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RESEARCH ARTICLE

EXAMINE THE EFFECTS OF MONEY SUPPLY M1 AND GDP ON FDI IN PAKISTAN

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ABSTRACT

The primary function of that study is to analyze the result of money supply and GDP on FDI in case of Pakistan. Funds offer should be to extra amount of cash within economy to own land of which requires large charge regarding inflation. When CPI, Rate of interest are not manipulated using within recommend boundaries then additional money improve additional inflation in a economy. In case most of us improve marketplace, agriculture, education and learning, health insurance and essential infrastructures then your funds offer could well be smaller as well as inflation reduces as well as Gross Domestic Product raise keeping that in mind. We have to take this in consideration and runs Base-line regression model to see how these variables effective in Pakistan for the period 1970-2013. We use Generalized Method of Moments (GMM) and we found that co-efficient of Money Supply (M1) and Gross Domestic Product (GDP) is positively significant on foreign direct investment (FDI). Nevertheless, unavailability of facts for the different critical determinants like corporations, labor prices along with actual physical facilities can be deemed as limitation your examine. For the future study, locating information in politics stability may also be another enhancement.

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INTRODUCTION

Money supply (M1) and GDP plays a significant role on FDI. Nation does manage the economics with different instruments, monetary coverage within among the macroeconomic musical instruments along with that this nation perform control the actual economics. The item will involve people actions commenced from the monetary government bodies, which in turn strive from impacting on the price and option of breaks, Wrightsman (1996). Monetary policy as being a means of managing economical matter to bring about sustainable economical development along with improvement through international industry possesses function as the order involving nations along with conventional articulation exactly how income has effects on financial system, Adam Smith. Economic authorities are usually liability of employing economic insurance policy for you to increase their own economies because the position of economic insurance policy which affects the actual macroeconomic objectives such as financial increase price tag balance, balance within equilibrium of obligations in addition to coordinator of some other objectives. In Pakistan, economic insurance policy have been employed due to the fact State Bank connected with Pakistan seemed to be saddle the obligation connected with forming as well as implementing economic insurance policy by State Bank connected with Pakistan.

That function offers help to make achievable your exodus connected with productive funds market where treasury expenses, a new economic instrument for available market businesses as well as boosting debt regarding government has grown within level as well as respected to become significant tool regarding traders as well as cause of handling liquidity available in the market.

Our main objective is to inspect the effect of money supply and GDP on FDI. For this study we gathered data from the various sources over the time period 1970-2013. Pakistan, currently being developing nation, commonly confronted a variety of complications; redundancy and unsound costs (inflation) in it is economic coverage that is this administration connected with targets. Financial coverage is made up of about the romantic relationship concerning full cash provide as well as the interest within an economic system which is the price connected with cash is usually assimilated. The State Bank of Pakistan controlled different variables; Inflation, Economic Growth, Unemployment, Interest Rate and Exchange Rates with other currencies, these variables influence the relationship of money supply and rate of interest in an economy. In this article we will spotlight on the positive impact of money supply (M1) and GDP on foreign direct investment (FDI). Funds provide is actually the quantity of monetary resources available in a good economic climate to the particular phase. Funds provide (M1) in Pakistan is actually saved, described, assessed as well as published by the State Bank of Pakistan.

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Money supply is important for any economy because funds utilized typically in every the particular financial transactions, and it has influenced on financial action. Thus increase in investment and decrease in interest rate has positive effect on economic activities and this can be achieved by the increase in Money Supply (M1). For the increase in the money supply leads to the increase buying power of consumers, and they spend more. The industries produce more or enhancing their production, when the buying power of consumers increases. At the point when the business will develop the interest of the work and capital merchandise will be expanded and in this way overcome the unemployment problem. Stocks market prices also increase, in this perception, money supply continuous to expand. At a certain limit there is inflation in the market, lender desire higher mortgage rates consumer buying energy lowers over the lifestyle of these lending products. Foreign Direct Investment (FDI) is actually immediate expense originated from in another country the place that the people have a total manage around the funds.

