YANGON UNIVERSITY OF ECONOMICS

DEPARTMENT OF STATISTICS

ROLE OF EDUCATION IN WOMEN'S EMPOWERMENT IN MYANMAR

BY

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M.P.S

Roll No.2

NOVEMBER, 2019

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ABSTRACT

The study used data from Myanmar Demographic and Health Survey to assess the role of education on women's empowerment in Myanmar. Descriptive statistics and multinomial logistic regression are used for analysis. The result from descriptive statistics showed that women's empowerment is mostly differ by socio-economic and demographic factors. The result of Pearson's Chi-Square statistic revealed that the existence of association between women's empowerment and its covariates. According to the multinomial logistic regression results, women's age, number of living children, women head of household, wife's income compared with husband's income and ownership of house have significant impact on women's empowerment. In addition the evidence of this results, positive relationship are observed between women's empowerment and women's education with higher level, husband education with primary level, women's occupation, wife's income compared with husband's income, ownership of house, women's age, number of living children, place of residence and region (Taninthayi, Bago, Rakhine, Yangon and Shan). Based on the results found in this study, women's education with higher level have positive impact on the women's empowerment. Therefore, it can concluded that women's education is key factor of female labor force participation in Myanmar.

ACKNOWLEDGEMENTS

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ABBREVIATIONS

3MDG - Three Millennium Development Goal

Coeff - Coefficient

DHS - Demographic and Health Surveys

Freq - Frequency

GLM - Generalized Linear Models

MDHS - Myanmar Demographic and Health Survey

MLR - Multinomial Logistic Regression

MoF - Ministry of Finance

MoHS - Ministry of Health and Sports

MoNPED- Ministry of National Planning and Economic Development

NGOs - Non-governmental Organization

PSUs - Primary Sampling Units

Ref - Reference

RRR - Relative Risk Ratio

USAID - United States Agency for International Development

CHAPTER I

INTRODUCTION

1.1 Rationale of the Study

Women's empowerment is giving legitimate power or authority to perform the tasks. If women were empowerment they would be able to participate in the planning and decision making task and contribute to the development programmes and activities individually. Women empowerment is the pivotal part in any society, state or country. It is a woman who plays a dominant role in the basic life of a child. Since the 1990's women have been identified as key agents of sustainable development and women's equality and empowerment are seen as central to a more holistic approach towards establishing new patterns and processes of development that are sustainable. The World Bank has identified, women empowerment as one of the key constitute elements of poverty and as a primary development assistance goal. Women's empowerment that is their freedom from control by other family members and ability to effect desired outcomes within the household. Women are an important section of society.

Education is milestone of women empowerment because it enables them to responds to the challenges, to confront their traditional role and change their life. Therefore, all the country around the world should be play a vital role towards women empowerment by increasing female education.

The education of women has been found to be importance for the success of individuals, communities and nations, leading to increased efforts to improve women's' education in Myanmar, among other countries. Women who receive a higher level of education generally receive for women, positively impacting them as well as employers. During British colonial rule, education access for women improved tremendously. The number of female students enrolled in school rose 61percent (by 45,000 students) from 1911-1921, and another 82 percent (100,000 students) from 1921 to 1931 with expansion of the colonial and private education system, primarily in the form of all-girls schools. This was mirrored by an increase in employment of women in public administration, law, medicine (96 percent increase), education (64 percent increase) and journalism sectors.

Several studies have pointed out that women's education play important roles in their access to health services which include use of family planning methods and

antenatal care, child immunization and other services. More educated women being more likely to utilize the services and enjoy the benefits of modern contraception. With the improvement in female literacy rate, followed by an increase in participation of women in the labor market, it is importance to investigate whether education has any effect on women's ability to enjoy their earnings and have control on their lives.

Women's education is one of the most influential factors improving child health and reducing infant mortality rate. Lower level of women literacy rate results in higher levels of fertility and infant mortality, poorer nutrition, lower earning potential and the lack of an ability to make decisions with in the households. Therefore giving proper education to women is necessary for both the society and family. Educated women's responsibility is tremendous. Women have a significant role in shaping the behavior and mental make-up of the younger generation. She has the primary duty of nurturing and shaping the children, the leaders of tomorrow. Educated women not only tend to promote education of their children, but also can provide better guidance to all their children. Educated parents have a good thought about their children's educational attainments. Mother's education will influence more in children's life than father's.

Education is a vital path to empowerment for vulnerable women. It makes them able to know their rights and gain confidence. Women's empowerment is essential to reducing poverty and promoting women's economic opportunities. In Myanmar, women education plays a very important role in the overall development of the country. It helps not only in the development of half of the human resources, but in improving the quality of life at home and outside. The increasing change in women education, the empowerment of women has been recognized as the central issue in determining the status of women for becoming super powers have mostly to concentrate upon the women's education. Moreover educated women can help in reduction of infant mortality rate, national economy and growth of the population. The empowered women can stand with men. They are not inferior to men and they can do whatever the men can do, some times better than that of a man. For this reason, this study aims to determine the role of education in women empowerment in Myanmar.

1.2   Objectives of the Study

The objectives of the study are as follows:

- to determine the association of the demographic and socio-economic factors of women's empowerment
- to investigates the effect of education on women's empowerment

1.3   Method of Study

Firstly, descriptive statistics is used to describe the percent and number of demographic and socio-economic characteristics. The relationship of demographic and socio-economic characteristics and education on women empowerment are checked by using Pearson Chi-Squared. Finally, multinomial logistic regression analysis is employed to investigate the effect of education on women's empowerment in Myanmar.

1.4   Scope and Limitation of the Study

This study is based on secondary data. The main information for this study was taken from Myanmar Demographic and Health Survey (MDHS) 2015-2016. Women's age 15-49 years are employed in this study covering Myanmar both place of residence and region. Women's empowerment is measured by women's decision regarding their own income spending. Moreover, religion and ethnicity which are the factors influencing on women's empowerment, but are not included in this study because they are the sensitive issues in Myanmar.

1.5   Organization of the Study

This study is divided into five chapters. The first chapter concerns with rationale of the study, objectives of the study, method of study, scope and limitations of the study and organization of the study. The second chapter describes literature review. The third chapter indicates methodology of this study. The fourth chapter provides the results and findings by using multinomial logistic regression and the last chapter presents conclusion, recommendations and further study.

CHAPTER II
LITERATURE REVIEW

This chapter presents on reviewing the research work done by various scholars on the topic related to women empowerment. It is divided into two sections, the first presents the review of women's empowerment in Myanmar. The second section deals with variables related in literature review and conceptual framework.

2.1   Review of Women's Empowerment in Myanmar

Women are central to the development process since they have three roles in their society: reproduction, production, and community management. The role of women also correlates with children's survival and education levels which are indicators for country development. Previously, their control was only on the non-money economy through bearing and raising children, and providing household chores, and taking part in agricultural works. However, changing societal norm and patterns forced them to contribute in money economy through working in both formal and informal sectors. Consequently, women workforce has been a substantial component of the domestic and global labor force.

Women have a critical role to play in the development of Myanmar, but they face a broad range of challenges including low skills, limited employment opportunities, and inadequate representation and participation in governance. Women in developing countries usually take part in the production process in agriculture and in both the formal and informal sector of the economy. In recent times women often have two jobs, within the home and outside it, but their roles are often ignored and their work is generally undervalued, and the additional burden that development imposes on women is usually unrecognized.

Across all levels of government, men dominate leadership roles in institutions key to economic management. Traditionally, women in Myanmar have responsibilities in bringing up the children, managing household chores, and giving affection to all members of the family. But women also provide an important source of labor in the economy. In 2014, the Ministry of Finance (MoF) and Ministry of National Planning and Economic Development (MoNPED) employed 57.6 per cent women and 61.7 per cent women respectively. But women made up only 28.6 per cent of leadership roles in MoF and 40 per cent in MoNPED. Women were mainly

found in middle management rather than more senior positions (Minoletti 2016). At the subnational level, women's representation is worse. In 2014, there was not a single female township administrator anywhere in Myanmar. The appointed township administrator is the most powerful official at the local level. At the further decentralized level of village tract/ward administrators only 42 women were elected out of a total of 16,785 positions (or 0.25 per cent) in 2012 (UNDP 2015, p2). The Yangon City Development Committee employed 48.5 per cent female workers but women held only 17.8 per cent of senior positions. Although women's participation in the workforce has grown steadily worldwide, existing gender inequalities continues to be a problem drawing the global attention to promote women empowerment and gender equality. The promotion of equality means that men and women are treated equally and without discrimination in all situations including their workplaces.

2.2   Variables Related Literature Review

This section provides analysis of specific studies done with regards to women's empowerment, basing on the demographic and education are backed with evidences and related findings.

Acharya and Bennet (1983) studied that women empowerment in different dimensions in Nepal using regression analysis. This study found that women are positively effect in the labor market. Women in the labor market are influence in resource allocation and domestic decision-making.

Vlassoff Carol (1994) studied the impact of rural development on women's status in an Indian village. This study aimed to examine women's education and mobility. The researcher concluded that women's education and economic independence help them to take independent decision and liberate them from their husbands and relatives. Education has helped the rural girls to be self-assertive and independent. In addition, researcher claimed that the best women empowerment measure is providing them proper education.

Kucharski. L and Kwiatkourski. B (2002) investigated the effect of education on employment status using Ploish Labor Force Survey data. Multinomial logistic regression had used for analyze labor market position of individuals. The results of this analyzes confirmed a big role human capital in the present of Ploish economy. This study found that people with tertiary education and specialists have the best

position in the labor market. In addition, the worst position have the persons with primary and basic vocational education as well as unskilled workers and persons with no professional experience.

