

**STUDY ON IMPACTS OF ABOLITION OF SCHOOL FEE ON PRIMARY
EDUCATION IN MYANMAR**

By

Thein Thein San

THESIS

Submitted to

KDI School of Public Policy and Management

In Partial Fulfillment of the Requirements

For the Degree of

MASTER OF PUBLIC POLICY

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Study on Impacts of Abolition of School Fee on Primary Education in Myanmar

Abstract

In this paper, I examine the impacts of the school fee abolition on the primary educational attainment after the abolition process by using the quasi natural experiment. I use Linear Probability Model to analysis relationship between primary school fee and educational attainment. I find that the school fee abolition is not the main reason in order to get universal primary education in Myanmar from my analysis. Although the school fees are free, there are other socio economic characteristics as the obstacles to get the educational attainment.

I. Introduction and Background

Traditionally, education has been valued and strongly encouraged by the society in Myanmar. However, the situation of education has not improved in the past decades since the society still suffers from high rate of poverty and poor social welfare system provided by the state. When Myanmar became the member of the United Nation Convention on the Right of the Child in 1991, the universal access to primary education became of great importance in order to get the universal education. There are six Myanmar National Goals in line with the Long term Basic Education Plan and Millennium Development Goals. The first one goal emphasized to ensure to get the significant progress in implementing universal primary education for all school age children and the primary education should be compulsory and good quality by 2015 (National EFA Review Report, 2014). Myanmar National EFA Goals are one of the key policy guide line for Myanmar in order to enhance the education sector. Although many targets had achieved, the targets for universalization of primary education from the National Goals is less likely to be achieved due to some reason such as school dropout rate in primary education.

In the previous decades, the dropout rates were very high across the country primarily because high school fees for all education levels are very high. According to the cohort analysis of UNDP, the average dropout rate during the year 2008 and 2012 is 25.2% in Myanmar (UNDP, 2015). In addition, several other reasons have been identified as contributing factors to school dropout. Some children were working at the informal sector to support household. In most of the cases, the reason behind the school dropout in the primary levels is linked to the families' financial status. There are high tuition fees and other related school fees such as participation fees for student festivals, multi-media classrooms, textbooks, paper, pens, financial contribution to the Parent Teacher Association Fund and other donation

for school improvement. Although some families live close to the school area, they cannot afford supporting their children to go to school due to less family income. Consequently, many students drop out of schools before they reach a secondary level. Therefore it has been very difficult to attain the universal primary and secondary education in Myanmar over the last decades.

In Myanmar, basic education currently consists of 6 years of primary education, 4 years of lower secondary education and 2 years of upper secondary education. Before the 2009-2010 school years, primary school education was not free and compulsory. The benefits of Myanmar's socioeconomic growth have not been distributed equally across the country and the rate of investment in education was very low. Education expenditure in percentage of total expenditure is 3.84% in 2011- 2012 fiscal year (Budget Department, Myanmar).

In 2011, the newly elected government started to implement reforms in various sector including the education sector. As a result, Myanmar's government adopted the Framework for Economic and Social Reforms (FESR) with the coordination of Ministry of National Planning and Economic Development and Myanmar Development Research Institute. In FESR, a reform focuses on the promotion of the education. FESR emphasizes the importance of rapidly improving not only the quality but also the quantity of primary and secondary education in Myanmar. Based on the international experience, the government has to consider innovation, school grants and student stipends or conditional cash transfers with effective policy measures that could improve the quality of education (FESR, 2012). During the reform process, Education Expenditure has been increased from 0.7% of GDP in fiscal year 2010-2011 to 2.1% of GDP in fiscal year 2013-2014.¹ In fiscal year 2013-2014, the government spent two third of the total government education expenditure for the basic education (Ibid). Since the period of 2009-2010, Myanmar's government set the school fee abolition policy for

¹ MOE, CESR Phase 2 Report (2014).

the primary level and policy implementation took place only in 2010-2011 school year as a country wide policy. All the students stop paying fee only by the school year 2010-2011. In addition the Government established the scheme to devolve cash from the center directly to the primary schools so as to remove the custom of receiving fees from the students (FESR 2012).

1.1 Statement of the Problem

Myanmar has faced many obstacles in attempts to improve the education sector. Among these obstacles, the government is particularly struggling with finding a solution to the issue of high rate of dropouts in primary school level. The primary dropout rate is 7.49 % in 2013-2014(Ministry of Education, Myanmar).The main loss occurs during the first two years of primary school was mainly for the reason of affordability according to the data extracted from the multiple indicator cluster survey conducted in 2010-2011(MICS Report 2012). The reason is that in most cases, families' financial status is linked to the school dropout in the primary levels. In order to financially support their household, children work in the informal sector.

1.2 Purpose of the Study

Although several analyses of the impacts of the school fee abolition have been undertaken for other countries, there is no study to analyses the impacts of school fee abolition process in Myanmar. Therefore, this study will examine the effect of the school fees abolition on primary educational attainment and other main reasons related to never attending school in Myanmar.