Or foreign direct investment (FDI) from a group of rich countries usually takes the type of a restricted stream of capital and engineering to the developing world. FDI is relatively more established than the other forms of foreign wealth investment. Other form of investments makes changes rapidly the investment environment in the host country while FDI does not change rapidly investment environment. The level of money related advancement in the host nation influences its capacity to draw in remote immediate venture. Now a day, FDI has become ever more important in the developing countries. Whereas, before 1994 the main source of the external finance was the official development Aid and loans from bilateral organizations. In 1980, developing world inward amount of foreign direct investment is just 10 percent of the GDP, while its reach one third of their GDP, or the shared of inflows of FDI reached 51% of absolute capital streams to creating nations (UNCTAD, 2007). Addison (2006) observes that this is the most visible dimensions in the world. For the 1 give, the strong worldwide trade regarding goods and also companies, together with increased rigidity and also divisibility in the manufacturing procedure, has produced entry regarding Transactional Companies throughout making and also companies because the key motor vehicles regarding globalization.

Also, industry as well as foreign one on one investment possess fond of the particular drastically growing East-Asian nations around the world an exact aspect by means of contributing to the particular speeding regarding professional expansion as well as structural alter together their particular improvement procedure. A real technique provides proof policy tips with the international agencies simply industry relaxation as well as cracking open regarding merchandise as well as variables market segments in order to foreign opposition. In 2006, Pakistan has succeeded in attracting US\$ 4273 million as along US\$ 2201 million in 2005 (WDI 2007). Approximately 70 percent of FDI has come into the telecommunication sector; energy sector, chemicals, fertilizers, trade liberalization, small inflation, and small external debt are encouraging foreign direct investment inflows in Pakistan. Pakistan made sound policies and overall macroeconomic

environment attract relatively large foreign direct investment inflows. Pakistan includes a incredibly reasonable plan with comeback pertaining to foreign immediate traders; for that reason, investing in Pakistan may give foreign immediate traders many positive aspects. Pakistan made different policies for manufacturing sector and service sector to attract foreign direct investment. There are two main Act who give legitimate spread to assurance of foreign investors in Pakistan, Foreign Private Investment Act (1976), and Furtherance and Protection of Economic Reforms Act (1992). Under these Acts State Bank of Pakistan is the regulating authority of made payments in and out of Pakistan. There is no constraint on inward payments by SBP but any outward payment does not made without permission of State Bank of Pakistan. These payments were made by the authorizing banks or agents on behalf of companies.

Literature review

We can likewise characterize fiscal strategy for location the accessibility of cash, supply of cash and focusing on the rate of enthusiasm for the boosting of monetary development. It covers parts of measures or mix of bundles wanted to control the volumes costs and also heading of cash in the economy. Exclusively, monetary authorities make effort to control the amount of money source and 'tokens' conditions when it comes to obtaining eligible macroeconomic objective, Ajje and Nenbee (2010). Chamberlain and Yueh (2006) analyze which the cause of dollars might deploy a powerful influence in the overall economy. Nnana (2006) explore the contact of money supply on GDP, they find that macroeconomic guidelines in building nations around the world are made to become stable your economy, induce growth and also lessen lower income.

Brems and Hans (1970) find that neoclassical development models demonstrate that outside immediate speculation expands the host nation's development through capital stock. Anyhow with withdrawing comes back to capital, the effect of remote immediate speculation on development is indistinguishable to that of household venture. Thus, foreign direct investment effect growth in short-run.

Borensztein (1998) through endogenous growth models, find that foreign direct investment incorporates the application of new innovations into the generation capacity of the host economy. Thus, foreign direct investment related mechanical spread over balances the impacts of withdrawing comes back to capital and keeps the economy on a long-run development. De Mello (1999), Hanson and Slaughter (2003), and Karimi (2009) suggests that foreign direct investment enlarge the coordinator country's recent understanding stock by way of understanding transfer coming from job teaching, skill order, along with coming from bringing out option managerial and organizational exercise. Ghironi and Melitz (2004) find that foreign direct investment is also consideration to open up exports markets. Claudia and Lipponer (2005) make a research on Foreign Direct Investment and Growth relationship find that FDI promote domestic investments. Some experiential studies make obvious evidences using country specific data. Asheghian (2004) stated the actual living of your positive in addition to important partnership among foreign one on one

expense in addition to fiscal increase in America regarding The United States. Many researchers in China conduct a numeral studies and find that foreign direct investment inflows have a significant consequence on economic growth. Kornecki and Raghavan (2008), the CEE countries recognize foreign direct investment as an important instrument in the development and transformation of their economies. Experiential analysis for the annual data of Malaysia proved the bidirectional causality and years to come relationship between inward foreign primary expense and monetary increase by Manal and Liu (2011). Greenwood and also Jovanovic (1990) stress the main benefit of economic climates associated with size within the processing associated with home elevators the actual additional productivity associated with investment how the banking institutions generate as they acquire with time. Bencivenga and also Johnson (1991) attract care about the actual position associated with diversity associated with liquidity chance. Saint Paul (1992) stresses the role of the fiscal institutions in spreading the risk of investment. From their findings, financial sector reduce the risk of dedicated speculation and, thus, raise the predictable returns from it.