Nashid Kamal and Haider (2004) analyzed the job shifts amongst women working in various types of occupations. Binary logistic regression was used and results showed that although education was initially a significant predictor of empowerment, marital status overrides its importance and education becomes insignificant. In this study, decision making index has positive association with women's empowerment. The researcher recommended that to prevent school drop-out from secondary level and to implement of legal age at marriage.

Kamal and Zunaid (2005) studied education and women's empowerment in Bangladesh using Bangladesh Demographic and Health Survey (2004) data. Binary logistic regression is used to investigate what factors correlate to women's empowerment. This study found that marital status was the most significant predictor of women's empowerment in Bangladesh. Unmarried women are six times more likely to be empowered. In addition, secondary education was another major determinant of women's empowerment. They concluded that female education was the major implication for strengthen of women empowerment.

Gupta. K and Yesudian. P (2006) investigated evidence of women's empowerment in India by using National Family Health Survey (1998-1999). Pearson Chi-Square and multinomial logistic regression were used in this study. They found that women's education levels emerged as an important predictor for all the four dimensions of women's empowerment. Additionally, media exposure and age have emerged as the important predictors for some dimensions of women's empowerment.

Upadhyay and Karasek (2012) studied women's empowerment and ideal family size using the Sub-Saharan Africa Demographic and Health Survey (2012). Multivariable linear regression was used to model women's ideal no of children and multivariable logistic regression was used to model women's odds of having more children than their ideal. This study found that women's empowerment is not consistently associated with a desire for smaller families or the ability to achieve desired fertility in these Sub-Saharan African countries.

Islam M. S (2014) investigated women's empowerment in Bangladesh. This study concluded that women were more empower by increasing women's education, strengthening female leadership at grass root levels, building capacity and social

awareness. The researcher have been generating the women's confidence to take decision in every spear of life so that they can contribute more to ensure women's overall empowerment.

Sundaram M. S et al (2014) studied role of education in women's empowerment using Madurai Census 2011. This study found that educational qualification play significant role in women empowerment. In addition, women's empowerment was carried out through the medium of education. Therefore, it was of foremost importance to raise the level of education amongst women.

Bhat R. A (2015) analyzed the role of education in the empowerment of women in India. This study concluded that women's education was the most powerful tool to change the position in society. And then, education also brought a reduction in inequalities and improved their status within the family and developed the concept of participation.

Brajesh and Shekhar (2015) investigated level of women's empowerment and it's determinates in selected South Asian Countries using principle component analysis and multinomial logistic regression. The Demographic and Health Survey (DHS) data was used during the period around 2006-2007 in India, Nepal and Bangladesh in this analysis. The model results indicated that age, education, media, occupation, marital duration and wealth power are important factors for women by whom a women gets a position in household and family, older women have more empowered than younger. In addition, empowerment in rural areas is much less visible than in urban. Rural women faced inequality at much higher rates, and in all spheres of life.

Abshoko A. D et al. (2016) studied the determinants of socio-economic empowerment of married women using multinomial logistic regression. The results of this model found that women's level of education, their employment status, their earning compared to husbands, exposure to media, place of residence, and age at first marriage, family size and attitude towards wife beating were major determinants factors affecting women participation on their social and economic matters in a household.

Rita K Hatri (2016) analyzed the role of education towards women's empowerment in India using various published and unpublished records, books, magazines and journals data. The researcher described that women's empowerment was an essential element in national development. In addition, the effective

management and development of women's resources, their capabilities, interests, skills and potentialities are very important for the mobilization of human resources. Economic development efforts to combat poverty can only succeed if women are part of the solution.

Dahal. G and Hossain. I (2016) investigated women education and empowerment impacts on socioeconomic development in Bangladesh and Nepal using ordinary least square. This study are used World Bank, International Monetary Fund (IMF), Human Development Reports (HDRS), CIA World Fact-Book (2015), Central Bureau of Statistics(Nepal), and Bangladesh Bureau of Statistics, Economic Survey of Nepal and Bangladesh and various other development and gender reports data. According to the ordinary least square analysis results, women's education was positive and significant impact on the socioeconomic growth of Bangladesh and Nepal. Therefore, they concluded women education was key factor of female labor force participation.

Masonera. A and Heshmati. A (2016) measured women's empowerment in Rwanda using DHS (2010) data. In this study, women's empowerment was measured by households' decision making and attitude towards physical abuse of spouses. The result of multinomial logistic regression revealed that education and media exposure were positively associated with women's empowerment. Residence and age at first marriage were negatively associated with women's empowerment. Moreover, this study showed that the effects of education, age of the respondent, wealth and the number of children ever born remained strong conditions which effected households' decision-making and attitudes about physical abuse. The researchers revealed that women's empowerment was achieved through providing education, labor force participation, media exposure, shifting negative traditional cultural norms and by focusing on integrated development.

Azra and Shahida (2018) analyzed the direct and indirect impact of women's education on their empowerment using simple linear regression and mediation path analysis. This analysis showed that education explained 11% of the variance in women's empowerment via income and self-esteem. Income and self-esteem fully mediated in the relationship between education and women's empowerment. The researchers concluded that education was a pre-requisite to enhance women's empowerment, but it appeared to boost up women's empowerment through increasing their income and elevated self-esteem.

2.3   Conceptual Framework

Measuring the empowerment process is conceptualize at different levels and different dimension. Hashemi, Schuler, and Riley (1996) explored that the impact of credit on a number of indicators of empowerment: (i) the reported magnitude of women's economic contribution; (ii) their mobility in the public domain; (iii) their ability to make large and small purchases; (iv) their ownership of productive assets, including house or homestead land and cash savings; (v) involvement in major decision making, such as purchasing land, rickshaw or livestock for income earning purposes; (vi) freedom from family domination, including the ability to make choices concerning how their money was used, the ability to visit their natal home when desired and a say in decisions relating to the sale of their jewellery or land or to taking up outside work; (vii) political awareness such as knowledge of key national and political figures and the law on inheritance and participation in political action of various kinds; and finally, (viii) a composite of all these indicators. They found that women's access to credit was a significant determinant of the magnitude of economic contributions reported by women; an increase in asset holdings in their own names; an increase in their purchasing power; their political and legal awareness and their composite empowerment index.

Kabeer (1999) studied to construct the indicators women empowerment by using three dimensional conceptual framework: (a) the resources as part of the pre-conditions of empowerment; (b) the agency as an aspect of process; and lastly (c) the achievements as a measure of outcomes. This study showed that the most suitable indicators for women empowerment are family structure, marital advantage, financial autonomy, freedom of movement, and lifetime experience of employment participation in the modern sector.

Jejeebhoy, (2000) studied that women's empowerment in three dimension on India. These three dimensions are (1) role of economic decision making, (2) role of child related decision making and (3) the freedom from threat. The independent variables used were, religion, education, participation in waged work, dowry size, marriage endogamy, spouse age difference and household economic status. The researcher found that some dimensions of empowerment are more closely related than others.

Towfiqua et al., (2007) studied in three dimensions of domestic empowerment like role of economic decision –making power, role of household decision making power and physical freedom of movement. The study found that urban women are more empowered than rural women and older women have more independence and empowerment than younger women because of their life experiences. In addition, researcher showed that an increase in the awareness about women rights and fundamental needs.

In this study a conceptual framework for determining the role of education on women empowerment. The dependent variable is women's empowerment in this study. Women decision regarding their income spending are divided into four forms. These are decide women alone, decide women and husband\partner, decide husband alone and decide someone else.

The independent variables are women's age, number of living children, head of household, women's education, husband's education, ownership of house, wealth index, wife's income compared with husband's income, women's occupation, place of residence and region.

In this framework, there may be a relationship between women's empowerment and demographic variables (women's age, number of living children and head of household). Women's age would affect their women's empowerment because older age of women may have more empower than younger age of women. More number of children may also effect on women's empowerment. Moreover, if female household head may have more empowerment.

There may also be a relationship between women's empowerment and socio-economic variables (ownership of house, wealth index, wife's income compared with husband's income, women's employment status, women's place of residence and region). Ownership of house would effect women's empowerment. If wife's income more than husband's income, women's empower may lead to increase. Women who live in urban area may have more empower than women who live in rural area.

And then, there is also a relationship between women's empowerment and educational variables. If more educated women may have more empower than uneducated women. Thus, this study was determined that women's education, women's occupation, wife's income more than husband's income and ownership of house are more likely to influence on women's empowerment. Women who live in

rural area, women wealth index and women who not head of household are less likely to influence women's empowerment.