1.3 Research Questions

- Is the cost for the education the main reason for never attending school after implementing the school fee abolishing policy in Myanmar?
- What other socio economic conditions need to be met to fully achieve the purpose of the abolition of primary school fees?
- How the school fee abolition can be contributed to enrollment or various socioeconomic growths?

1.4 Hypothesis

School fee abolition is not the panacea to get the educational attainment in Myanmar.

1.5 Methodology of the Study

This study is intended to analyze the impacts of the school fee abolition on primary education in Myanmar. A regression analysis will be used to reveal the relationship between the school fee, and other socio economic characteristics of the household. The quantitative methodology will be used in reviewing impacts of the school fee abolition on primary education in Myanmar. I also will be used qualitative methodology in reviewing some areas.

1.6 Data Collection

For this study, I am going to use the survey data organized by the Ministry of Planning and Finance. The data are available from Myanmar Poverty and Living Condition Survey (2014/2015) undertaken by the Planning Department, Ministry of Planning and Finance in the cooperation with World Bank for the year 2015. I also need to use other sources or combine data sources from the other Ministries such as Ministry of Education and Ministry of Religious Affairs. However, the above mentioned household survey is listed as the primary sources for the most of the data.

1.7 Contribution and limitation of the Study

This study was limited to examining and understanding the impacts of school fee abolition policy in implementing the universal primary education in Myanmar. There are some limitations in my study, although my study reaches its aim. The study should have analyzed the dropout rate in the primary level and impacts of the parent's education on the children's educational attainment. I cannot put in my regression the child labor rate due to data unavailable. I hoped that this study will be of significance to policy makers and analysts. From my research, I can support the specific guideline for policy coordination and policy recommendations for education sector in Myanmar. And also to the other researchers themselves, it will be of importance for research purpose given that it is a useful paper to figure out the suitable policy recommendations for the education system in Myanmar.

1.8 Organization of the Study

In this paper, there are 5 chapters to examine the impacts of the school fee abolition in Myanmar. In chapter one, introduction and background of the study, purpose of the study, research questions, hypothesis, methodology, data collection, contribution and limitation, and organization of the study are covered. Chapter two of the study has elaborated the literature review deal with the study. Chapter three has presented the role of government and public expenditure for education in Myanmar. Chapter four analyzed the data about educational attainment corrected with the school fee abolition and other variables such as household size, urban/ rural, gender and many other socio economic characteristics and presents the evaluation of the result. Chapter five has elaborated the conclusion. And then, I present my recommendations.

II. Literature Review

Most of the government tries to provide access to universal primary education because it is one of the basic concerns necessities of the society. The United Nation Declaration of Human Right (1948) promulgated the elementary education as the fundamental human right. School fee is a major obstacle for children in developing countries from being to go to school. Free schooling may be the single most important policy measure that can have a dramatic, impact on school enrolment. It unleashes latent demand for education and encourages children from disadvantaged backgrounds to participate. Eliminating school fees is crucial for fulfilling the rights and needs of every girl and boy, including excluded and vulnerable children (UNICEF, 2005). UNICEF established the School Fee Abolition Initiative since 2005 (World Bank, 2009).

This study will be contribute to the studies by Iscan, Rosenblum, and, Tinker (2015), who were studied School Fees and Access to Primary Education over 40 years in the in sub-Saharan Africa and Riphahn, (2005), who has identified the effect of the secondary school fees on educational attainment as well as Nssah's study (2013) on achieving Universal primary education through school fee abolition.

Many scholars conducted studies related to educational attainment after the abolition of school fees. However, school fee abolition is not the only reason that leads to educational attainment based on the experience of sub-Saharan African countries studied by Iscan, Rosenblum, Tinker (2015). Although Ghana introduced free primary education in 1996, enrollment rate did not increase significantly. It is partly because of a supply side problem (Akyeampong et al. 2007). Most of the teacher from Ghana left for Nigeria in order to get the high salaries. That was one of the socio economic conditions related to the educational attainment according to the Ghana's experiences although the school fees were abolished.

In Tanzania case, Vavrus and Moshi (2009) suggested that although school fees were officially abolished in 2001 for the primary level, household contributions were often expected from parents to pay for school materials and infrastructure in the absence of sufficient government spending. For these reasons, the enrollment rate did not increase in the initial phase of the abolition process. Thus, from the experiences of these two countries, there are still other socio economic conditions to be fulfilled in order to get educational attainment after school fees were abolished.

Furthermore, primary education not only has significant positive private returns, but also entails positive social returns (Deininger, 2003; Kadzamira and Rose, 2003; Plank, 2007). Iscan, Rosenblum, and Tinker (2015) examined the impact of the major increases in enrollment following the abolition of school fees, and identified the government funding shortfall amplified by the policy change. They also examined the long-term relationship between school fees and education quality as well as access over the past 40 years. Their focus was on seven countries in sub-Saharan Africa with relatively similar education policies and socioeconomic circumstances: Ethiopia, Ghana, Kenya, Malawi, Tanzania, Uganda, and Zambia (Iscan, Rosenblum, and Tinker, 2015). They found out that primary school fees were associated with a 17 percent point reduction in enrollment rates in primary schools, and 5 percent point dropout in primary completion rates (Iscan, Rosenblum, and Tinker, 2015). They also find that the introduction of fees decreased primary school enrollment, without achieving significant quality improvements. Other sources suggest that fees represented a significant proportion of household expenditures on primary education in sub-Saharan Africa, anywhere from one-third in Ghana to one-half in Ethiopia. Primary school fees have a disproportionately larger negative impact on the educational attainment of the children from poor families (World Bank, 2009). In addition, the policy benefited children from all strata:

rural and urban, poor and non poor, female and male in Ethiopia according to their study (Iskan, Rosenblum, and Tinker 2015).

