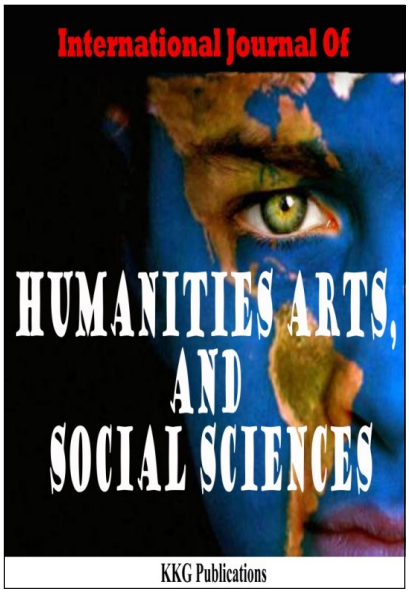

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Millennium & Financial Development Goals: Economic Indicators Perspective of South Asian Countries

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MILLENNIUM & FINANCIAL DEVELOPMENT GOALS: ECONOMIC INDICATORS PERSPECTIVE OF SOUTH ASIAN COUNTRIES

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Abstract. This paper estimates the relationship between financial development and millennium development goals for poverty, education, gender equality and health by providing evidence from the South Asian countries. Ordinary least square model is applied with panel data approach, OLS regression which consider the issues of relationship between financial development, economic growth as control variable and millennium development goals and getting evidence from the South Asian countries surveyed during the period of 1970-2013. We find that the results of regression stated that a sound financial development system is very important to get achievement because it gives the way to improve the MDGs goals for poverty, education, gender equality and health. We also found that financial development has diminishing marginal impact on MDGs and the results are consistent with the (Rosner, 2011). Moreover, the study concluded that need for improving the opportunities for deposit savings in the banks rather than the entrance to credit, which having very large impact on the attainment of millennium development goals.

INTRODUCTION

People of the different countries have many difficulties they are facing in their regions such as poverty, education, health and gender equality but some of the problems are restricted to the poor nations. To eradicate these hurdles from the lives of the people in September 2000 the millennium declaration was made by the United Nations and the proclamation was accepted by 189 nation members. The millennium declaration made 8 goals for eradication of poverty; get universal education, gender equality, health, environmental sustainability and a global partnership. The aim of this paper is to investigate the relationship between financial development and millennium development goals in south Asian countries. South Asia which is the home of 1.2 billion people that is consists of 22.2 percent people of the world. It has become rich in resources but in the 2005 unemployment rate was at its peak. In 1998 the south Asia and South Africa was accounted for near about the 70 percent of the population living less than 1$ a day which was up to 10 percent from 1987.People below the poverty line in the South Asia 35.8 percent in Bangladesh 50 percent, in India they are 29 percent. Pakistan, Nepal and Sri Lanka have 42, 33 and 25 percent respectively. The people less than 1$ per day are found 36% in Bangladesh while in India 34% percent people living below the one dollar a day. In Pakistan, Nepal and Sri Lanka they are 37.7, 13.4 and 6.6 respectively. The 23 percent of the people of the world lived in the South Asia which is called the region of poorest people. So these income disparities are very high in the world as compared to the other ones. This shows that in that environment of the region economic growth does not give advantages to the poor people. MDGs were established in 2000, a huge struggle has been made to organize recourses to shrink poverty, discrimination and disease in poor countries. MDGs are all inter-related. As one goal is achieved, progress towards another is advanced as well. For example, access to safe drinking water impacts positively upon health-related outcomes. Similarly, the attainment of universal primary education would ensure greater gender equality as girls are enrolled in school. MDGs are linked to sustainable economic growth in that they are: (1) "ends in themselves" and (2) "capital inputs". By the MDGs being ends in themselves, they have the capability to launch people to better and improved standards of living; whereas as capital inputs, they contribute to productivity and ultimately sustainable economic growth. That is why we are going to check that there is association between financial development and millennium development goals and economic growth as control variable is found or not with in South Asian countries or not, or the financial development have its significant effects on MDGs for poverty, education, gender equality and health or not.

LITERATURE REVIEW

Research shows that not only growth programs are attached to attain MDGs and expansion in education, health and eliminate