Independent Variables   Dependent Variable

```
┌─────────────────────────────────┐
│ Demographic Characteristics     │
│                                 │
│   • Women's age                 │
│   • Number of living            │
│     children                    │
│   • Head of household           │
└─────────────────────────────────┘
┌─────────────────────────────────┐
│ Socio-economic Characteristics  │
│                                 │
│   • Women's education           │
│   • Husband's education         │
│   • Ownership of house          │
│   • Wife's income compared      │
│     with husband's income       │
│   • Women's occupation          │
│   • Wealth Index                │
│   • Place of residence          │
│   • Region                      │
└─────────────────────────────────┘
```

┌──────────────────────────────────┐
│ Women's Empowerment   │
│   │
│ (Women's decision regarding   │
│ their income spending)   │
└──────────────────────────────────┘
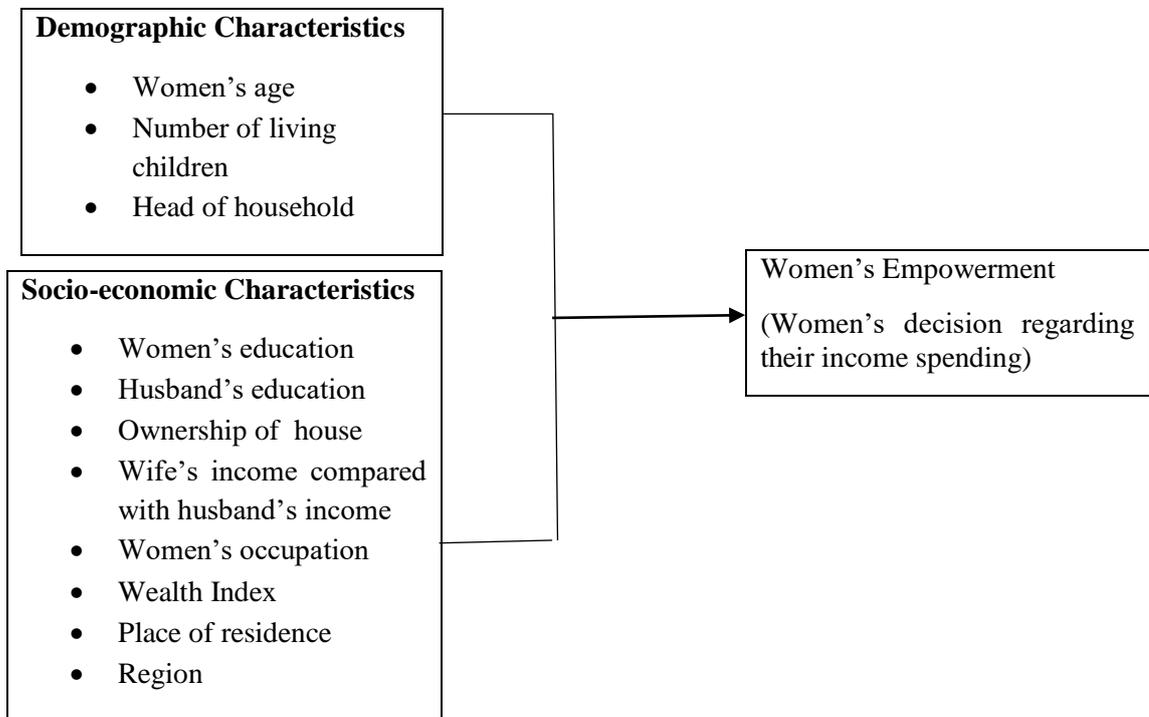
Figure (2.1)   Conceptual Framework for Women's Empowerment

CHAPTER III

METHODOLOGY

3.1   Source of Data

The Myanmar Demographic and Health Survey (MDHS) 2015-16 is the first survey of its kind to be implemented in the country as part of the worldwide Demographic and Health Surveys (DHS) Program. It was conducted by the Ministry of Health and Sports (MoHS), with the objective of providing reliable, accurate, and up-to-date data for the country. The funding for the MDHS was supported by the United States Agency for International Development (USAID) and the Three Millennium Development Goal Fund (3MDG).

The sampling frame consisted of 76,990 primary sampling units (PSUs) across the country. The sample was based on the 2014 census frame, which is used to coordinate household-based surveys conducted in Myanmar, including the current 2015-16 MDHS. The 2015-16 MDHS conducted a stratified two-stage sample design and was intended to allow estimates of key indicators at the national level, in urban and rural areas, and for seven States and eight Regions of Myanmar.

The MDHS (2015-2016) is a national sample survey. It provides up-to-date information on fertility levels; marriage; fertility preferences; awareness and use of family planning methods; child feeding practices; nutrition; adult and childhood mortality; awareness and attitudes regarding HIV/AIDS; women's empowerment; and domestic violence. This survey were targeted group of women and men age 15-49 residing in randomly selected households across the country. In addition to national estimates, the report gives estimates of key indicators for both urban and rural areas in Myanmar and also for 15 states and regions. MDHS (2015-2016) were used three sets of questionnaires: a Household Questionnaire, a Woman's Questionnaire, and a Man's Questionnaire. These questionnaires were transformed to accord with Myanmar culture as well as to reflect some country-specific health issues. Women questionnaire was used in this study.

This resulted in a total of 12885 women completed the women questionnaire. Among the 12885 women were interviewed in the MDHS, 2015-16, 7327 reported working for cash. This variables was screened for missing data and a total of 4282 women were used in this study.

3.2   Description of Variables Included in the Study

The following table shows variables definition and categories of dependent and independent variables considered for fitting in this study.

Table 3.1   Definition and Categories of Dependent and Independent Variables

No	Variables	Definition	Categories
1	**Dependent Variable** Women's decision regarding their income spending	Women are considered to have control over their own earnings if they participate in decisions alone or jointly with their husband about how their own earnings will be used.	Y =1 if woman alone =2 if woman and husband/ partner =3 if husband alone =4 if someone else
2	Women's education	The completed highest standard passed of respondent	X_1 =1 if no education =2 if primary education =3 if secondary education =4 if higher education
3	Husband's education	The completed highest standard passed of husband level of education	X_2 =1 if no education and don't know =2 if primary education =3 if secondary education =4 if higher education
4	Women's occupation	the measurement of women's employment is only considered for those women who were currently	X_3 =1 if others =2 if private =3 if own business

No	Variables	Definition	Categories
		employed	=4 if government
5	Wife's income compared with husband's income	Wife's income compared with husband's income, whether don't know and husband's\partner does not bring in money, more than him, less than him and about the same.	X_4 =1 if husband/ partner does not bring in money =2 if more than their husband =3 if less than their husband =4 about the same
6	Ownership of the house	Women who own a house, whether alone or jointly with someone else.	X_5 =1 if woman does not own the house =2 if woman own the house
7	Wealth index	A composite measure of a household's cumulative living standard	X_6 =1 if poorest =2 if poorer =3 if middle =4 if richer =5 if richest
8	Women's age	Current age of respondent	X_7 =1 if 15-24 years =2 if 25-34 years =3 if 35-49 years
9	Number of living children	The total number of children who were alive at the time of the survey	X_8 =1 if no children =2 if 1-3 children =3 if 4 children or more
10	Head of household	The respondent who is head of household	X_9 =1 if not head of household =2 if head of household

No	Variables	Definition	Categories
11	Place of residence	Women who live in urban or rural area at the time of the survey	X_{10} =1 if rural =2 if urban
12	Region	Myanmar has fifteen administrative regions, including NayPyiTaw, the capital city	X_{11} =1 if Kachin =2 if Kayah =3 if Kayin =4 if Chin =5 if Sagaing = 6 if Taninthayi =7 if Bago =8 if Magway =9 if Mandalay =10 if Mon =11 if Rakhine =12 if Yangon =13 if Shan =14 if Ayeyarwaddy =15 if NayPyitaw

3.3   Pearson's Chi-Square Test

Pearson's Chi-Square test (χ^2) is used to determine whether there is a significant difference between expected frequencies and the observed frequencies and the observer frequencies in one or more category. Chi square test is determined two discrete variables are associated. If there's an association, the distribution of one variable will differ depending on the value of the second variable. But if the two variables are independent, the distribution of the first variable will be similar for all values of the second variables. Compare the p-value to alpha-level which is commonly 0.05.

The formula for Pearson's Chi-Square as follow

$$\chi^2 = \sum_{i=1}^{n} \frac{(O_i - E_i)^2}{E_i}$$

Where, O_i=Observed frequency

E_i =Expected frequency

According to the following guidelines, it can interpret

- If p-value is less than or equal to alpha-value then the two variables are associated.

- If p-value is greater than alpha value then the variables are independent.

3.4   Multinomial Logistic Regression

In recent years, specialized statistical methods for analyzed categorical data have increased, particularly for application in biomedical and social science. Regression analysis is one of these statistical tools that utilize the relationship between two or more variables. There are different types of regression analysis for different type of data. Logistic regression sometimes called the logistic model or logit model. There are two models of logistic regression, binary logistic regression and multinomial logistic regression. Binary logistic regression is typically used when the dependent variable is dichotomous and the independent variables are either continuous or categorical. When the dependent variable is polychotomous and is comprised of more than two categories, a multinomial logistic regression can be employed.

The multinomial logistic regression is often considered an attractive analysis because it does not assume normality, linearity, or homoscedasticity. A more powerful alternative to multinomial logistic regression is discriminant function analysis which requires these assumptions are met. Indeed, multinomial logistic regression is used more frequently than discriminant function analysis because the analysis does not have such assumptions. The assumption of the multinomial logistic regression is the choice of or membership in one category is not related to the choice or membership of another category.

Multinomial logistic regression is a simple extension of binary logistic regression that allows for more than two categories of the dependent or outcome variable. Like binary logistic regression, multinomial logistic regression uses maximum likelihood estimation to evaluate the probability of categorical membership. Continuous variables are not used as response variable in logistic regression, and only one response variable can be used. The MLR model can be used to predict a response variable on the basis of continuous and/or categorical explanatory variables to determine the percent of variance in the response variable explained by the explanatory variables, to rank the relative importance of independents, to assess interaction effects, and to understand the impact of covariate control variables.

Formally, the multinomial logistic regression can be written as

$$ln\Omega_{m\backslash b}(x) = ln\frac{\Pr(y=m\backslash x)}{\Pr(y=b\backslash x)} = x\beta_{m\backslash b} \text{ for m} = 1 \text{ to J}$$

Where, b is the base category which is also referred to as the comparison group. Since $ln\Omega_{m\backslash b}(x) = ln1 = 0$, it must hold that $\beta_{b\backslash b} = 0$. That is, the log odds of an outcome compared to itself is always 0, and thus the effects of any independent variables must also be 0. These j equations can be solved to compute the predicted probabilities:

$$\Pr(y = m\backslash x) = \frac{\exp(x\beta_{m\backslash b})}{\sum_{j=1}^{J}\exp(x\beta_{j\backslash b})}$$

While the predicted probability will be the same regardless of the base category b, changing the base category can be confusing since the resulting output from multinomial logistic regression appears to be quite different.