Although school fees are abolished, educational attainment depends on gender in the developing countries. The parents do not sent girls to school as they are required to look after the household and family members. According to the analysis by Deininger (2003), there is evidence that the abolition of the school fees in Uganda completely eliminated the educational gender bias against girls. Schultz (2004) also point out a larger enrollment effect of educational subsidies for girls over boys. Fee abolition benefited the rural students more than urban students, girls more than boys, and traditionally disadvantaged areas more than wealthier ones in Ethiopia (World Bank, 2009).

On the other hand, educational attainment depends on education expenditure of household in the developing countries. Most of the available information show beneficial results of abolishing school fees or introducing education subsidies for school attendance and enrollment (Alderman et al. 2001; Deininger, 2003; Al-Samarrai and Zaman, 2007; Schultz, 2004). The evidence on school fees from industrialized countries is more limited. Dearden et al. (2007) found positive effects of a means-tested subsidy on participation in full-time education in the United Kingdom. Card and Lemieux (2000) showed the significant correlations between school fees and the educational enrollment of teenagers in the United States. Studies also looked at the impact of school fee at the primary level (Bedi et al., 2004; Bray & Lillis, 1988; Reddy & Vandemoortele, 1996). Furthermore, the quality access implication of fee abolition was examined not only not only in the country and but also the group of countries (Bold, M. Kimenyi, Mwabu, and Sandefur, 2010; Deininger 2003; World Bank, 2009). According to the next studies, school fees have acted as a significant barrier to enrollment based on the observed increases in enrollment rates following the abolition of fees in several countries (Kattan and Burnett, 2004).

III. Public Expenditure for Education and Implementing Universal Primary Education in Myanmar

Government of Myanmar prioritizes the policy to invest in education as an important function in order to access the universal primary education in line with the Millennium Development Goal. In the past, although the Government expenditure was less than 1 % of GDP, it has significantly increased from 0.6 % of GDP in FY 2009-2010 to 2.1% of GDP in FY 2013-2014.² Government of Myanmar spent two third of the total government expenditure in education for the basic education and spent the rest of education expenditure for the higher education.³ In Myanmar, 85% of government expenditure on education is allocated to the Ministry of Education and 10% to the Ministry of Science and Technology and the rest are allocated to nine other Ministry. Since basic education is under the Ministry of Education and budgetary allocation is focus for the child and basic education. In the fiscal year 2012-2013, 90 percent of Ministry of Education (MoE) budget is allocated for the basic education.⁴

The government spent more government budget in increasing the school building, the school teachers in primary education during the recent years rather than previous years. In this regard, the number of primary school teachers and primary school significantly increased 2013-2014 compared to 2007-2008 as shown in the following table. However, the primary school students increased slightly because of family's financial situation. Many children were working in the informal sector to support the household. According to the 2013-2015 evaluation, the primary school enrollment did not increased significantly although the school fees were abolished.

² Ministry of Education, CESR Phase 2 Report

³ *Ibid.*

⁴ UNICEF, Snapshot of Social Sector Public Budget Allocations and Spending in Myanmar, 2014

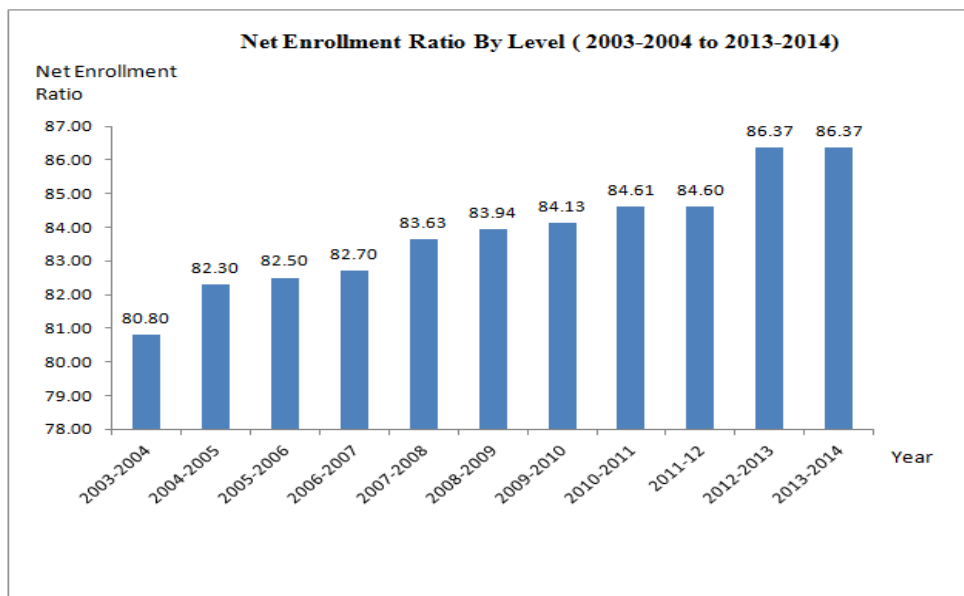
Table 3.1 - Number of the Primary Education School, Teachers and Students in the Year 2013-2014 compare to 2007-2008