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poverty (Bourguignon et al., 2010). Government policies are also effecting, Africa's present economic growth is a display of government policies induce since 1960s a study conducted by (Ahmed & Cleve, 2004) for the attainment of MDGs and figured out hurdles while achieving the goals with especially focus on economic growth, poverty, education and health related and the importance of actions taking at national, international and regional level and said that not only Africa's progress but also a global support and understanding to regional needs is required to reach the goals. Reddy and Huety (2005) presented the policies made by World Bank and millennium development project to reach these goals. Similarly, Stewart (2003) purposed a range of policies options after analyzing the economic deportment of different countries on the issue of the possibility of attaining millennium development goals. Chowdhury and Islam (2011) purposed some macroeconomic policies on achieving the millennium development goals (MDGs) specifically for poverty reduction. While in scrutinizing the future of millennium development goals (MDGs) after 2015, some recommendations made by (Nayyar, 2013). For national and international level, systematic flexibility for national level which results in discernment of inequality for achieving the MDGs so the developing countries should re-evaluate the policies, redesign the strategies in national surroundings. At international level, advancement towards goals slow so collaboration among developing countries needed via better negotiation and collective actions. However, Fehling, Nelson and Venkatapuram (2013) explore the limitation in formation, structure and application of MDGs which are not only the reason but the global recession is also responsible for the shortfall and slow progress of MDGs. Some others said, MDGs are impossible not fit to the national needs while they boosts up health and prosperity in many countries by considering the prospect hurdles to millennium development goals framework after 2015 development having greater impacts. The Millennium Project, an advisory body to the United Nations, has stated that the MDGs are attainable if there is economic growth at increasing level in the countries. Policies that promote economic growth are needed to achieve the MDGs. Evidence shows that economic growth reduces poverty (Bourguignon et al., 2010). Economic growth also improves education by promoting school participation, gender equality by enabling women to control more of their own income, and health by increasing life expectancies and reducing child mortality rates (Lee & Barro, 2001; World Bank, 1993). However not all growth initiatives are linked to improvements in poverty, education, gender equality, and health (Bourguignon et al., 2010). Policies that create growth yet do not directly benefit the poor or improve education, gender equality, and health in a country may not help attain the MDGs. One possible development strategy is "financial development". Financial development improves the financial sector in a country so that it more efficiently allocates capital between lenders and borrowers. A more developed financial sector promotes economic growth (Levine, 2005). Therefore financial development may indirectly help achieve the MDGs by stimulating growth. Recent research has also shown that financial development directly reduces poverty without increasing income inequality (Beck, Demirguc-Kunt & Levine, 2004; Rosner, 2010). Therefore financial development is a significant policy option to achieve the first MDG of poverty reduction. However there has been little empirical research on financial development's impact on the other MDGs for poverty reduction, education, gender equality, and health. It may be that an improved financial sector does not have an impact on these MDGs beyond its effect on growth. Financial sector development contribute a lot for the economic growth of a country and for the attainment of the millennium development goals (Claessens & Feijen, 2007) find out the association between financial development, millennium development goals of poverty, education, health and gender equality and concluded the positive relationship in all these by using both cross country and case study data and said that financial development is an essential element in economic wellbeing because it minimized the poverty and undernourishment. Rosner (2011) condemn that developing countries who are making efforts to achieve the health, education and gender equality related MDGs should develop an effective financial system because it directly enhance education, gender equality and health afar its effects on economic growth. Moreover, financial development assist in the attainment of MDGs but enhancing the entrance to credit, minimizing settlement prices in the economy by permitting more people to deposit their reductions and it has big effects on millennium development goals. Also countries with minimal development can attain MDGs through financial development as compare to earlier studies which stated that financial development has no effects on economic growth of least developed countries. Sarkar (2007) examine the link in the attainment of the MDGs and economic growth. Findings, there are three major purposes which are to launch the idea of pro MDG economic growth and pro-growth MDGs.

(1) Extension in the Agriculture, construction, transport, energy, water and sanitation, health and education helps to attain MDGs and improvement in peaceable Asian countries because these are considering to be the growth engines. (2) Specifically, the removal of poverty and the other sectors of MDGs are of great importance which having low growth. (3) To analyze the

growth of the above mentioned sectors, and also check the enhancement in financial inclusion index, Education expenditure to GDP ratio, and direct tax to total tax. Advancement in education sector will enhance the child mortality, malnourishment and infant mortality. Appropriate macroeconomic policies help to attain these objectives. Poverty and economic growth has positive association and this association is also highly variable over the countries and time period.

Study by the Carstens and Palanivel (2003) on the nine East Asian and five South Asian countries. Eight countries of South Asia are analyzed on the success or revert of MDG 1 achievement and each of them are examined for the element impacting poverty, population, effects of disaster, opportunity for water, adequate nutrition and sanitation. Fafchamps and Shilpi (2014) examined the household welfare and how it is differ by parents' education. Results collected from Nepal by using census data but the focal point is virility, child labor, survival and their schooling. Education for women is not as important as it is consider being fruitful while using educational rank to proxy and menage backdrop it shows positive relationship between women education and the fruitful results are opposite and also power full. Because the educated women having a small family size and brought up their children's efficiently however, men having statistical relationship in education and household wellbeing remnant powerful. Taylor, Jankins and Sacker (2011) analyzed the effects of financial ability on psychological fitness at independent earnings by using British household panel survey data from 1990-2006. They judge from group panel data models which show that financial ability has notable impacts on psychological fitness atop which linked with earnings and material welfare commonly. In case of men's, having small financial ability impacted mostly as compare to those which linked to unemployment. In women's case, it is alike to be breach Moreover, with out of job and breach situations and vice versa. Lee and Barro (2001) analyzed the school excellence and menage inputs are very near to each other's because family earnings and parental education having power full links with student's performance. They also find out that educational results can be increased with higher income of teachers and greater size schools. By using the panel data approach which includes inputs and outputs of school quality for a wide range of countries and this data also discover the value of education. Barro and Lee (2013) study on the achievement of education in the world from 1950-2010 by using panel data on 146 countries which is presents on gender bases in 5 year of age. They also use the census data on group bases but with the new evaluation of mortality rate at completion educational duration? They collate their findings with (Lee & Barro, 2001). Their measure of educational achievements gave sensible proxy for the stock of human capital for a wide range of countries and is beneficial in empirical work. Funding for development in most Asian countries make these countries dependent on these funds which can be eliminated at any time by the donor countries and the end result is to send people deeper into poverty because these cannot be substituted (Mathbor & Ferdinand, 2008).

This paper empirically tests the impact of financial development on the MDGs for poverty, education, gender equality, and health in South Asian countries. By using data from 1970 through 2013, we found that financial development reduced poverty, improves education, gender equality, and health by increasing the availability of private credit, money, domestic credit and deposits in the economy. Increasing opportunities to deposit savings is the most significant way that financial development affects the MDGs. The least financially developed countries benefit the most from financial development.