3.5   Relative Risk Ratio (RRR)

The relative risk is often used when the study involves comparing the likelihood, or chance, of an event occurring between two groups. Relative Risk is considered as descriptive statistic. Thus, it does not determine statistical significance. Relative risk ratio utilizes the probability of an event occurring in one

group compared to the probability of an event occurring in the other group. It requires the examination of two dichotomous variables, where one variable measures the event (occurred vs. not occurred) and the other variable measures the groups (group 1 vs. group 2).

Relative Risk is calculated by dividing the probability of an event occurring for group 1 (A) divided by the probability of an event occurring for group 2 (B). Relative risk ratio is very similar to odds ratio, however, RRR is calculated by using percentages, whereas odds ratio is calculated by using the ratio of odds. Ratio of relative risk values are greater than or equal to zero.

$$\text{Relative Risk Ratio} = \frac{Probability\ of\ an\ event\ in\ exposed\ group}{Probability\ of\ an\ event\ in\ not\ exposed\ group}$$

After calculating the relative risk ratio, it can be interpreted as follow:

- If the relative risk is equal to 1, it means that there is no difference in the risk between the two groups.
- If relative risk is lower than 1, it means that the risk is lower in the exposed group.
- If relative risk is higher than 1, it means that the risk is higher in the exposed group.

3.6 Likelihood Ratio

Overall fit of a model shows how strong a relationship between all of the independent variables, taken together, and dependent variable. It can be assessed by comparing the fit of the two models with and without the independent variables. A logistic regression model with the k independent variables (the given model) is said to provide a better fit to the data if it demonstrates an improvement over the model with no independent variables (the null model). The overall fit of the model with k coefficients can be examined via a likelihood ratio test which tests hypothesis as follows:

$$H_0: \beta_0 = \beta_2 = \ldots = \beta_k = 0$$

H_1: At least one of the independent variable are not equal to zero.

To do this, the deviance with just the intercept (-2 log likelihood of the null model) is compared to the deviance when the k independent variables have been added (-2 log likelihood of the given model). Likelihood of the null model is the likelihood of obtaining the observation if the independent variables had no effect on the outcome. Likelihood of the given model is the likelihood of obtaining the observations with all independent variables incorporated in the model.

The difference of these two yields a goodness of fit index G, χ^2 statistic with k degrees of freedom. This is a measure of how well all of the independent variables affect the outcome or dependent variable.

$$G = \chi^2 = (\text{-2 log likelihood of null model}) - (\text{-2 log likelihood of given model})$$

An equivalent formula sometimes presented in the literature is

$$= \text{-2log} \ \frac{\log \text{likelihood of null model}}{\log \text{likelihood of given model}}$$

where the ratio of the maximum likelihood is calculated before taking the natural logarithm and multiplying by -2. The term 'likelihood ratio test' is used to describe this test. If the p-value for the overall model fit statistic is less than the conventional 0.05, then reject H_0 with the conclusion that there is evidence that at least one of the independent variables contributes to the prediction of the outcome.

CHAPTER-IV

RESULTS AND FINDINGS

This chapter presents results and their findings. Results of the study are presented in three sections, the first deals with descriptive analysis on characteristics of the ever married women 15-49 years old. The second section presents finding from the bivariate analysis which the relationship between women's empowerment and various background characteristic of women. The third section is the presentation of multinomial logistic regression model to test the effect of independent variables on the women's empowerment.

4.1   Descriptive Analysis

This section describes general characteristics of ever married women in the sample. This study consisted of women respondents in reproductive age 15-49 years old from Myanmar Demographic and Health Survey (2015-2016). Table (4.1) presents the summary of general characteristics of ever married women's age 15-49 years old.

Table (4.1)   Percent Distribution of Demographic and Socioeconomic Characteristics of Women's Empowerment

	Women alone		Women and husband		Husband alone		Someone else	
	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent
Women's education								
No education	322	48.94	273	41.49	56	8.51	7	1.06
Primary	1,027	52.11	778	39.47	125	6.34	41	2.08
Secondary	626	50.69	501	40.57	63	5.1	45	3.64
Higher	245	58.61	153	36.60	11	2.63	9	2.15
Husband's education								
No education	364	54.09	259	38.48	38	5.65	12	1.78
Primary	851	51.02	688	41.25	100	6.00	29	1.74
Secondary	834	51.45	632	38.99	107	6.6	48	2.96
Higher	171	53.44	126	39.38	10	3.13	13	4.06
Women's occupation								
others	887	49.83	738	41.46	108	6.070	47	2.64
Private	905	55.86	602	37.16	77	4.75	36	2.22
Own business	185	39.53	218	46.58	55	11.75	10	2.14
Government	243	58.7	147	35.51	15	3.62	9	2.17

	Women alone		Women and husband		Husband alone		Someone else	
	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent
Women's income compared with husband's income								
Husband's does not bring in money	51	72.86	12	17.14	2	2.86	5	7.14
More than their husband	436	64.31	183	26.99	34	5.01	25	3.69
Less than their husband	1,257	53.17	918	38.83	141	5.96	48	2.03
About the same	476	40.68	592	50.6	78	6.67	24	2.05
Ownership of house								
Doesn't own	720	52.75	516	37.8	65	4.76	64	4.69
Own	1,500	51.42	1,189	40.76	190	6.51	38	1.30
Wealth index								
Poorest(Ref)	479	56.96	282	33.53	68	8.09	12	1.43
Poorer	411	49.10	349	41.7	55	6.57	22	2.63
Middle	413	45.94	404	44.94	54	6.01	28	3.11
Richer	450	51.84	356	41.01	40	4.61	22	2.53
Richest	467	55.79	314	37.51	38	4.54	18	2.15
Women's age								
15-24	226	50.67	156	34.98	23	5.16	41	9.19
25-34	766	51.03	600	39.97	86	5.73	49	3.26
35-49	1,228	52.59	949	40.64	146	6.25	12	0.51
Living children								
No children	233	48.95	181	38.03	22	4.62	40	8.4
1-3 children	1,530	51.92	1,193	40.48	165	5.6	59	2.00
4 and above children	457	53.2	331	38.53	68	7.92	3	0.35
Head of household								
Not head of household	1,880	50.35	1,540	41.24	247	6.61	67	1.79
Head of household	340	62.04	165	30.11	8	1.46	35	6.39
Place of residence								
Rural	1,548	49.57	1,300	41.63	194	6.21	81	2.59
Urban	672	57.98	405	34.94	61	5.26	21	1.81
Region								
Kachin	132	48.00	108	39.27	27	9.82	8	2.91
Kayah	66	30.28	130	59.63	16	7.34	6	2.75
Kayin	131	72.78	42	23.33	3	1.67	4	2.22
Chin	45	33.09	66	48.53	17	12.5	8	5.88
Sagaing	181	51.27	159	45.04	7	1.98	6	1.70
Taninthayi	131	52.82	93	37.5	22	8.87	2	0.81
Bago	201	57.26	126	35.9	18	5.13	6	1.71
Magway	230	58.52	132	33.59	23	5.85	8	2.04

	Women alone		Women and husband		Husband alone		Someone else	
	Freq	Percent	Freq	Percent	Freq	Percent	Freq	Percent
Mandalay	197	49.13	167	41.65	18	4.49	19	4.74
Mon	178	80.18	27	12.16	7	3.15	10	4.5
Rakhine	116	56.59	76	12.16	10	4.88	3	1.46
Yangon	93	34.57	161	59.85	13	4.83	2	0.74
Shan	185	48.81	156	41.16	31	8.18	7	1.85
Ayeyarwaddy	185	48.81	146	39.89	28	7.65	7	1.91
Naypyitaw	149	52.1	116	40.56	15	5.24	6	2.1

Source: MDHS, 2015-2016. Freq = Frequency

From the descriptive analysis, 58.61 percent of women in higher level of education are decide on spend their earnings by themselves. Nearly forty percent of women in any level of education are taken jointly decide by husband and wife. When women with uneducated, her husband are highest empowered compare to educated women. Only four percent of women with secondary education are decide regarding their own cash earns spending by someone else.

Regarding to the level of husband's education, more than 50 percent of husband in any level of education are usually decide on spending of women' s income by women alone. Another nearly 40 percent of men are taken jointly decide with women and their husband. Surprising, higher education level of husband are lowest empower. And then, husband with higher education are decide regarding women's income spending by someone else.

With regard to the women's occupation, women who government staff are highest women decision making power about their own income spending. Women are taken jointly decide with their husband are not significantly between different occupations. When women who own business, her husband have highest decision power regarding women income spending. Women in any kind of work are equal chance to decide regarding their income spending by someone else.

Results on women's income compared with husband's income show that women solely decision making power is highest on control over women's income if husband does not bring in money. When wife's income same husband's income, decision of spending on women income have the same chance with wife and her husband. If wife's income less or same husband's income, men's decision power regarding women's income spending are highest.

And then, women who own house or does not own house have an equal chance to decide about their income spending by women or her husband alone and jointly decide with her husband. Although, 1.3 percent of women who own house are decide regarding their income spending by someone else.

According to the wealth index, both women and her husband are the highest decision power regarding women's own cash spending if women are poorest level in wealth index. But women are poorest level in wealth index, women are lowest taken jointly decide with their husband regarding their spending. In addition, 3.11 percent middle level of women in wealth index are taken decide about their income spending by someone else.

For the women's age, the older age of women are usually decide on spending by themselves or jointly decide with their husband. Women's age between 15-34 years have nearly equal chance to decide on how to spend women's cash earns by themselves or jointly decide with their husband. Youngest age of women (15-24) are highest decide on their own cash earns spending by someone else. Only 0.51 percent of women age 35-49 are taken on women income spending decision by someone else.