Sr.No	Number of School, Teachers and Students	2007-2008	2013-2014
1	Post Primary and Primary School	36114	43181
2	Primary School Head and Teachers	177331	180922
3	Primary School Students	5042016	5265132

Source: MOE, Education Development in Myanmar, Nay Pyi Taw, p. 3; MOE (2014)

The national level data obtained from the Ministry of Education shows that the enrollment rates were slightly increased from the 2003-2004 school year as shown the following figure. According to the national level data, the enrolment rate also increased from 80.80 percent in academic year 2003-2004 to 86.37 percent in year academic year 2013-2014.

Figure 3.1 Net Primary Enrollment Ratio



Source: Ministry of Education

According to the data from the Integrated Household Living Condition Assessment Survey conducted by the UNDP and Planning Department in 2009-2010, the enrolment rate overall, net primary enrolment in 2010, a statistically significant increase from its 2005 level. However there is huge difference between the poor and non poor according to above

mentioned survey result. Although net enrolment is difference between the rural and urban, there is no significant difference between the genders compare with the year 2005 and year 2010 as shown below table.

Table 3.2 - Net Enrolment Rate in Primary School in 2005 compare to 2010

Year	Poverty Status		Strata		Genders	
	Poor	Non Poor	Rural	Urban	Male	Female
2005	80.1	87.2	87.6	84	84.2	85.2
2010	81.3	90.3	91.8	86.7	87.8	87.6

Source: IHLCA Survey 2004-2005 & IHLCA Survey 2009-2010

According to the above mentioned surveys, the access to primary education is also slightly different from the poor and non-poor as shown in the below table. However, there is larger difference between rural and urban dwellers. It shows that the enrollment is related to the urban and rural and school location because many students cannot go to the school if the school is very far especially in the rural areas where the infrastructure is not well developed.

Table 3.3 - Access to primary school for year 2005 and 2010

Year	Poverty Status		Strata	
	Poor	Non Poor	Rural	Urban
2005	80.1	87.2	87.6	84
2010	81.3	90.3	91.8	86.7

Source: IHLCA Survey 2004-2005 & IHLCA Survey 2009-2010

On the other hand, although the enrollment rate was slightly increased, the primary completion rate was not significantly increase for the poor due to the high school fee for the every education level. Many children drop out of schools before they reach a secondary level. In the previous years, Children drop out of school for several complex reasons, although the main reason is based on families' financial status. For example, most of the cases of school

dropout in the primary levels are strongly linking with financial situation of the family. In addition, the high tuition cost and other school related fees are a major factor for the dropout in primary level. School related fees including enrollment fee, payment for textbooks, exercise books, school cleaning, examination papers, sports fees, in school tutoring fees and many other related fees.

Overall, education shares of expenditure by household decreased from around 3 percent in 2010 to 2 percent in 2005. However, on the other hand government increased the expenditure for education in order to implement the school fee abolition scheme from the academic year 2009-2010. Government of Myanmar introduced the school fee abolition in primary school since the academic year 2009-2010 and established the scheme to devolve cash from the center directly to the primary schools so as to remove the custom of receiving fees from the students. The policy affected in 2010-2011 as the country wide policy. The school fee abolition policy is one of educational reform processes under the sector policy for inclusive growth and poverty reduction. The Government intends to reduce high dropout rate and pocket cost burden on the families for the education by setting this policy.

According to the Constitution of the Republic of the Union of Myanmar (2008), the Union shall implement free, compulsory primary education system. In addition, there are six National Education for All (EFA) Goals which is in line with not only the Millennium Development Goals (MDGs) but also the long term basic education plan.

Regarding the universalization of primary education, Government of Myanmar set the targets that related to the universal primary education in formulating the National EFA Goal for the year 2015. Most of the targets tend to the universal primary education and quality education. Government also tends to spent more budgets for implementing the UPE program. The targets tend to increase the Net Intake Rate, Gross Enrolment Ratio, Net Enrolment Ratio,

Promotion Rates from Grade 1 through Grade 5, Survival Rate, Coefficient of Efficiency and public expenditure as shown the following table.