Increase in the expected returns, cheering the higher pace associated with preserving and expenditure throughout thoroughly specialized funds which increases productivity throughout the economy. Pagano (1993) look at that your better proficiency from the loan companies personal that your greater proportion associated with available preserving throughout the economy. King and Levine (1993b) debate that a more productive monetary foundation part channels an expansive allotment of sparing to back a more noteworthy number of spearheading task. This raises the mechanical movement rate and the development rate of last merchandise. McKinnon (1973) provides idea of financial repression, government arrangements intended to ensure the benefit of household budgetary organizations against global rivalry actually when they permit rivalry among the neighborhood monetary foundations. These arrangements proficiently hold the residential premium rate over the universal business sector rate. According to Stiglitz along with Weiss (1981) the eye fee might help pass cash from the economic climate although would certainly wait the particular stream regarding international primary expenditure along with engineering dispersal, by simply decreasing how many business owner from the economic climate.

In line with Carkovic in addition to Levine (2005), sixty that will macro-economic studies frequently forget to tolerably be the reason for endogeneity regarding international strong expense inflows in addition to nation distinct results. Their information suggests that the necessity for far more particular person nation studies given that causality among international strong expense in addition to increase is usually nation distinct. Price, GDP, and M1 all are dull at first divergence level. GDP and price are both joined with M1. M1 having a great importance for consideration. The monetary experience is purely the inflammation. In Nepal the analysis for 1980-2009 says that the money supply does not affect the price, but the price level is caused by money supply. The weekly data for money supply M1 was presented by the Federal Reserve since it started collecting in 1950s. There is a good company handed

within 1978 of which got purchased the particular Federal government Book setting locates for your progress connected with dollars present however there was clearly a superior relation between dollars present progress and also primarily monetary progress that's scored by GDP. Keynesian economists demonstrated the change in cash supply is straightforwardly going to influence the stock costs simply just if the change in cash supply creates likelihood in future financial strategy. The economist had idea that if positive money supply encounters that is going to lead the individuals to estimate to tighten the prospects financial approach. Current interest rate will be pushed up the tightening of money supply. The volume of international venture enlarged from \$20 billion to approx \$60. The particular problems produced shareholders and development spouses disappear. Wall street game diminish, capital journey set-in, fold of forex stores plus the sacrificing price of Pakistani rupee for you to no less than one-third of it is preceding price were being the particular important instances. At this time there wasn't any option still left with the government apart from the particular bailout via IMF deal.

Finance Ministry equipped a plan to bring \$4 billion in 2008 by the transaction but all the transactions government Cancelled in 2008 and the balance became the history. The systems of the financial arrangement are should be the transient investment rate that is the arrangements centered point to have control of expansion and by increasing the short term interests the inflation can be controlled recommendations, taken as given would involve the exclusion of the theory of moneys quantity. Speculations that can be controlled by controlling the rate of development of cash supply. The economists acknowledge broadly that the swelling has a negative impact on monetary development. The examiners did not show the affect of inflation on growth wasn't exceptional. Hyper inflation was practiced in many countries of Latin America after 1970s. There was a concern to find the effect of inflation. The inflation got a significant bad affect on monetary development in excessive levels of inflation. Today in developing countries it is found that the rate of inflation overtakes a specify point, and it is affecting the growth rate unluckily. A fundamental role has been played by Federal Reserve in affecting the US economy categorization which carried out the monetary policies and targeted a stable economic system.

Research Question

In this paper we try to observe the effect of M1 and GDP on foreign direct investment (FDI). Moreover, we examine the effects of inflation rate and interest rate on foreign direct investment.

MATERIALS AND METHODS

The data for difference variables use in study will be obtained from World Bank Database (WDI), International Monetary Fund (IFS) CD-ROM and statistical bulletins issued by Pakistan. These sources were selected because the data obtained from these sources is reliable. The estimation period start from 1970-2013. This is robust because Pakistan went

through lot of economic and political changes during these years. Thus this sample period accommodate us majority of cruises and non-cruises conduction faced by the Pakistan.