In addition, nearly fifty percent of household in one to three children are taken jointly decide on women income spending by wife and husband. About 8.4 percent of household in no children are decide by someone else. When women have four and above children, women and her husband decision making power are highest regarding women income spending.

If head of household are female, more than 60 percent of women are decide on their income spending by themselves. About 41 percent women are jointly decide with her husband regarding their income spending. When women are not household head, the decision making power of husband solely is highest on spending decision of women's income.

According to the women place of residence and region, women residence in urban area are more empower than residence in rural area. More than one third of women residence in rural area are taken jointly decide on women's income spending. Women solely decide on how to spend their cash earns are the highest in Kayin and Mon. Women in Chin and Kayah are lowest decision power on decide how to spend women's income. The percentage of taken jointly decision by husband is the highest in Yangon and Kahah. Women in Mon and Rakhine are lowest taken jointly decide with her husband regarding their income spending. In addition, nearly 50 percent of

women are jointly decide by husband and wife in Chin, Shan, Sagaing, Mandalay and NayPyitaw. Husband solely decision making power regarding women income spending is the highest in Chin. Men's decision power on spending of women income are lowest in Sagaing and Kayin. Women who live in Chin state are mostly decide on their income spending by someone else. Nearly one percent of women who live in Taninthayi and Yangon region are decide regarding their income spending by someone else.

4.2   The Relationship between Women's Empowerment and its Covariates

Bivariate analysis is used to determine the association between women's empowerment with various background characteristics of women. Table (4.2) presents the result of bivariate association on the basis of Chi-Square test.

Table (4.2)   The Relationship between Women's Empowerment and its Covariates

	Chi-Square	P-value
Women's education	37.7664	0.000
Husband's education	18.0684	0.034
Ownership of house	51.9035	0.000
Wife's income compared with husband's income	143.3693	0.000
Women occupation	70.2899	0.000
Wealth index	48.5897	0.000
Women's age	130.5119	0.000
Living children	98.8778	0.000
Head of household	91.1196	0.000
Place of residence	24.4679	0.000
Region	293.8974	0.000

Source: MDHS (2015-2016)

According to the Table (4.2), women's education, ownership of house, wife's cash earns compared with husband's cash earns, women's occupation, wealth index, women's age, living children, head of household, place of residence and region are highly associated with women empowerment. These variables are statistically significant at 1% level. The statistical significant of the relationship between husband's education and women's empowerment was found at 5% level.

4.3   Multinomial Logistic Regression of Women's Empowerment

The multinomial logistic regression is applied with the dependent variables as women's empowerment (women's decision regarding their income spending). It is

coded as '1' if women alone, '2' if women and husband, '3' if husband alone and '4' if someone else. In this study, the reference category is someone else. The independent variables are women's education, men's education, women's age, number of living children, women head of household, wife's income compared with husband's income, wealth index, ownership of house, place of residence and region. The validity of multinomial logistic regression model are examined by likelihood ratio test, and the model was significant with value of $\chi^2=828.86$ (p<0.01). The results regarding the multinomial logistic regression analysis are given in Table (4.3)

Table (4.3)   Multinomial Logistic Regression of Women's Empowerment

	Women alone		Women and Husband		Husband alone	
	Coeff	RRR	Coeff	RRR	Coeff	RRR
Women's education						
Primary	-0.3665	0.6932	-0.5219	0.5934	-0.8178*	0.4414*
Secondary	-0.3555	0.7008	-0.4288	0.6513	-1.0371*	0.3545*
Higher	0.3463	1.4139	0.1884	1.2073	-0.7984	0.4501
No education(Ref)						
Husband's education						
Primary	0.1406	1.1509	0.2569	1.2929	0.4687	1.5980
Secondary	-0.1091	0.8966	-0.0146	0.9855	0.6572	1.9294
Higher	-0.9545*	0.3850*	-0.6476	0.5233	-0.3603	0.6975
No education(Ref)						
Women's occupation						
Private	0.4379	1.5495	0.1341	1.1435	0.1237	1.1316
Own business	-0.0485	0.9527	0.2724	1.3131	0.8551*	2.3516*
Government	0.9516**	2.5898**	0.5003	1.6492	0.3676	1.4442
Others(Ref)						
Wife's income compared with husband's income						
More than their husband	0.3830	1.4667	0.8620	2.3679	0.6486	1.9129
Less than their husband	0.9789*	2.6614*	2.0326***	7.6337***	1.6307*	5.1072*
About the same	0.3434	1.4097	1.9210***	6.8278***	1.3754	3.9567
Husband's does not bring in money(Ref)						
Ownership of house						
Own	0.8318***	2.2974***	0.8506***	2.3410***	1.0444***	2.8416***
Doesn't own(Ref)						

	Women alone		Women and Husband		Husband alone	
	Coeff	RRR	Coeff	RRR	Coeff	RRR
Wealth index						
Poorer	-0.5762	0.5620	-0.2161	0.8056	-0.5952	0.5515
Middle	-0.6847*	0.5042*	-0.1289	0.8790	-0.6400	0.5273
Richer	-0.5648	0.5685	-0.1085	0.8972	-0.7374	0.4784
Richest	-0.6225	0.5366	-0.1744	0.8400	-0.6410	0.5267
Poorest(Ref)						
Women's age						
25-34	0.5521**	1.7369**	0.6678***	1.9500***	0.6456*	1.9071*
35-49	2.0386***	7.6802***	2.1488***	8.5745***	2.1050***	8.2069***
15-24(Ref)						
Number of Living children						
1-3 children	0.8067***	2.2406***	0.7859***	2.1944***	0.7400**	2.0960**
4 and above children	1.7102***	5.5301***	1.5199**	4.5717**	1.6525**	5.2202**
No children(Ref)						
Head of household	-0.7104***	0.4915***	-1.2144***	0.2969***	-2.2954***	0.1007***
Not head of household(Ref)						
Place of residence						
Urban	0.8780***	2.4061***	0.4870	1.6274	0.9975***	2.7115***
Rural(Ref)						
Region						
Kachin	-0.3870	0.6791	-0.3095	0.7338	0.2589	1.2955
Kayah	-0.8764	0.4163	0.1366	1.1463	0.2436	1.2758
Kayin	0.2222	1.2488	-0.5969	0.5505	-1.2168	0.2962
Chin	-1.5243**	0.2178**	-0.5881	0.5554	-0.0723	0.9303
Sagaing	0.2294	1.2579	0.3254	1.3846	-0.6871	0.5030
Taninthayi	0.8202	2.2709	0.9076	2.4783	1.5834*	4.8717*
Bago	0.6255	1.8692	0.4241	1.5282	0.4299	1.5371
Magway	-0.0206	0.9796	-0.5071	0.6022	-0.3517	0.7035
Mandalay	-1.1384**	0.3203**	-0.9529*	0.3856*	-1.0781*	0.3402*
Mon	-0.7051	0.4941	-2.2740***	0.1029***	-1.4616**	0.2319**
Rakhine	0.4461	1.5622	0.4655	1.5928	0.3416	1.4071
Yangon	0.6076	1.8360	1.6410*	5.1603	1.1967	3.3091
Shan	0.2597	1.2965	0.3048	1.3564	0.8099	2.2477
Ayeyarwaddy	-0.0516	0.9497	0.0802	1.0835	0.2541	1.2893
Naypyitaw(Ref)						
_cons	1.1512	3.1621	-0.3895	0.6774	-1.8458	0.1579

Source: MDHS (2015-2016). Coeff =Coefficient. RRR=relative risk ratio.
Someone else (Base outcome).Ref= reference. *=10%, **=5%, ***=1%

According to the Table (4.3), women's age, number of living children, women head of household, wife's income compared with husband's income and ownership of house have significant impact on women's empowerment. Positive relationship exist

between women's empowerment and women's education with higher level, husband education with primary level, women's occupation, wife's income compared with husband's income, ownership of house, women's age, number of living children, place of residence and region (Taninthayi, Bago, Rakhine, Yangon and Shan). Women's education with primary and secondary level, husband's education with higher level, wealth index, head of household and region (Chin, Magway, Mandalay and Mon) have negative association with women's empowerment.

Women alone (Women's Empowerment)

The relative risk of women with primary education level and middle education level are decrease by 0.6923 and 0.7008 respectively. The relative risk of women with higher level of education is increase by 1.4139 compare with uneducated women. Therefore, women with higher level education are more empower than other levels of education. In husband's education, higher education level of husband is significantly associated with women's empowerment. The relative risk of husband's education with higher level for women alone to someone else would be expected to decrease by 0.3850 compare with the husband no education.

Regarding the women's occupation, women with government staff was significantly associated with women's empowerment. The relative risk of women who government staff would be expected to increase by 2.5898 compare with other occupation.

According to the women's income compared with husband's income, women's income compared with husband's income and women's empowerment are positive relationship. It means that the relative risk of women's income more than her husband, women's income less than her husband and women's income with the same her husband are increase by 1.4667, 2.6614 and 1.4097 respectively compare with husband does not income. And then, women's income less than husband's income is statistically significant at 10% level.

For the women ownership of house, the relative risk for women own house would be expected to increase by 2.2974 compare with women does not own house. This variables is statistically significant at 1% level.

Considering the wealth index, poorest is the reference category and middle differ significantly from the reference category at the 10% level. The relative risk for women with poorer level, middle level, richer level and richest level are decrease by

0.5620, 0.5042, 0.5685 and 0.5366 respectively compare with poorest level of women in wealth index.

Regarding women's age, age of women have positively relationship with women's empowerment. The base category for women's age is 15-24 years and women's age for 25-34 and 35-39 years are statistically significant at 5% and 1% level respectively. This mean that the more increase age of women the more women empowerment.