Table 3.4 - National EFA Goal for the year 2015 and 2010 situation

Sr	Description	2010 situation	targets for 2015
1	Net Intake Rate	96.00	98.00
2	Gross Enrolment Ratio	98.00	99.50
3	Net Enrolment Ratio	90.00	95.00
4	Percentage of children having reached at least Grade 5 or equivalent competencies	72.00	80.00
5	Survival Rate to Grade 5	83.00	91.30
6	Coefficient of Efficiency (primary)	94.00	97.10
7	current public expenditure in primary education (as a % of GDP)	0.6	0.7
8	current public expenditure in primary education Per pupil, as a % of per capita GDP)	4.00	4.10
9	public expenditure on primary education (As a % of total public expenditure on Education)	43.00	45.00

Sources: (MOE, National EFA Review Report 2014)

In academic year 2013-2014, Ministry of Education selected some townships to implement compulsory primary education as pilot areas according to their population, location and socio economic situation.

The National EFA Goal for the 2015 had been analysis in year 2013-2014 as follow.

Table 3.5 - National EFA Goal for the year 2015 and 2013-2014 Achievement

Sr	Description	Targets for 2015	Achieved 2013-2014
1	Net Intake Rate	98.00	98.40
2	Gross Enrolment Ratio	99.50	100.60
3	Net Enrolment Ratio	95.00	86.40
4	Percentage of children having reached at least Grade 5 or equivalent competencies	80.00	74.70
5	Survival Rate to Grade 5	91.30	74.70
6	Coefficient of Efficiency (primary)	97.10	92.00
7	current public expenditure in primary education (as a % of GDP)	0.7	0.60
8	current public expenditure in primary education Per pupil, as a % of per capita GDP)	4.10	7.10
9	public expenditure on primary education (As a % of total public expenditure on Education)	45.00	42.40

Sources: (MOE, National EFA Review Report 2014)

According to the above table, Net Intake Rate (NIR) of Grade 1 is achieved in the academic year 2013-2014. Gross Intake Rate (GIR) of Grade 1, Gross Enrolment Rate (GER) at Primary Level, Promotion Rate for Grade 2 and Grade 3, current public expenditure in primary education (as a % of GDP) are likely to be achieved in academic year 2015 but the other are yet to be achieved. So that National EFA targets especially targets for universalization of primary education are less likely to be achieved according to the evaluation in year 2013-2015.

3.1 Role of Monastic School in Universalization of Primary Education in Myanmar

Monastic Schools system in Myanmar is very old education system and it has a very long history. This system started since the 11th century, King Anawrahtar period. Nowadays, monastic Schools that provide the primary school education are important role in implementing the universal primary education in Myanmar. They are not under the Ministry of Education. They are under the Ministry of Religious Affair and follow the basic education curriculum prescribed by the government. They need to register with the Ministry of

Religious Affairs in order to coordinate textbook supplies to follow the examination rules of the government. Monastic primary schools normally aim to provide poor children who cannot go to the government primary school due to many reasons such as high school fee, located very far from school and family's financial situation. Generally, monastic schools accept the children from the poor family who stay nearby and they do not have capacity to attend the government school. Traditionally, most of the orphans try to attend the monastic school because government schools are out of their reach.

According to the statistics from the Ministry of Planning and Finance, there are 1500 monastic schools including primary, secondary and high school throughout the nation and they are supervised by the Buddhist Monk of respective monastery. Mandalay region that is the only one region has monastic high schools and the largest number of monastic schools as well. Although monastic schools in many regions are increased in 2013-2014 compared with the year 2009-2010, the efficiency of these schools is dependent on the situation of supporting from the public. The operation of the school strongly relies on public donation and collaboration. The student does not need to pay the school fee and other school-related fees and they are covered by the public donation.

In the past, monastic schools have received a very small amount of funding or supporting; now they have been considered a part of the informal education sector. Although the government has started to support the monastic schools by increasing the salaries of the teachers from the monastic schools, there is still a lack of basic facilities, teaching and learning materials. The following table shows that the number of monastic schools throughout the nation in the academic years 2010-2011 and 2013-2014.

Table 3.6 - Number of Monastic School by region/state (AY 2010-2011 and AY 2013-2014)

Sr	Region/State	no of school in 2009-2010	no of school in 2013-2014
1	Ayeyarwady Region	118	128
2	Bago Region	90	108
3	Chin State	17	17
4	Kachin State	18	18
5	Kayah State	7	6
6	Kayin State	31	32
7	Magway Region	95	77
8	Mandalay Region	241	204
9	Mon State	45	54
10	Rakhine State	66	55
11	Sagaing Region	152	157
12	Shan State	40	46
13	Tanintharyi Region	34	40
14	Yangon Region	117	141
15	Nay Pyi Taw		20

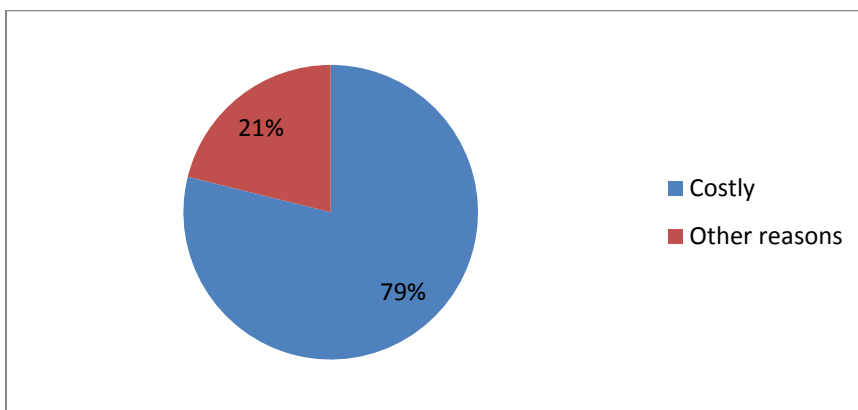
Sources: MNPED (2012). *Statistical Yearbook 2011*