DATA AND RESEARCH METHODOLOGY

This study analyzed the achievement of millennium development goals in the context of South Asian countries for the period of 1970-2013 with the help of financial development and economic growth the data for the independent variables and dependent variables is taken from the World Bank's world development indicators. All the data is based on secondary data, Variables that are included in the study are described as follow:

Dependent Variables

For the analysis purpose of poverty, education, gender equality and health, by focusing on the variables which measure the targets of MDGs in the country. Halve the proportion of people living below the 1$ per day and also suffering from hunger this variable is used to measure the MDG target to eradicate the extreme level of poverty by one half. Primary enrollment equals the proportion of children's who are in the age of primary education enrollment and is used to check the set target achievement by MDG. Persistence to 5^{th} grade shows the children proportion of people who reached to the grade five it uses as an extra measure to check the education level in the country. Female enrolled to the primary education equals to the percentage of women who are enrolled to the primary level at the age of primary school going. This measured is use to present gender equality level in the country to access the education for all genders. Female persistence to 5^{th} grade is also taken as an extra variable to check the achievement of the MDG for removal of gender disparity. Mortality under age of

five equals to the percentage of child who died before reaching the age of five and this target for the reduction of under-five mortality rate is 2/3 by the millennium declaration for health is checked. Infant mortality means the percentage of babies who died before reaching the age 1 and is used as an extra measure variable. Maternal mortality rate is equals to the percentage of female who died during the pregnancy and childbirth. This variable is used to check the MDG target for health by the 3/4 decrease in the ratio. HIV is equals the percentage of people within the age of 15-49 suffering from HIV. This variable is used to check the cut short and setback of HIV/AIDS in the MDG target of health.

Independent Variables

Financial development indicators give a proxy for the quality and quantity of financial services and also for the level of financial intermediary development, four indicators of financial development are using in this study which are respectively discussed ratio of bank claims on private sector to GDP (PC/GDP) it shows the significance of financial sector in the country. It is supposed that credit gives to the private sector enhanced the investment for a large level then the credits give to the public sector. Large level of this ratio is interpreted as large level of financial services and therefore higher financial development. The second one is the ratio of total domestic credit to GDP (DC/GDP). This shows the domestic assets of the financial sector. The third one is the ratio of bank deposit to GDP (BD/GDP). This calculates the capacity of banking sector to gather the household deposits. The last one is the broad money stock to GDP ratio (M3/GDP). It presents the accurate size of the financial sector of a growing economy. These ratios are assumed to be increase or decrease for the time if the financial sector grows faster or slower than the real sector of the economy.

Control Variables

In this paper, 3 control variables are used to check and detach the effects of financial development on the millennium development goals such as Inflation which is equals the annual gross domestic product deflator and used to check the changes in the economic environment. Economic growth of a country is measured as GDP which is gross domestic product or per capita income of a country. Continuous growth of countries provide a significant means to reduce the poverty level that's why the countries which have a powerful growth rate may have a lot of chances to reduce the poverty, strong the political conditions, enhance the level of sustainable environment and in fact decrease the levels of brutality and offence. Economic growth is considered as a tool for reduction in the poverty (Bourguignon et al., 2010). Population density is equals the no. of people per square kilo meter to control the countries living with denser people and can take advantages of financial development in a better way.

Specification of the Model

After reviewing the empirical studies, in this paper we are going to use following model in order to analyze the achievements of MDGs with the contribution of financial development and economic growth as control variable. The OLS specification is also used in the Rosner (2011) where he also checked the effect of financial development and MDGs for education, gender equality and health for the developing countries. The specific form of OLS specification is as follow:

$$MDGi = \beta 0 + \beta 1PC + \beta 2PC\text{^}2i + \beta 3PDi + \beta 4INF + \beta 5GDPG + \varepsilon i \quad \text{.....(1)}$$

$$MDGi = \beta 0 + \beta 1M3i + \beta 2M3\text{^}2i + \beta 3PDi + \beta 4INF + \beta 5GDPG + \varepsilon i \quad \text{.....(2)}$$

$$MDGi = \beta 0 + \beta 1BDi + \beta 2BD\text{^}2i + \beta 3PDi + \beta 4INF + \beta 5GDPG + \varepsilon i \quad \text{.....(3)}$$

$$MDGi = \beta 0 + \beta 1DCi + \beta 2DC\text{^}2i + \beta 3PDi + \beta 4INF + \beta 5GDPG + \varepsilon i \quad \text{.....(4)}$$

Where: i = country index, MDG = Millennium Development Goal Measure, PC= private credit, M3= money supply, BD= bank deposits, DC= domestic credit.

$\beta 1$ indicated that financial development has any effect on MDGs. $\beta 2$ tests the nonlinearly. By taking the derivative of MDG with financial development, we can check the impact of every financial development variable for the MDGs. Then this derivative will be $\beta 1 + \beta 2$ Fin Dev, Where the Fin Dev= the level for the PC, M3, DC and BD. So the coefficient $\beta 1$ checks the impact of financial development for the country having no financial development. A positive $\beta 1$ check the MDGS for education and gender equality regression. A negative $\beta 2$ suggest that financial development increase the education and gender equality at a diminishing rate. For the measure of health related MDG regression, -ve$\beta 1$ suggest financial development diminish the HIV and mortality but far from its effects on economic growth. But the positive $\beta 2$ said that financial development increases the health also at a diminishing rate. First of all we used the descriptive statistics then we checked the correlation and then in regression model we used the OLS (ordinary least square) to check the relationship between financial development, economic growth and the millennium development goals.

EMPIRICAL RESULTS AND DISCUSSION

Table 1 presents the descriptive statistics of the data which describes the characteristics or the qualities of a data. The average purchasing power parity at national currency is 22% and the percentage of population who is living below the minimum level of energy food is 21% while the maternal mortality rate is comparatively higher than the infant mortality under five and child mortality but the infant mortality is less than the under-five mortality by 33%. 77 percent of female are enrolled to the fifth grade and the average primary school enrollment is 87 rests is stay in fifth grade by 70 percent. Population aged to the 15 and 49 suffering from HIV is the 0.14% of the whole and the variance in HIV is 0.09 on average, deposits are less than the money supply as percentage of GDP which is 31 and 38 percent respectively and private credits are 22 percent while the domestic credits are 38 percent.