And then, number of living children and women's empowerment are positively relationship with significantly at 5% level. The relative risk of less than three number of living children and more than four number of living children are increased by 2.2406 and 5.5301 respectively compare with women no number of living children. Women with more than four number of living children are highest empower than women with less than three number of living children.

For the head of household status, it is found that the relative risk of women head of household are decreased by 0.4915 than those who are not head of household with significant level at 1%.

According to the place of residence and region, women who live in urban area are found to have higher women empowerment than those women who live in rural area. This study confirm that place of residence is significantly effecting on women's empowerment at 1% level. For region, Naypyitaw is reference category and Chin and Mandalay are statistically significant at 5% level. And then, Kachin, Sagaing, Taninthayi, Bago, Rakhine, Yangon and Shan are positively relationship with women's empowerment (women alone).

Both Women and Husband (Women's Empowerment)

Regarding to women's education, the relative risk of women with primary education level and secondary education level are decrease by 0.5934 and 0.6513 respectively. The relative risk of women with higher level of education is increase by 1.2073 compare with uneducated women. For husband's education, the relative risk of husband with primary education level is increase by 1.2929. The relative risk of women with secondary education level and higher education level are decrease by 0.9855 and 0.5233 respectively.

And then, women's occupation are positive relationship with women's empowerment. The relative risk of women with private, own business and

government workers are increase by 1.1435, 1.131 and 1.6492 respectively. Among these workers, women who government staffs have the highest empowered than other kinds of works.

Considering the wife's income compared with husband's income, women's income compared with husband's income and women's empowerment are positive relationship. It means that the relative risk of women's income more than her husband, women's income less than her husband and women's income with the same her husband are increase by 2.3679, 7.6337 and 6.8278 respectively compare with husband does not income. And then, women's income less than husband's income and women's income with the same her husband are statistically significant at 1% level.

And then, ownership of house is positively relationship with significantly at 1% level. The relative risk for women own house would be expected to increase by 2.341 compare with women does not own house. But, wealth index and women's empowerment are negatively relationship. The relative risk for women with poorer level, middle level, richer level and richest level are decrease by 0.8056, 0.8790, 0.8972 and 0.8400 respectively compare with poorest level of women in wealth index.

According to the women's age, age of women have positively relationship with women's empowerment. The base category for women's age is 15-24 years and women's age for 25-34 and 35-39 years are statistically significant at 1% level. This mean that the more increase age of women the more women empowerment.

Regarding to the number of living children, number of living children and women's empowerment are positively relationship with significantly at 1% and 5% level respectively. The relative risk of less than three number of living children and more than four number of living children are increase by 2.1944 and 4.5717 respectively compare with women no number of living children. Women with more than four number of living children are highest empower than women with less than three number of living children.

Considering the head of household status, it was found that the relative risk of women head of household are decrease by 0.2969 than those who are not head of household with significant level at 1%.

According to the place of residence and region, women who live in urban area are found to have higher women empowerment than those women who live in rural area. For region, Naypyitaw is reference category and Mandalay, Mon and Yangon are statistically significant at 1% and 10% level respectively. And then, Kayah,

Sagaing, Taninthayi, Bago, Rakhine, Yangon, Shan and Ayeyarwaddy are positively relationship with women's empowerment (women and husband).

Husband alone (Women's Empowerment)

Starting from the women's education, women's education and women's empowerment for husband alone are negatively relationship. It means that the relative risk of women's with primary, middle and higher level of education are decrease by 0.4414, 0.3545 and 0.4501 respectively compare with uneducated women. And then, women with primary and secondary level of are statistically significant at 1% level. For husband's education, the relative risk of husband with primary education level and secondary education level are increase by 1.5980 and 1.9294 respectively. The relative risk of husband with higher education is decreased by 0.6975.

Regarding to the women's occupation, women who own business was significantly associated with women's empowerment. The relative risk for women with private, own business, and government are increase by 1.1316, 2.3516 and 1.4442 compare with other workers of women.

According to the women's income compared with husband's income, women's income compared with husband's income and women's empowerment are positive relationship. It means that the relative risk of women's income more than her husband, women's income less than her husband and women's income with the same her husband are increase by 1.9129, 5.1072 and 3.9567 respectively compare with husband does not income. And then, women's income less than husband's income is statistically significant at 10% level.

For the women ownership of house, the relative risk for women own house would be expected to increase by 2.8416 compare with women does not own house. This variables is statistically significant at 1% level. But, wealth index and women's empowerment are negatively relationship. The relative risk for women with poorer level, middle level, richer level and richest level are decrease by 0.17, 0.144, 0.127 and 0.262 respectively compare with poorest level of women in wealth index.

According to the women's age, age of women have positively relationship with women's empowerment. The base category for women's age is 15-24 years and women's age for 25-34 and 35-39 years are statistically significant at 1% level. This mean that the more increase age of women the more women empowerment.

And then, number of living children and women's empowerment are positively relationship with significantly at 5% level. The relative risk of less than three number of living children and more than four number of living children are increased by 2.096 and 5.2202 respectively compare with women no number of living children. Women with more than four number of living children are highest empower than women with less than three number of living children.

Regarding to the head of household status, it is found that the relative risk of women head of household are decrease by 0.1007 than those who are not head of household with significant level at 1%.

According to the place of residence and region, women who live in urban area are found to have higher women empowerment than those women who live in rural area. This study confirm that place of residence is significantly effecting on women's empowerment at 1% level. For region, Naypyitaw is reference category and Taninthayi, Mandalay and Mon are statistically significant at 5% and 10% level respectively. And then, Kachin, Kayah, Sagaing, Taninthayi, Bago, Rakhine, Yangon, Shan and Ayeyarwaddy are positively relationship with women's empowerment (husband alone).

CHAPTER V

CONCLUSION AND RECOMMENDATIONS

5.1   Conclusion

This study focused upon the socio-economic and demographic factors affecting on women's empowerment in Myanmar. Women's empowerment was measured by women's decision regarding their income spending. In order to investigate the women's socio-economic and demographic factors associated with women's empowerment in Myanmar. The dependent variable was women's empowerment while the independent variables were geographical location (urban/rural and region), educational status, women's occupation, women's age, wealth power, number of living children, head of household, wife's income compared with husband's income and ownership of house.

The principle variable in this study is education and its impact on women's empowerment. According to descriptive analysis, women with secondary education have nearly less than half of women with primary education. This shows that higher schooling drop-out rate at secondary education in Myanmar. Although, women with higher education are the highest decision power regarding their income spending. Husband's education are not very different between primary and secondary education level. But husband with higher education are less than women with higher education. Government staffs of women are highest empowered than other works of women.

Mostly, higher education level of women do not have no more children. But uneducated women have more children. In fact, this study seems that women have advantageous of more children because number of living children are positively association with women empowerment. Women is the main decision-maker regarding the use of her income increases with increases in number of children. Women who live in urban area are more likely to educate than in rural areas. No education and primary education of women are highest in rural areas.

According to the results of multinomial logistic regression, Women's age, number of living children, women head of household, wife's income compared with husband's income, ownership of house have significant impact on women's empowerment. Positive relationship exist between women's empowerment and women's education with higher level, husband education with primary level, women's occupation, wife's income compared with husband's income, ownership of house,

women's age, number of living children, place of residence and region (Taninthayi, Bago, Rakhine, Yangon and Shan). Women's education with primary and secondary level, husband's education with higher level, wealth index, head of household and region (Chin, Magway, Mandalay and Mon) have negative association with women's empowerment.

In this study, women with higher level of education are more likely to empower. But the relative risk of a husband to make decision alone instead of someone else is negatively related with women's education. A possible explanation for this result is that any education level of women are never decided how to spend their income relative to someone else. Most of wife are usually decide on the use of their income by themselves or jointly with her husband in Myanmar.

Women who government staffs are more likely to empower because these staffs have higher education and higher qualification. Own business women are less likely to empower than her husband because own business women means that agricultural self-employed workers and domestic workers. Women income less than her husband income are more likely to report that they themselves decide how their income are used than are those who earn same their husbands or does not bring in money their husbands. Women who earn less than or same as her husband are most likely to taken jointly decide with her husband regarding their income spending.

Women with middle level in wealth index are less likely to empower than others level of women in wealth index. Older women (35-49 years) are more likely to take decision alone or jointly with her husband as compared those in 25-34 years of age. But older women (35-49 years) are less likely to take decision on use of their income by husband alone as compared to women alone or jointly decide with husband. In contrast, older women are more empowered than younger women.

Women who have more children are more empowered than fewer or no children because increases number of children women more supported to provide education for children, discuses husband about desire number of children and other matters for desire family size. Women with less children (one to three children) are found jointly decide with her husband or decide by husband alone on how their income are used. Women are not empowered if male head of household. Women in urban areas are more likely to empower than women in rural areas to make independent decisions about the use of the money they earn. Therefore, the policy makers should be emphasized to improve education especially in rural areas.

The data finds that women from Yangon region are more likely to report that decisions on the use of their income are mainly made jointly with their husbands as compared to NayPyitaw. In addition, women from Taninthayi are more likely to report that decisions on the use of their earnings are mainly made husband alone as compared to NayPyitaw. This indicates that women exists regional differences, Yangon city is urbanized and central economy in Myanmar. All the industrial and infrastructural growth has been centered Yangon city. Most of household in Yangon, both husband and wife are working outside the home.

Therefore, this study are concluded that women's education, women's occupation, wife's income more than husband's income and ownership of house are more likely to influence on women's empowerment. Women who live in rural area, women wealth index and women who not head of household are less likely to influence on women's empowerment.

The results have implications for the experts in gender issues, economists and policy-makers that women are not empowered just by getting higher and higher education unless they do not have opportunities to materialize their knowledge and earn money to have financial autonomy. Education appears to be dynamic in enhancing the self-esteem of women that carry the impact of their education in empowering women.