According to the Ministry of Religious Affairs, there are 1500 monastic school including secondary and high school in 2016 and catering for over 150000 children. Although monastic school in many regions are increased in 2013-2014 compare with the year 2009-2010, due to the lack of the funding, the monastic school has declined after the year 2014 (Myanmar Time, 2016).

IV. Empirical Analysis

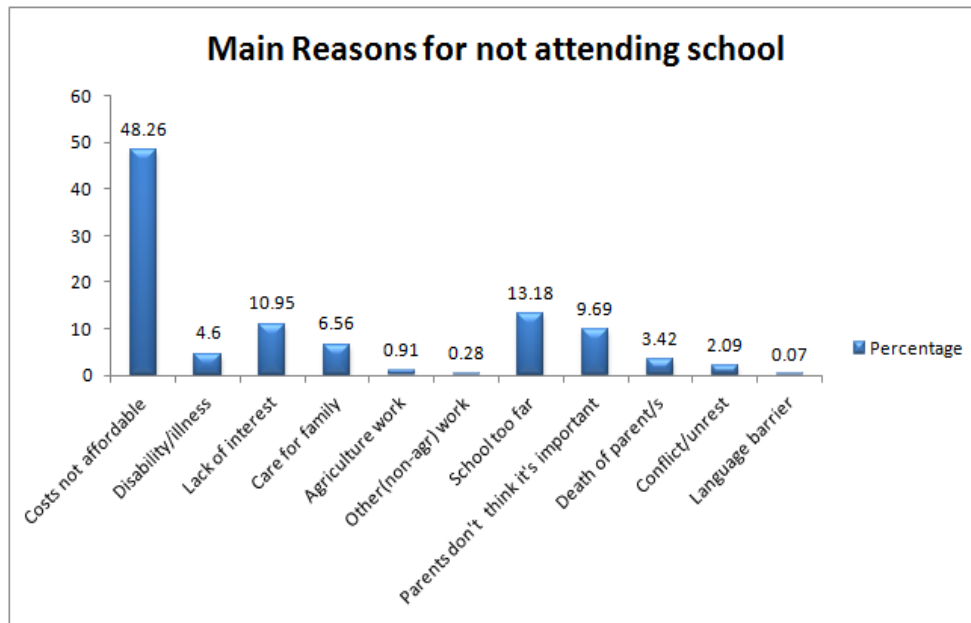
I analyzed the main reason for never attending school for the year 2015 by using the Myanmar Poverty and Living Condition Survey 2014-2015 data. According to the analysis, the reason for the never attending school is due to the cost and it is 79 percent as shown in the below pie chart. My analysis also shows that the other reason for the never attending school is 21%.

Figure- 4.1 percentage of the main reason for never attending school



Source: MPLCS Survey 2014-2015, MOPF& World Bank (Myanmar)

The figure 4.2 shows the every reason for not attending school by percentage. There are many considerable reasons related to the socio economic conditions of the household. School location, parent's thinking on importance of education and lack of the interest on the education are also the big reasons related to the never attending school. Although the Government implemented the free primary education in school year 2010- 2011, there are still other reasons related to the family's socio economic situation that cannot increase the enrollment. Although the school fees are free in year 2010-2011 school year, there are many other reasons related to the enrollment. In this regards, the school fee abolition is not panacea to get the educational attainment in Myanmar according to the analysis.

Figure 4.2 Main Reasons for not Attending School by Percentage

Source: MPLCS Survey 2014-2015, MOPF& World Bank (Myanmar)

Theoretical Framework

The school fee abolition policy came into effect in 2011 to increase primary school enrollment particularly for individuals with poor socioeconomic conditions. Therefore, the children who are the primary school age in 2011 are expecting to have higher enrollment than those who are not exposed to this policy. I am taking this as a quasi natural experiment to find out factors influencing enrollment in primary education. The outcome of interest investigated under this study is enrollment of primary school age going children into primary education. I have used the Myanmar Poverty and Living Condition Survey (2014/2015) undertaken by the Planning Department, in the cooperation with World Bank for the year 2015. The survey has 3600 sample and it had conducted as a nationwide survey. The survey collects a wide range of indicators on education, income and labor market outcomes of individuals in Myanmar.

Government of Myanmar set the school fee abolition policy in the school year 2009-2010 and policy affected in the school year 2010-2011. I want to analysis the effect of the

school fee abolition policy on the enrollment before and after the policy implementation. Therefore I have divided the sample into the two groups those who were exposed to this policy and those who were not exposed to the policy. I used year of birth in the data set and those who were born in 2002, 2003, 2004 who were completed primary school level in 2011 and who born in 2005, 2006 and 2007 who are old enough at the age of school going in year 2011, in the comparison group.