Base line regression model

The GMM time series analysis will be employed to estimate the following base line regression model.

$$(FDI)_t = \alpha_0 + \beta_1 (GDP) + \beta_2 (M1)_t + \beta_3 (INF)_t + \beta_4 (IR)_t + \varepsilon_t$$

Where:

FDI = foreign direct investment is the dependent variable and measure as we taking the log of the FDI value for determining the independent variables effects.

GDP = is the gross domestic product and GDP is independent variable and measures as we taken the log of GDP of Pakistan. Gross Domestic Product would be the complete industry worth industry worth of remaining products in addition to solutions which usually manufactured in the nation within a existing season are corresponding to final number regarding client, federal government consumption in addition to investment decision, as well as the worth regarding trade equilibrium.

M1 = is the money supply in the country in a specific time period.

INF = is the inflation rate in Pakistan in the given time period. Inflation is the condition at which the customary value level for products and administrations in climbing and on the other hand the purchasing power is fallen.

IR = is the interest rate set by the higher authorities like the State Bank of Pakistan. Interest rate is the sum charged; form the rate of essential, by a bank to a borrower for the utilization of benefits.

The above equation will be estimated by generalized method of moment (GMM) analysis. GMM analysis is preferred in that situation where independent variables face the problem of endogeneity. The order to cure for endogeneity, the legs of the variables used in the study will be taken as instruments. A J-statistic greater than 1 will validate our instatements.

RESULTS AND DISCUSSION

Table 1 show that FDI is the dependent variable, which dependent on GDP, M1, INF (inflation rate), and IR (interest rate). According to Table 1 GDP have positively significant impact on Foreign Direct Investment (FDI) the value of t-statistic is positive and more than 2 shows that GDP have significant impact on FDI.

In Table 1 the t-statistic value of M1 (money supply) shows that M1 have positively significant impact on FDI. Inflation rate's (INF) results also show that inflation rate have positively significant effect on FDI. And the last independent variable interest rate (IR) has negatively significant effect on FDI.

Table 1.

Dependent Variable = FDI				
Independent Variables	Co-efficient	Std. Err.	t-Statistic	Prob.
GDP	0.782069	0.281467	2.778546	0.0091
M1	0.475575	0.114750	4.144464	0.0002
INF	0.461840	0.113573	4.066468	0.0003
IR	-0.778291	0.389228	-1.999575	0.0541
C	-11.59487	5.861118	-1.978269	0.0566
AR(1)	0.481126	0.133913	3.592827	0.0011
MA(1)	1.157246	0.036421	31.77414	0.0000
MA(2)	0.157574	0.036419	4.326746	0.0001

According to the previous studies, increase in the GDP leads to the increase in FDI inflows, its indicating the strong economy of that country. Due to strong economy foreign investors makes investment in that country, because there is less risk involved in that kind of investment. The FDI inflows increase the growth of economy of country increase. From our results the GDP positively and significantly affect the FDI in Pakistan. Thus, Pakistan is a favorable country to make investment. The positive value of M1 shows that when money supply increases, the buying power of the consumer also increases and the growth of industries raise. The growth of industries attract the foreign investors for invest in Pakistan. Surprisingly, in case of Pakistan the inflation rate positively affect the FDI. Whereas inflation is inversely proportional to foreign direct investment or increase in inflation rate leads to the decrease in foreign direct investment. From the table 1, we see that the interest rate is negatively significant with foreign direct investment. Theoretical background suggest that the interest rate is higher the people make deposit their money in banks and not taking the risk for investment in any field and when domestic people are not investing in their country the foreign investors does not make investment in that country. Same as in case of Pakistan, the higher interest rate cannot attract the FDI inflows. And low FDI inflows there are lesser growth of economy.

Conclusion

In this country we observe the effects of M1 and GDP on FDI in Pakistan. For this study we considered the data over the period 1970-2013 and use the Generalized Method of Moments (GMM) estimation technique for getting the unbiased results. We find that among other variables, GDP is the most essential variable of attracting FDI. Moreover, M1 is also promoting FDI in Pakistan. But unexpectedly, coefficient of inflation is significantly impact on foreign direct investment in case of Pakistan. Similarly, secure macro-economic environment as portrayed by low and secure inflation also push foreign direct investment. As expected the negative sign interest rate statistics show that the higher the interest rate the lesser the foreign direct investment inflows in Pakistan and vice versa. Therefore, organic meat concludes in which creating nations around the world could possibly bring in unusual primary purchase by simply emphasizing improving GDP along with raise with income supply. Additionally, expanding the gifted work and creating budgetary establishments with liberalization and stable swelling may likewise empower them to pull in remote immediate venture.

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