The education of the woman, her autonomy and her decision making role all add up in the same direction. This study indicates that education alone cannot be the road to enhanced women's empowerment. Although, education are essential need to get a good jobs, to get more earn and to get more empower about the decision making processes. Therefore, change in many more societal norms such as employment opportunities for women, more save life from present to future, women decision making power and related issues need to evolve further and strengthen the cause of women's empowerment in Myanmar.

5.2   Policy Recommendations

This study makes several recommendations and implication for relevant policy. In regard to women's place of residence, women who live in rural area are less empower than women who live in urban area. Therefore, government should be considered education and employment opportunities for women that focus more to the rural area.

For women's education, women's education is key factor of women labor force participation which has important role to increase productivity and economic growth. Hence, government should be taken a direct policy in order to improve the status of women by increasing opportunity of women to get higher education. Besides, government should be improved education infrastructure and teacher, especially in rural areas of Myanmar.

5.3 Further Study

Women's empowerment can be measured by different dimensions. In this study, women's empowerment was measured by women's decision regarding their own income spending. Moreover, further research should be studied other dimensions such as household decision making and attitude towards wife beating.

In addition, further study should be included the cultural variables such as religion and ethnicity because these variables can explain more about which factors influence on women's empowerment.

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APPENDIX

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Iteration 0:  log likelihood =        -4128.932
Iteration 1:  log likelihood =       -3884.3585
Iteration 2:  log likelihood =       -3720.9787
Iteration 3:  log likelihood =       -3714.6526
Iteration 4:  log likelihood =        -3714.502
Iteration 5:  log likelihood =       -3714.5019
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Multinomial logistic regression		Number of obs	4282
		LR chi2(111)	828.86
		Prob > chi2	0
Log likelihood = -3714.5019		Pseudo R2	0.1004

Women decision regarding spending	Coef.	Std. Err.	z	P>z	[95% Conf. Interval]	
Respondent alone						
Women's education						
primary	-0.3664512	0.4593231	-0.8	0.425	-1.266708	0.533806
secondary	-0.3555399	0.4920818	-0.72	0.47	-1.320002	0.608923
higher	0.3463479	0.6602666	0.52	0.6	-0.9477509	1.640447
Husband's education						
primary	0.1405595	0.3806304	0.37	0.712	-0.6054624	0.886581
secondary	-0.1091267	0.3819266	-0.29	0.775	-0.8576891	0.639436
higher	-0.9545193	0.5306953	-1.8	0.072	-1.994663	0.085625
Own house						
Own	0.8317708	0.2612592	3.18	0.001	0.3197122	1.343829
Wife's income compared with husband's income						
more than their husband	0.3830091	0.5879155	0.65	0.515	-0.769284	1.535302
less than their husband	0.9788554	0.5681687	1.72	0.085	-0.1347348	2.092446
about the same	0.3433627	0.5889009	0.58	0.56	-0.8108618	1.497587

Women decision regarding spending	Coef.	Std. Err.	z	P>z	[95% Conf. Interval]	
Occupation						
Private	0.4379203	0.2807186	1.56	0.119	-0.1122781	0.988119
Own business	-0.048495	0.4084865	-0.12	0.905	-0.8491139	0.752124
Government	0.951589	0.4709697	2.02	0.043	0.0285054	1.874673
Wealth index						
poorer	-0.5762401	0.3933811	-1.46	0.143	-1.347253	0.194773
middle	-0.6847489	0.3934144	-1.74	0.082	-1.455827	0.086329
richer	-0.5647715	0.4271218	-1.32	0.186	-1.401915	0.272372
richest	-0.6225104	0.50365	-1.24	0.216	-1.609646	0.364625
Women's age						
25-34	0.5521129	0.2615772	2.11	0.035	0.039431	1.064795
35-49	2.038646	0.3940766	5.17	0	1.26627	2.811022
Living children						
1-3 children	0.8067409	0.251992	3.2	0.001	0.3128457	1.300636
4 and above children	1.710206	0.6632736	2.58	0.01	0.4102133	3.010198
Sex of household head						
Head of household	-0.7103573	0.2365003	-3	0.003	-1.173889	-0.24683
Residence						
urban	0.877989	0.3231164	2.72	0.007	0.2446925	1.511285
Region						
Kachin	-0.386965	0.6011096	-0.64	0.52	-1.565118	0.791188
Kayah	-0.8764449	0.6343886	-1.38	0.167	-2.119824	0.366934
Kayin	0.2222146	0.7069173	0.31	0.753	-1.163318	1.607747
Chin	-1.524283	0.632273	-2.41	0.016	-2.763515	-0.28505
Sagaing	0.229443	0.6245121	0.37	0.713	-0.9945781	1.453464
Taninthayi	0.8201961	0.8550743	0.96	0.337	-0.8557187	2.496111
Bago	0.6254991	0.6240601	1	0.316	-0.5976362	1.848634
Magway	-0.0206107	0.5901025	-0.03	0.972	-1.17719	1.135969
Mandalay	-1.13836	0.5283141	-2.15	0.031	-2.173837	-0.10288
Mon	-0.7050903	0.5704614	-1.24	0.216	-1.823174	0.412994
Rakhine	0.4460683	0.7519406	0.59	0.553	-1.027708	1.919845
Yangon	0.6075991	0.858618	0.71	0.479	-1.075261	2.290459
Shan	0.259683	0.6245328	0.42	0.678	-0.9643788	1.483745
Ayeyarwaddy	-0.0516039	0.6092517	-0.08	0.932	-1.245715	1.142508
_cons	1.151229	0.8744291	1.32	0.188	-0.562621	2.865078

Women decision regarding spending	Coef.	Std. Err.	z	P>z	[95% Conf. Interval]	
Respondent and husband\partner						
Women's education						
primary	-0.5218524	0.4617553	-1.13	0.258	-1.426876	0.383171
secondary	-0.4288221	0.4950398	-0.87	0.386	-1.399082	0.541438
higher	0.1883901	0.6663201	0.28	0.777	-1.117573	1.494353
Husband's education						
primary	0.2568834	0.3841981	0.67	0.504	-0.4961311	1.009898
secondary	-0.0145608	0.3863964	-0.04	0.97	-0.7718838	0.742762
higher	-0.6475842	0.5393245	-1.2	0.23	-1.704641	0.409472
Own house						
Own	0.8505692	0.2638674	3.22	0.001	0.3333986	1.36774
Wife's income compared with husband's income						
more than their husband	0.8620121	0.6376791	1.35	0.176	-0.387816	2.11184
less than their husband	2.032576	0.617194	3.29	0.001	0.8228978	3.242254
about the same	1.921001	0.6355651	3.02	0.003	0.6753164	3.166686
Occupation						
Private	0.1340979	0.2837537	0.47	0.637	-0.4220492	0.690245
Own business	0.2723953	0.4090719	0.67	0.505	-0.5293709	1.074162
Government	0.5002679	0.4758074	1.05	0.293	-0.4322974	1.432833
Wealth index						
poorer	-0.2161097	0.3974516	-0.54	0.587	-0.9951006	0.562881
middle	-0.1289331	0.3971713	-0.32	0.745	-0.9073746	0.649508
richer	-0.1085163	0.4315385	-0.25	0.801	-0.9543162	0.737284
richest	-0.1743512	0.5089174	-0.34	0.732	-1.171811	0.823109
Women's age						
25-34	0.6678143	0.2681798	2.49	0.013	0.1421915	1.193437
35-49	2.14879	0.3987399	5.39	0	1.367275	2.930306
Living children						
1-3 children	0.7859234	0.257194	3.06	0.002	0.2818324	1.290014
4 and above children	1.519877	0.6661283	2.28	0.023	0.2142893	2.825464

Women decision regarding spending	Coef.	Std. Err.	z	P>z	[95% Conf. Interval]	
Sex of household head						
Head of household	-1.214424	0.243622	-4.98	0	-1.691915	-0.73693
Residence						
urban	0.4869824	0.3267934	1.49	0.136	-0.1535209	1.127486
Region						
Kachin	-0.3094689	0.605949	-0.51	0.61	-1.497107	0.878169
Kayah	0.1365634	0.6305771	0.22	0.829	-1.099345	1.372472
Kayin	-0.5968616	0.7230812	-0.83	0.409	-2.014075	0.820352
Chin	-0.5880606	0.6328812	-0.93	0.353	-1.828485	0.652364
Sagaing	0.3254144	0.6283016	0.52	0.605	-0.906034	1.556863
Taninthayi	0.9075725	0.8589286	1.06	0.291	-0.7758967	2.591042
Bago	0.4240917	0.6296116	0.67	0.501	-0.8099244	1.658108
Magway	-0.5071174	0.5962318	-0.85	0.395	-1.67571	0.661475
Mandalay	-0.9529444	0.5323599	-1.79	0.073	-1.996351	0.090462
Mon	-2.273983	0.6001302	-3.79	0	-3.450217	-1.09775
Rakhine	0.4654667	0.7567428	0.62	0.538	-1.017722	1.948655
Yangon	1.641003	0.8584415	1.91	0.056	-0.0415114	3.323518
Shan	0.3048479	0.6285031	0.49	0.628	-0.9269956	1.536691
Ayeyarwaddy	0.0802036	0.6136352	0.13	0.896	-1.122499	1.282907
_cons	-0.3894896	0.9139004	-0.43	0.67	-2.180701	1.401722