TABLE 1
Descriptive Statistics

	MEAN	MED	MAX	MINI	S.D
BD	28.114	27.187	79.297	1.990	14.867
DC	38.188	39.362	93.235	-5.734	18.666
FPERSIST_G5	70.786	70.251	100	9.722	25.362
FPSSSE	77.096	79.645	148.964	2.041	33.543
GDPG	3.111	3.073	24.381	-15.353	3.684
HIV	0.147	0.1	0.4	0.1	0.097
INF	9.033	7.923	80.569	-17.630	7.995
M3	36.187	39.536	59.465	8.539	11.792
MOR_5	114.528	108.15	273.1	9.6	68.797
MOR_INF	81.576	78.7	182.3	8.2	45.086
MOR_MAT	278.881	225	900	29	208.621
PC	22.510	22.278	69.332	1.917	13.182
PD	352.773	236.517	1203.003	6.240	323.609
PERSIST_G5	68.747	68.439	98.735	9.687	26.053
POP_UNDERNO	21.148	21.925	36.87	6.2	6.437
PPP_CF	22.172	19.23	67.1	8.1	10.978
PSE	87.168	87.658	156.170	20.114	27.360

The growth rate or GDP growth per capita is 3.11 percent which is less than the average rate of growth by 2% every year and the inflation is higher by 9.03% at the average.

TABLE 2
Correlations of Poverty, Education, Gender Equality and Health

	FPE	RSIST_G5	FPSE	HIV MOR_5	MOR_INF	MOR_MAT	PERSIST_G5	POP_UNDERNO	PPP_CF	PSE
FPERSIST_G5	1									
FPSE	0.990	1								
HIV	-0.32	-0.411	1							
MOR_5	-0.97	-0.995	0.428	1						
MOR_INF	-0.99	-0.99	0.371	0.993	1					
MOR_MAT	-0.74	-0.82	0.640	0.875	0.816	1				
PERSIST_G5	0.998	0.986	-0.357	-0.966	-0.987	-0.731	1			
POP_UNDERNO	0.700	0.739	-0.881	-0.727	-0.709	-0.718	0.730	1		
PPP_CF	0.846	0.909	-0.675	-0.936	-0.896	-0.976	0.841	0.824	1	
PSE	0.993	0.988	-0.419	-0.968	-0.985	-0.754	0.997	0.774	0.86	1

Table 2 shows, Female primary School enrollment and female persistence to fifth grade have positive correlation with each other's. Economies which having more children's enrollment they also indulge more women to contribute at school also have more children's stay. HIV has negative correlation with female primary enrollment and female persistence to fifth grade. Under five mortality is positively correlated to HIV except others Two variables and infant mortality is also positively correlated to HIV but also with the under-five mortality while maternal mortality have positive correlation with HIV, mortality under five and infant mortality. Population under minimum level of energy diets have positive correlation with female persistence to grade 5 and female primary school enrollment but negative correlation with HIV, maternal mortality under five and infant mortality. Purchasing power parity positively correlated with persistence to fifth grade and female primary enrollment and also with undernourished population.

TABLE 3
Correlations of Financial Development and Control Variables with the MDGSs

	FPERSIST_G5	FPSE	MOR_5	MOR_INF	MOR_MAT	PERSIST_G5	POP_UNDERNO	PPP_CF	PSE	BD	DC	GDPG	INF	HIV	PC	PD
FPERSIST_G5	1.00000															
FPSE	0.990	1.000000														
MOR_5	-0.973	-0.995	1.000000													
MOR_INF	-0.992	-0.999	0.993	1.000000												
MOR_MAT	-0.744	-0.828	0.875	0.816	1.000000											
PERSIST_G5	0.998	0.986	-0.966	-0.987	-0.731	1.000000										
POP_UNDERNO	0.700	0.739	-0.727	-0.709	-0.718	0.730	1.000000									
PPP_CF	0.846	0.909	-0.936	-0.896	-0.976	0.841	0.824	1.000000								
PSE	0.993	0.988	-0.968	-0.985	-0.754	0.997	0.774	0.865	1.000000							
BD	-0.185	-0.267	0.283	0.225	0.519	-0.220	-0.817	-0.551	-0.285	1.000000						
DC	-0.588	-0.591	0.551	0.561	0.451	-0.633	-0.943	-0.606	-0.675	0.766	1.000000					
GDPG	0.706	0.623	-0.544	-0.622	-0.138	0.738	0.586	0.345	0.734	-0.121	-0.730	1.000000				
INF	-0.242	-0.162	0.143	0.205	-0.172	-0.206	0.514	0.168	-0.139	-0.907	-0.524	-0.150	1.000000			
HIV	-0.327	-0.411	0.428	0.371	0.640	-0.357	-0.881	-0.675	-0.419	0.987	0.797	-0.182	-0.832	1.00000		
PC	0.568	0.512	-0.503	-0.549	-0.203	0.530	-0.188	0.218	0.473	0.685	0.281	0.288	-0.925	0.563	1.00000	
PD	0.407	0.285	-0.2177	-0.317	0.261	0.403	-0.184	-0.136	0.349	0.680	0.051	0.643	-0.823	0.619	0.767	1.00000

Table 3 is presenting the associations of financial development and control variables with MDGs of poverty, education, gender equality and health variables. Financial development has positive correlation with female persistence to fifth grade and also with female primary enrollment because the economies which having more children and women in school having more chances to stay in schools. But financial development has negative correlation with less than five mortalities, infant mortality and maternal mortality. Financially sound countries have less child, infant and maternal mortality. Undernourished population and purchasing power parity has positive association with financial development which shows a good stable financial system of some country while HIV is negatively correlated to financial development which presents those countries needs better Financial reforms so that incidence of HIV will be reduced.

