
_cons	4.714***	5.641	1.195	4.304***
	(0.333)	(3.666)	(2.800)	(0.401)
N	47	27	47	18
R-sq	0.083	0.286	0.116	0.329

Standard errors in parentheses
* p<0.05, ** p<0.01, *** p<0.001

Analysis

1. Increasing FDI, increases growth rate. Increasing exports, decreases growth rate.
2. Increasing FDI, exports and unemployment, increases growth rate. Increasing inflation and an increase in trade openness, decreases growth rate.
3. Increasing FDI and trade openness increases growth rate. Increasing exports, decreases growth rate.
4. For year > = 2000, increasing FDI, increases growth rate. Increasing exports, decreases growth rate.

Instrumental Variable; A variable that only affects FDI but has no effect on GDP. An instrumental variable for my model can be location of the country. The location of a country can affect investment from foreign countries. But has no direct effect on the GDP.

Conclusion

From the regressions, the only clear result I get is that increasing FDI will increase the growth rate. However, FDI alone is not the most important factor for GDP growth in Pakistan. For improved results, I will need to run regressions on a longer time period and with more variables that affect growth.