I developed the following model for empirical investigation.

$$\mathbf{Edu} = \beta_0 + \beta_1 \mathbf{Cohort} + \gamma \mathbf{X} + \varepsilon \quad (1)$$

where,

Edu = Binary variables it takes 1 if enrolled otherwise 0

Cohort = Binary takes 1, for those who exposed to the school fee abolition policy

X = Cohort variables (household size, urban/rural, other socio economic characteristics)

ε = error term

Result

Since my dependent variable is binary (takes 1 for yes and =0 otherwise), therefore I analyzed equation (1) by using Linear Probability Model (LPM). The potential advantage of LPM over other discrete variable models is that it is easy to interpret. For the potential problems associated with LPM is sometimes extreme values result in large variance and standard errors resulting in biased t-statistics. To control for this problem, all the results mentioned herein are presented with robust standard errors.

There is positive relationship between enroll and each variable such as gender, rural urban and household size. The result from the LPM model indicates that the policy increased enrollment by 3.9% for the cohort who exposed to this policy. The results from column (1) to column (3) are robust even after controlling for gender, region, education expenditure and household size. This suggests that our results are not driven by omitted variable bias.

The education expenditure is disaggregated into three levels i.e. low, medium and high based on the data available in the survey. The expenditures are controlled because the policy was supposed to those who cannot afford education and usually spend less due to their socioeconomic conditions. The results in column (3) suggest that the policy increased enrollment for the medium expenditure group by 2.5% compared to the low expenditure group. The results however are bigger for high expenditure group which is of no surprise because high expenditure group is already spending more than the low and medium groups. This effect is presented in more detail in the shape of subgroup analysis in Table 4.3.

Table 4.1 Policy effect on Enrollment

	(LPM) 1	(LPM) 2	(LPM) 3
Cohort (=1 expose to the policy)	0.039 ^{***} (0.009)	0.038 ^{***} (0.009)	0.062 ^{***} (0.008)
Female		-0.002 (0.009)	-0.007 (0.008)
Rural		0.024 ^{**} (0.009)	0.081 ^{***} (0.009)
Household Size			0.006 ^{***} (0.002)
Education Expenditure (Ref: Low Expenditure=0)			
Medium Expenditure=1			0.025 ^{***} (0.010)
High Expenditure=2			0.225 ^{***} (0.012)
Constant	1.022 ^{***} (0.006)	0.985 ^{***} (0.021)	0.787 ^{***} (0.025)
Observations	2105	2105	2105

Standard errors in parentheses
* $p < .10$, ** $p < .05$, *** $p < .01$

(2) Year of Birth, District Fixed Effect

One concern with the results presented in Table 4.1 is that it could provide biased estimates if individuals have been born in years where there is shock in the country's economy or family socioeconomic conditions or if some regions have prospered more than other regions during the passage of time. To address this potential bias, I have presented results in Table 4.2 with year of birth and district fixed effect by including year of birth and district dummies in the regression. We know that by including fixed effect model, the time invariant characteristics are eliminated and the results reported are because of the time varying characteristics. Our results are robust to the inclusion of year of birth and district fixed effect and even the effect is stronger than results in Table 4.1. The results in column (2) suggest that the policy increased enrollment by 12.8% for those who were exposed to this policy after controlling for gender, region, household size, expenditures and year of birth and district fixed effect. The results also suggest that our estimated coefficients are not driven by time invariant shocks.

Table 4.2 Effect on enrolment by including Year-of-Birth and District-Fixed Effects

	(LPM) 1	(LPM) 2
cohort	0.062 ^{***} (0.008)	0.128 ^{***} (0.013)
Rural	0.081 ^{***} (0.009)	0.054 ^{***} (0.010)
Female	-0.007 (0.008)	-0.005 (0.008)
Household Size	0.006 ^{***} (0.002)	0.002 (0.002)
exp=0	0.000 (.)	0.000 (.)
exp=1	0.025 ^{***} (0.010)	0.048 ^{***} (0.010)

exp=2	0.225 ^{***} (0.012)	0.236 ^{***} (0.012)
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Year of Birth Fixed Effect

Year of Birth (2004)		0.025 [*] (0.013)
Year of Birth (2005)		0.029 ^{**} (0.013)
Year of Birth (2006)		-0.082 ^{***} (0.014)
Year of Birth (2007)		-0.056 ^{***} (0.014)
Constant	0.787 ^{***} (0.025)	0.782 ^{***} (0.043)
Observations	2105	2105

Standard errors in parentheses

* $p < .10$, ** $p < .05$, *** $p < .01$

(3) Education Expenditure

Since the policy primarily focused on subsidizing households to enroll their children in schools, therefore I have presented a subgroup analysis by low, medium, and high expenditure for the education in table 4.3. The policy has a robust strong effect on low and high expenditure groups. The policy contributed a 2.6% increase in enrollment for low category.