TABLE 4
Correlations of Financial Development and Control variables

	PC	BD	M3	DC	PD	INF	GDPG
PC	1						
BD	0.912	1					
M3	0.735	0.795	1				
DC	0.874	0.893	0.848	1			
PD	0.795	0.762	0.355	0.592	1		
INF	-0.115	-0.132	-0.060	-0.057	-0.116	1	
GDPG	0.264	0.190	0.205	0.210	0.201	0.026	1

(Financial development as dependent variable)

Table 4 presents the correlations between financial development and Control variables and all of the financial development variables are highly associated with each other's. Countries which have extra private credit also have extra money supply and deposits in their financial institutions but the countries which have denser population having sound financial system on the other hand the high inflation have low financial development. GDP growth per capita is not seemed to be good for

financial development.

Table 5 exhibit the ordinary least square regression results of financial development and MDG. The bank deposits, private credit, M3 and domestic credits coefficients are highly significant with poverty, gender equality, and health, education regression. They are positively associated with poverty, education and gender equality regression but negative significant correlation with female persistence to fifth grade and mortality regressions but having positive significant correlation with HIV. This presents that more sound financial system leads to more enrollments to school by children and also keep the women and children into school and declines the less than five and maternal mortality and also enhances the purchasing power parities and minimizes the undernourished population.

TABLE 5

Financial Development and MDGs Poverty, Education, Gender Equality and Health OLS Regression Results

	PSE	Persist_G5	FPSE	FPERSIS_G5	MOR_5	MOR_INF	MOR_MAT	HIV	POP_UNDERNO	PPP_CF
BD	1.257015***	0.161747	1.28083***	-0.441001	-2.644818***	-1.42659***	-14.60421*	0.0048*	0.171528	0.68655***
	(-0.31873)	(-0.489828)	(-0.410035)	(-0.66445)	(-0.740888)	(-0.503096)	(-8.038072)	(-0.0016)	(-0.198225)	(-0.186592)
PC	1.349715***	1.340225**	2.00903***	0.869135	-5.376655***	-3.108779***	-29.01111***	0.0073*	0.380465**	1.16552***
	(-0.30145)	(-0.561401)	(-0.373761)	(-0.730171)	(-0.70202)	(-0.480431)	(-8.635939)	(-0.0020)	(-0.165571)	(-0.237636)
DC	1.003019***	0.005279	1.1997***	-0.537996	-2.432802***	-1.38498***	-12.13065***	0.0039*	0.66188***	0.58000***
	(-0.25847)	(-0.367419)	(-0.329701)	(-0.474499)	(-0.516884)	(-0.351545)	(-4.772391)	(-0.0012)	(-0.145062)	(-0.153431)
M3	3.62E+00***	5.40E+00***	6.1278***	5.098948*	-1.39E+01***	-9.12E+00***	-1.76E+01	2.29E-17	1.45E+00	1.83E+00
	(7.19E01)	(-1.83E+00)	(-1.179022)	(-2.826656)	(-2.32E+00)	(-1.61E+00)	(-1.51E+02)	(1.83E+00)	(-1.92E+00)	(-3.46E+00)

(***, **, and * Re-present 1, 5 and 10% levels respectively).

FINDINGS & DISCUSSION

So far, results presents that the increment in domestic credit, private credit, money supply and deposits in the countries assist to accomplished the millennium development goals of poverty, education, gender equality and health. Claessens and Feijen (2007) shows the positive relationship in the private credit and school participation and in the 2011 Rosner (2011) said that there is not only the relationship but they also have causal association. Moreover, results describes that continues financial development helps to improve the level of poverty, education, gender equality and health and will also. Because with high purchasing power parity people will able to get their own education not only this they will more send their children to schools and whish shows the values of education so the effect of sound financial system intends them to invest in their youth to attend school not only boys but also girls because more educated people show less gender disparity. Results shows that financial development impacts health also but not as much it effects the others such as poverty, education, gender equality. Financial development lessens the mortality under five, infant mortality and maternal mortality and will also in future. Present generation of children saw that the financial development reduced the mortality in future they will become adults and will also do well for their own and children's health also. Bank deposits, money supply, domestic credit have high significant relation with poverty, gender equality, health and education regressions the results are matched for these with Rosner (2011). Results describes that increment in deposits in the countries as compare to the domestic credit, private credit, money supply it shows big immediate effects on the advancement of education, poverty, gender equality and health. This is very big impact because it is relative to GDP growth per capita. According to the results of OLS regression, Increase deposits in a sound financial system having the effect on GDP growth on primary enrollment sixty percent. Mortality under five shows its eighty percent effects on GDP growth and the female primary enrollment have its fifty percent impacts on GDP growth while maternal mortality shows its seventy percent effects on GDP growth but with no financial development and moreover, the advantages from the increment of deposits seem to take long time for buildup. The results suggest that policy makers should make the focal point the high level of deposits, private credit and money in South Asian countries.

CONCLUSION AND POLICY IMPLICATIONS

The present research give us a chance to check the relationship between financial development, economic growth and the millennium development goals for poverty, education, gender equality and health in South Asia with the help of four financial development indicators and economic growth, population density and inflation as three controlled variables. A more developed and sound financial system give the way to achieve the MDGs and also define their future outcomes, the results are matched the theory of diminishing marginal impact of financial development and tells that the MDGs can be met through the reduction in conversion cost, better ingress to credit and intend-

ing population for savings in financial institutions. Moreover, the study shows the long run relationship between all the variables as Rosner (2011) shows in the developing countries. It also shed light that by enhancing opportunities for the savings in banks, in spite of the ingress to credit has the big effects on the millennium development goals. Because many people in the south Asian region are poor so it is the better for them to deposit in banks and get more opportunities to invest in profitable projects and avail chances of getting more money. The results also state that standard of living can be increased by reducing poverty from the country with the help of financial development and economic growth as (control variable). Because when a country's per capita income increased the people get more chances to adopt better life style, get more healthy food which next leads to access to the better education of their own and their children's which helps to protect their future. As we know the more educated people show less gender diversity and make the atmosphere of their home and country more peace full by providing those chances to contribute in income level and maintaining a decent income for their selves and also for their family. The results shows the inter links of all MDGs goals discussed in this study and also tells that the millennium development goals can be achieved very easily but with the help of financial development and economic growth. However, the research work provides the policy makers the points to make economic policies and financial reforms which will sustain a long run growth in the country and also helps to meet MDGs especially.

Policy Implications

This study implies for the policy makers to make policies and also focus on the development opportunities of financial system, which help to boosts a better financial system through which the millennium development goals can be achieved easily and shows the direct impact for the poor countries to complete the MDGs. The study is limited to the achievement of the first four goals of the millennium declaration with the help of financial development and economic growth as dependent variable. The study suggests or recommends that in future the researchers can do the study on the whole of the eight millennium development goals accomplishment and it also can be done with a comparison of the developing and under developing countries.

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Appendix A: Variable Calculations

For the time period of 1970-2012 the variables are calculated for each south Asian country with available data for these years. Deposits are taken as a percentage of GDP which is the rate of all checking and savings in banks. Private credit is the value of claims on the private sector as percentage of GDP.M3 is also said to be liquid liabilities which are the sum of all currency and deposits in central banks as proportion of GDP. Domestic credit is the value of all both type of credit which is credit to private and credit to public as percentage of GDP. Population undernourished equals to the portion of population who is suffering from the minimum level of energy diets. Purchasing power parity is equal to the proportion of population which is living under the 1.25$. Primary enrollment is the ratio of children who are enrolled in primary level. Persistence to the fifth grade is equal to the portion of children enrolled to the primary grade 1 and eventually reached to the fifth grade. Female primary enrollment is equal to the percentage of female who enrolled in the primary level. Female persistence to fifth grade is the ratio of women which also enrolled in first primary level and eventually reached to the last primary level. Under - 5 five mortality presents the percentage of newly birth babies who die before 1 year of age. Infant mortality equals to the percentage that die before 1 year of age. Maternal mortality is the percentage of women who die during delivery and pregnancy. HIV presents the percentage of population aged from 15-49 and are incidence of HIV. Population density shows the no. of people per square kilo meter. Inflation is taken as GDP growth deflator per year. GDP is the GDP growth per capita. Bank concentration is the percentage of the five largest banks with ingress to total banking sector assets.

Deposits i=Σtm=t-n(Deposits/GDP)i,m/(n+1),

Private Credit i =Σtm=t-n(private credit/GDP)i,m/(n+1),

M3 i =Σtm=t-n(M3/GDP)i,m/(n+1),

Domestic Credit i =Σtm=t-n(domestic credit/GDP)i,m/(n+1),

Population undernourishment=Σ(population undernourishment/GDP)i,m/(n+1),

Purchasing power parity i =Σtm=t-n(purchasing power parity/GDP)i,m/(n+1),

Primary enrollment i=Σtm=t-n(primary enrollment/GDP)i,m/(n+1),

Persistence to grade 5i=Σtm=t-n(persistence to grade 5/GDP)i,m/(n+1),

Female primary enrollment =Σtm=t-n(female primary enrollment/GDP)i,m/(n+1),

Female persistence to grade =Σtm=t-n(female persistence to grade 5/GDP)i,m/(n+1),

Under -5 mortality i =Σtm=t-n(under -5- mortality/GDP)i,m/(n+1),

Infant mortality i =Σtm=t-n(infant mortality/GDP)i,m/(n+1),

Maternal mortality i =Σtm=t-n(maternal mortality/GDP)i,m/(n+1),

HIV i =Σtm=t-n(HIV/GDP)i,m/(n+1),

Population density i =Σtm=t-n(population density/GDP)i,m/(n+1),

Inflation i=Σtm=t-n(private credit/GDP)i,m/(n+1),

GDP Growth i =Σtm=t-n(GDP Growth/GDP)i,m/(n+1),

Bank concentration i =Σtm=t-n(Bank concentration/GDP)i,m/(n+1),

Here i= country index, t = observation of recent years, n= difference between first and the last observation year

Appendix B: Financial Development Regression Results

TABLE B.1
Financial Development and FPERSIS_G5 Regression Results

	FPRESIS_G5	FPRESIST_G5	FPRESIST_G5	FPRESIST_G5
Bank deposit	-0.4410			
	(0.66445)			
Bank deposit^2	0.0113			
	(0.009343)			
Private credit		0.869135		
		(-0.730171)		
Private credit^2		-0.0033**		
		(0.010811)		
DC			-0.537996	
			(0.474499)	
DC^2			0.010075	
			(0.005518)	
M3				5.098948*
				(2.826656)
M3^2				-0.054813
				(0.042936)
PD	-0.005689	-0.012822	-0.014231	0.018426
	(0.011543)	(0.0111)	(0.012256)	(0.017111)
INF	0.098983	0.273316	0.499631	0.086281
	(0.65234)	(0.500453)	(0.526931)	(0.714076)
GDPG	2.4520**	2.5909***	3.4405***	0.320479
	(1.043706)	(1.029509)	(1.033897)	(1.367457)
C	67.4655***	46.4863***	64.0713***	-44.02085
	(13.36656)	(11.47445)	(11.04605)	(41.79511)
Estimation procedure	OLS	OLS	OLS	OLS
Observations	46	50	50	20
RSquared	0.213184	0.288352	0.246531	0.614899