Table 4.3 Effect on enrollment by Low, Medium and High Education Expenditure

	Low Expenditure	Median Expenditure	High Expenditure
Cohort (=1 exposed to the policy)	0.026 ^{**} (0.012)	0.006 [*] (0.004)	0.405 ^{***} (0.049)
Rural	-0.003 (0.012)	0.000 (0.003)	0.110 ^{***} (0.040)
Female	-0.003 (0.006)	-0.002 (0.002)	-0.002 (0.029)

**Year of Birth Fixed
Effect (Reference 2003)**

Year of Birth (2004)	-0.003 (0.013)	-0.000 (0.004)	0.053 (0.044)
Year of Birth (2005)	0.000 (0.012)	-0.001 (0.003)	0.031 (0.046)
Year of Birth (2006)	-0.025*** (0.009)	-0.006* (0.004)	-0.259*** (0.062)
Year of Birth (2007)	-0.029*** (0.009)	-0.007* (0.004)	-0.172*** (0.057)
Household Size	-0.002 (0.002)	0.000 (0.000)	0.002 (0.006)
Constant	1.029*** (0.038)	1.000*** (0.012)	0.797*** (0.133)
District Fixed Effect	Yes	Yes	Yes
Observations	617	1013	475

Standard errors in parentheses
* $p < .10$, ** $p < .05$, *** $p < .01$

(4) Rural/ Urban Effect

Table 4.4 Rural /Urban Effect

	Urban	Rural
Cohort (=1 exposed to the policy)	0.087*** (0.021)	0.098*** (0.019)
Female	0.003 (0.013)	0.001 (0.011)
Year of Birth Fixed Effect (Reference 2003)		
Year of Birth (2004)	0.028 (0.021)	0.006 (0.019)
Year of Birth (2005)	-0.002	-0.001

	(0.020)	(0.019)
Year of Birth (2006)	-0.079 ^{***} (0.023)	-0.102 ^{***} (0.019)
Year of Birth (2007)	-0.049 ^{**} (0.022)	-0.073 ^{***} (0.019)
Household Size	-0.002 (0.003)	0.001 (0.003)
Constant	0.991 ^{***} (0.053)	0.993 ^{***} (0.060)
District Fixed Effect	Yes	Yes
Observations	641	1464

Standard errors in parentheses

* $p < .10$, ** $p < .05$, *** $p < .01$

Table 4.4 presents the result by regional variation i.e. rural and urban. There is not much variation between the results in urban and rural area. However results in rural area are slightly higher i.e. 9.8% compared to urban area (8.7%). This suggests that the policy effect was even stronger for the rural areas which we expect the policy to affect the disadvantaged.

V. Conclusion and Recommendations

This chapter brings the research objectives, research questions, theoretical framework, hypothesis and findings of the whole study as a synthesis so as to do conclusion. This chapter is presented in conclusion and recommendations and suggestions for the future studies. I have assessed the impact of school fees on primary enrollment for two age groups those who are exposed to this policy and those who have not exposed to the policy in the year 2015.

The school fee abolition is not panacea to get the educational attainment in Myanmar according to the analysis. Although the school fees are free, there are many other reasons related to the enrollment in Myanmar. Never attending school is related to many other socio economic characteristics such as school location, parent's thinking on education, lack of interest on education etc.

My study indicates that the school fee abolition policy increased enrollment by 3.9% for the cohort who exposed to this policy in Myanmar. Even after controlling for gender, region, education expenditure and household size, the results are still robust.

I have included fixed effect model by including year of birth and district dummies in the regression to eliminate the time invariant characteristics. The results show that the coefficients are not driven by time invariant shocks. The result from my empirical study shows that the policy increased enrollment by 12.8 % for those who were exposed to this policy after controlling for gender, region, household size, expenditures and year of birth and district fixed effect.

According to the study, school fee abolition policy contributed increase in enrollment depending on the expenditure for education by households. Although the policy increased enrollment, high expenditure group contributed increase in enrollment more than low and medium group. It shows that after implementing the school fee abolition policy, there is still financial burden for the poor family although the school fee was free.

The access to primary education is large difference between rural and urban dwellers according to the IHLCA 2005 and 2010 surveys. However, there is not much difference between the results in urban and rural area in 2015. The policy effect was even stronger for the rural areas which we expect the policy to affect the disadvantaged.

The main finding of this paper is that there are other important socio economic characteristics that effect on the primary educational attainment in 2015. School fee abolition is not enough policy for universal primary education in Myanmar. The policy can reduce the expenditure for the education of household but it is not enough reason to implement the universal primary education.

The Government needs to fulfill the infrastructure requirement such as roads and bridges in the rural area as the school location is the big obstacle for going to school in the rural area. And the Government needs to enhance the conditional cash transfer scheme to the poor family and stipend to the students from the poor family. And need to consider the role of the monastic schools that are very important in implementing the universal primary education in Myanmar. Generally, monastic schools that are strongly rely on public donation and collaboration accepts the children from the poor family and orphans. So the Monastic school should be provided by the government by supporting fund, basic facilities, teaching and learning materials. There is also need to review the all the policy regarding the education.

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