(Female persistence to grade 5 as dependent variable)

TABLE B.2
Financial Development and the FPSE Regression Results

	FPSE	FPSE	FPSE	FPSE
Bank Deposit	1.28083***			
	(0.410035)			
Bank Deposit^2	-0.001608			
	(0.006404)			
Private Credit		2.009032***		
		(0.373761)		
Private Credit^2		-0.013289**		
		(0.006156)		
Domestic Credit			1.199727***	
			(0.329701)	
Domestic Credit^2			-0.006381	
			(0.004455)	
M3				6.127***
				(1.179022)
M3^2				-0.083***
				(0.018765)
C	36.61296***	34.8389***	35.67366***	-56.87***
	(6.876113)	(5.846976)	(6.619092)	(18.00092)
INF	0.162372	-0.019831	-0.189425	0.196032
	(0.337294)	(0.213372)	(0.227354)	(0.196032)
PD	0.011094	0.014134**	(0.018507***	0.073***
	(0.00824)	(0.006245)	(0.018507)	(0.009776)
GDPG	1.047579**	1.171083**	1.757733***	0.171013
	(0.550641)	(0.50739)	(0.538761)	(0.631988)
Estimation Procedure	OLS	OLS	OLS	OLS
R-squared	0.430508	0.426489	0.33444	0.486751
Observation	181	207	207	104

(Female primary school enrollment)

TABLE B.3
Financial Development and PSE Regression Results

	PSE	PSE	PSE	PSE
Bank Deposit	1.257015***			
	(0.318733)			
Bank Deposit^2	-4.76E-03			
	(5.01E-03)			
Domestic Credit		1.0030***		
		(0.258465)		
Domestic Credit^2		-6.83E-03		
		(3.52E-03)		
Private Credit			1.3497***	
			(0.301452)	
Private Credit^2		-7.34E-03		
		(5.00E-03)		
M3				3.62E+00***
				(7.19E-01)
M3^2				-5.19E-02***
				(1.14E-02)
C	56.5324***	58.1440***	60.075***	6.200427
	(5.386647)	(5.302383)	(4.775134)	(11.04295)
PD	0.000683	0.0114**	0.00698	0.052091***
	(6.48E-03)	(5.38E-03)	(5.10E-03)	(6.05E-03)
INF	0.037098	-0.168878	-0.045189	0.042298
	(0.257122)	(0.182265)	(0.172596)	(0.13168)
GDPG	0.238439	0.8411**	3.85E-01	7.15E-02
	(0.386945)	(0.401592)	(3.77E-01)	(3.84E-01)
Estimation Procedure	OLS	OLS	OLS	OLS
R. Squared	0.391028	0.249184	0.34186	0.485349
Observation	186	211	211	109

(Primary school enrollment as dependent variable)

TABLE B.4
Financial Development and PERSIST_ G5 Regression Results

	PERSIST_G5	PERSIST_G5	PERSIST_G5	PERSIST_G5
Bank Deposit	0.161747			
	(0.489828)			
Bank Deposit^2	2.89E-03			
	(6.70E-03)			
Domestic Credit		0.005279		
		(0.367419)		
Domestic Credit^2		5.38E-03		
		(4.24E-03)		
Private Credit			1.340225**	
			(0.561401)	
Private Credit^2			-9.03E-03	
			(8.22E-03)	
M3				5.40E+00***
				(1.83E+00)
M3^2				-5.93E-02**
				(2.74E-02)
C	62.6855***	57.1941***	43.51157	-46.24359
	(10.83346)	(8.871983)	(9.07718)	(27.89124)
PD	-0.004666	-0.0202**	-0.016195	0.01606
	(1.02E-02)	(1.05E-02)	(9.32E-03)	(1.20E-02)
INF	-0.188304	0.167781	0.13087	0.094005
	(0.554781)	(0.438963)	(0.408972)	(0.479985)
GDPG	1.7864**	2.7724***	1.97E+00	1.21E-01
	(0.820601)	(0.788826)	(7.82E-01)	(9.41E-01)
Estimation Procedure	OLS	OLS	OLS	OLS
R. Squared	0.200592	0.271386	0.34326	0.707777
Observation	60	66	66	28

(Persistence to grade five as dependent variable)

TABLE B.5
Financial Development and MOR_5 Regression Results

	MOR_5	MOR_5	MOR_5	MOR_5
Bank Deposit	-2.644818***			
	(0.740888)			
Bank Deposit^2	1.43E-02			
	(1.10E-02)			
Domestic Credit		-2.4328***		
		(0.516884)		
Domestic Credit ^2		1.09E-02*		
		(6.43E-03)		
Private Credit			-5.3766***	
			(0.70202)	
Private Credit^2			4.72E-02***	
			(1.15E-02)	
M3				-1.39E+01***
				(2.32E+00)
M3^2				1.59E-01***
				(3.57E-02)
C	196.6091***	198.5963***	214.2216***	444.0686***
	(13.50591)	(11.90147)	(11.13492)	(37.12273)
PD	-0.0336***	-0.0206**	-0.012003	-0.1346***
	(1.37E-02)	(1.06E-02)	(9.88E-03)	(1.96E-02)
INF	-1.1817**	0.2962**	-0.17441	-0.701273
	(0.679794)	(0.445818)	(0.415282)	(0.471811)
GDPD	-4.1371***	-5.0934***	-4.01E+00***	-1.42E+00
	(1.026751)	(0.951919)	(8.86E-01)	(1.35E+00)
Estimated Procedure	OLS	OLS	OLS	OLS
R. Squared	0.341566	0.361975	0.456494	0.597894
Observation	221	258	258	127

(Mortality under five as dependent variable)

TABLE B.6
Financial Development and the MOR_MAT Regression Results

	MOR_MAT	MOR_MAT	MOR_MAT	MOR_MAT
Bank Deposit	-14.60421*			
	(8.038072)			
Bank Deposit^2	1.06E-01			
	(1.10E-01)			
Domestic Credit		-12.1306***		
		(4.772391)		
Domestic Credit^2		6.56E-02		
		(4.99E-02)		
Private Credit			-29.0111***	
			(8.635939)	
Private Credit^2			3.01E-01**	
			(1.27E-01)	
M3				-1.76E+01
				(1.51E+02)
M3^2				1.85E-01
				(1.64E+00)
C	746.8522***	695.1622***	870.6185***	827.826
	(161.7969)	(126.8108)	(140.273)	(3647.073)
PD	-0.099216	-0.031092	-0.015423	-0.354621
	(1.15E-01)	(8.87E-02)	(7.96E-02)	(3.74E-01)
INF	-7.161618	0.073796	-4.505638	-4.422026
	(7.28305)	(6.754679)	(5.990734)	(14.79751)
GDPG	0.6734	-0.720838	1.03E+00	-8.35E+00
	(0.673405)	(9.178108)	(8.17E+00)	(2.01E+01)
Estimated Procedure	OLS	OLS	OLS	OLS
R. Squared	0.384241	0.40972	0.500124	0.369751
Observation	31	38	38	11

(Maternal mortality as dependent variable)

TABLE B.7
Financial Development and HIV Regression Results

	HIV	HIV	HIV	HIV
Bank Deposit	0.004885*			
	(0.001641)			
Bank Deposit^2	-1.63E-05			
	(2.25E-05)			
Domestic Credit		0.003976*		
		(0.001237)		
Domestic Credit^2		-1.47E-05		
		(1.34E-05)		
Private Credit			0.007385*	
			(0.002031)	
Private Credit^2			-6.06E-05**	
			(2.92E-05)	
M3				2.29E-17
				(7.22E-17)
M3^2				-6.75E19
				(7.85E-19)
C	0.098843***	0.107104***	0.088454***	0.1***
	(0.034547)	(0.107104)	(0.03633)	(1.68E-15)
PD	-0.000118***	-0.000114***	-0.000107***	2.41E-19**
	(2.42E-05)	(2.15E-05)	(2.12E-05)	(9.95E-20)
INF	-0.005467***	-0.007241***	-0.005717***	-8.85E-18
	(0.001754)	(0.001707)	(0.001693)	(6.50E-18)
GDPG	-0.000353	0.001679	-1.11E-05	-1.55E-17**
	(0.002447)	(0.002232)	(2.27E-03)	(6.78E-18)
Estimated Procedure	OLS	OLS	OLS	OLS
R. Squared	0.321684	0.281398	0.267611	
Observation	135	155	155	45

(HIV as dependent variable)

TABLE B.8
Financial Development and POP_ UNDERNO Regression Results

	POP_UNDERNO	POP_UNDERNO	POP_UNDERNO	POP_UNDERNO
Bank Deposit	0.171528			
	(0.198225)			
Bank Deposit^2	-5.40E-03			
	(2.25E-03)			
Domestic Credit		0.661***		
		(0.145062)		
Domestic Credit^2		-8.07E-03***		
		(1.35E-03)		
Private Credit			0.3804**	
			(0.165571)	
Private Credit^2			-8.38E-03	
			(2.21E-03)	
M3				1.45E+00
				(1.92E+00)
M3^2				-1.84E-02
				(2.06E-02)
C	21.4943***	6.9271*	15.1922***	3.779664
	(4.284013)	(3.841614)	(3.112631)	(45.12833)
PD	0.0027**	0.0028***	0.0009	-0.0163***
	(1.36E-03)	(1.34E-03)	(1.37E-03)	(2.34E-03)
INF	0.132054	0.2835***	0.3732***	-0.167675
	(0.097148)	(0.098088)	(0.105558)	(0.158577)
GDPG	0.22853*	0.044455	2.53E-01**	2.12E-01
	(0.139364)	(0.133185)	(1.44E-01)	(1.58E-01)
Estimated Procedure	OLS	OLS	OLS	OLS
R. Squared	0.403767	0.455381	0.36464	0.730839
Observation	109	126	126	42

(Undernourished population as dependent variable)

TABLE B.9
Financial development and PPP_ CF regression results

	PPP_CF	PPP_CF	PPP_CF	PPP_CF
Bank Deposit	0.6865***			
	(0.186592)			
Bank Deposit^2	-8.45E-03***			
	(2.55E-03)			
Domestic Credit		0.5800***		
		(0.153431)		
Domestic Credit^2		-6.08E-03***		
		(1.71E-03)		
Private Credit			1.1655***	
			(0.237636)	
Private Credit^2			-1.52E-02***	
			(3.45E-03)	
M3				1.83E+00
				(3.46E+00)
M3^2				-1.14E-02
				(-1.14E-02)
C	5.56645	6.19987*	-0.563209	-38.19419
	(3.929258)	(3.84191)	(4.274041)	(78.65882)
PD	0.000715	0.001476	-0.000475	-0.0117***
	(2.75E-03)	(2.77E-03)	(2.64E-03)	(3.75E-03)
INF	0.3644**	0.255889	0.4058**	0.049937
	(0.199465)	(0.210782)	(0.200342)	(0.256502)
GDPG	0.293495	0.436847	4.18E-01	3.36E-01
	(0.278316)	(0.282284)	(2.77E-01)	(2.55E-01)
Estimated Procedure	OLS	OLS	OLS	OLS
R. Squared	0.123932	0.12219	0.179078	0.31012
Observation	135	146	146	43

(Purchasing power parity as dependent variable)