Women decision regarding spending	Coef.	Std. Err.	z	P>z	[95% Conf. Interval]	
Husband alone						
Women's education						
primary	-0.8177995	0.4920862	-1.66	0.097	-1.782271	0.146672
secondary	-1.037094	0.5402837	-1.92	0.055	-2.09603	0.021843
higher	-0.798352	0.7776909	-1.03	0.305	-2.322598	0.725894
Husband's education						
primary	0.4687332	0.4312484	1.09	0.277	-0.3764981	1.313965
secondary	0.6572052	0.4411154	1.49	0.136	-0.2073652	1.521776
higher	-0.3602725	0.6760865	-0.53	0.594	-1.685378	0.964833
Own house						
Own	1.044359	0.3038555	3.44	0.001	0.4488134	1.639905
Wife's income compared with husband's income						
more than their husband	0.6486186	0.9295125	0.7	0.485	-1.173192	2.47043
less than their husband	1.630653	0.9049276	1.8	0.072	-0.1429722	3.404279
about the same	1.375402	0.9205956	1.49	0.135	-0.4289325	3.179736
Occupation						
Private	0.123668	0.3287504	0.38	0.707	-0.520671	0.768007
Own business	0.8550796	0.4447217	1.92	0.055	-0.0165589	1.726718
Government	0.3675832	0.5613121	0.65	0.513	-0.7325684	1.467735
Wealth index						
poorer	-0.5951631	0.4334376	-1.37	0.17	-1.444685	0.254359
middle	-0.6400271	0.4376425	-1.46	0.144	-1.497791	0.217737
richer	-0.7374004	0.4828308	-1.53	0.127	-1.683731	0.208931
richest	-0.6410307	0.57112	-1.12	0.262	-1.760405	0.478344
Women's age						
25-34	0.6455597	0.357018	1.81	0.071	-0.0541827	1.345302
35-49	2.104976	0.4662351	4.51	0	1.191172	3.01878
Living children						
1-3 children	0.7400136	0.3447283	2.15	0.032	0.0643585	1.415669
4 and above children	1.65254	0.7165173	2.31	0.021	0.2481913	3.056888

Women decision regarding spending	Coef.	Std. Err.	z	P>z	[95% Conf. Interval]	
Sex of household head						
Head of household	-2.295387	0.4297382	-5.34	0	-3.137658	-1.45312
Residence						
urban	0.9974879	0.370633	2.69	0.007	0.2710606	1.723915
Region						
Kachin	0.2588725	0.6834054	0.38	0.705	-1.080577	1.598322
Kayah	0.2435902	0.7197918	0.34	0.735	-1.167176	1.654356
Kayin	-1.21679	0.9508363	-1.28	0.201	-3.080395	0.646815
Chin	-0.0722972	0.7221151	-0.1	0.92	-1.487617	1.343022
Sagaing	-0.6871495	0.7731172	-0.89	0.374	-2.202431	0.828133
Taninthayi	1.583447	0.9158969	1.73	0.084	-0.2116784	3.378571
Bago	0.4299286	0.714017	0.6	0.547	-0.969519	1.829376
Magway	-0.3517476	0.6786645	-0.52	0.604	-1.681906	0.97841
Mandalay	-1.07814	0.6299901	-1.71	0.087	-2.312898	0.156618
Mon	-1.461608	0.728692	-2.01	0.045	-2.889818	-0.0334
Rakhine	0.3415541	0.8522076	0.4	0.689	-1.328742	2.01185
Yangon	1.196675	0.9359947	1.28	0.201	-0.6378405	3.031191
Shan	0.8099193	0.700395	1.16	0.248	-0.5628296	2.182668
Ayeyarwaddy	0.2540635	0.6870853	0.37	0.712	-1.092599	1.600726
_cons	-1.845826	1.189373	-1.55	0.121	-4.176956	0.485303
Someone else	(base outcome)					

Iteration 0: log likelihood =	-4128.93	
Iteration 1: log likelihood =	-3884.36	
Iteration 2: log likelihood =	-3720.98	
Iteration 3: log likelihood =	-3714.65	
Iteration 4: log likelihood =	-3714.5	
Iteration 5: log likelihood =	-3714.5	
	Number of	
Multinomial logistic regression	obs =	4282
	LR chi2(111) =	828.86
	Prob > chi2 =	0
Log likelihood = -3714.5019	Pseudo R2 =	0.1004

Women decision regarding spending	RRR	Std. Err.	z	P>z	[95% Conf. Interval]	
Respondent alone						
Women's education						
primary	0.69319	0.3183981	-0.8	0.425	0.2817577	1.70541
secondary	0.700795	0.3448484	-0.72	0.47	0.2671346	1.83845
higher	1.413894	0.9335473	0.52	0.6	0.3876118	5.157473
Husband's education						
primary	1.150918	0.4380742	0.37	0.712	0.545822	2.426819
secondary	0.896617	0.3424418	-0.29	0.775	0.4241411	1.895411
higher	0.384997	0.2043162	-1.8	0.072	0.1360595	1.089397
Own house						
Own	2.297383	0.6002126	3.18	0.001	1.376731	3.833696
Wife's income compared with husband's income						
more than their husband	1.466691	0.8622906	0.65	0.515	0.4633447	4.642729
less than their husband	2.661408	1.512129	1.72	0.085	0.8739477	8.104711
about the same	1.40968	0.8301618	0.58	0.56	0.4444748	4.470889
Occupation						
Private	1.549481	0.4349683	1.56	0.119	0.8937957	2.686176
Own business	0.952662	0.3891496	-0.12	0.905	0.4277938	2.121501
Government	2.589822	1.219727	2.02	0.043	1.028916	6.518684
Wealth index						
poorer	0.562008	0.2210831	-1.46	0.143	0.2599534	1.215035
middle	0.504217	0.1983661	-1.74	0.082	0.2332075	1.090165
richer	0.56849	0.2428145	-1.32	0.186	0.2461252	1.313075
richest	0.536596	0.2702564	-1.24	0.216	0.1999583	1.439974
Women's age						
25-34	1.736919	0.4543384	2.11	0.035	1.040219	2.900244
35-49	7.680205	3.026589	5.17	0	3.547597	16.62691
Living children						
1-3 children	2.240594	0.5646116	3.2	0.001	1.36731	3.671631
4 and above children	5.530099	3.667969	2.58	0.01	1.507139	20.29142
Sex of household head						
Head of household	0.491469	0.1162324	-3	0.003	0.3091622	0.781277

Women decision regarding spending	RRR	Std. Err.	z	P>z	[95% Conf. Interval]	
Residence						
urban	2.406056	0.7774361	2.72	0.007	1.277228	4.532553
Region						
Kachin	0.679115	0.4082225	-0.64	0.52	0.2090633	2.206016
Kayah	0.41626	0.2640707	-1.38	0.167	0.1200528	1.443302
Kayin	1.248839	0.882826	0.31	0.753	0.3124478	4.991552
Chin	0.217777	0.1376946	-2.41	0.016	0.0630697	0.751976
Sagaing	1.257899	0.7855732	0.37	0.713	0.3698794	4.277908
Taninthayi	2.270945	1.941827	0.96	0.337	0.4249776	12.13521
Bago	1.869179	1.16648	1	0.316	0.5501104	6.35114
Magway	0.9796	0.5780646	-0.03	0.972	0.3081433	3.11419
Mandalay	0.320344	0.1692423	-2.15	0.031	0.1137404	0.902232
Mon	0.494064	0.2818445	-1.24	0.216	0.1615123	1.511335
Rakhine	1.562158	1.17465	0.59	0.553	0.3578261	6.8199
Yangon	1.836018	1.576438	0.71	0.479	0.3412086	9.879476
Shan	1.296519	0.8097187	0.42	0.678	0.3812199	4.409427
Ayeyarwaddy	0.949705	0.5786094	-0.08	0.932	0.287735	3.134619
_cons	3.162076	2.765011	1.32	0.188	0.5697139	17.55043

Women decision regarding spending	RRR	Std. Err.	z	P>z	[95% Conf. Interval]	
Respondent and husband\partner						
Women's education						
primary	0.59342	0.274015	-1.13	0.258	0.2400577	1.466929
secondary	0.651276	0.3224075	-0.87	0.386	0.2468234	1.718477
higher	1.207304	0.8044511	0.28	0.777	0.3270726	4.456454
Husband's education						
primary	1.292894	0.4967275	0.67	0.504	0.6088818	2.74532
secondary	0.985545	0.3808109	-0.04	0.97	0.4621417	2.101733
higher	0.523309	0.2822331	-1.2	0.23	0.1818377	1.506023
Own house						
Own	2.340979	0.617708	3.22	0.001	1.395704	3.926466
Wife's income compared with husband's income more than their						
husband	2.367921	1.509973	1.35	0.176	0.6785372	8.263434
less than their husband	7.633724	4.711489	3.29	0.001	2.277089	25.59133
about the same	6.827791	4.339506	3.02	0.003	1.964654	23.72872
Occupation						
Private	1.143505	0.3244738	0.47	0.637	0.6557018	1.994204
Own business	1.313106	0.5371548	0.67	0.505	0.5889754	2.927537
Government	1.649163	0.784684	1.05	0.293	0.6490163	4.190556
Wealth index						
poorer	0.805647	0.3202057	-0.54	0.587	0.3696863	1.755724
middle	0.879033	0.3491266	-0.32	0.745	0.4035824	1.914599
richer	0.897164	0.3871609	-0.25	0.801	0.3850754	2.09025
richest	0.840002	0.4274915	-0.34	0.732	0.3098054	2.277569
Women's age						
25-34	1.949971	0.5229427	2.49	0.013	1.152797	3.298398
35-49	8.574481	3.418987	5.39	0	3.92464	18.73337
Living children						
1-3 children	2.194432	0.5643947	3.06	0.002	1.325557	3.632838
4 and above children	4.571662	3.045314	2.28	0.023	1.238981	16.86878
Sex of household head						
Head of household	0.296881	0.0723267	-4.98	0	0.1841666	0.478579

Women decision regarding spending	RRR	Std. Err.	z	P>z	[95% Conf. Interval]	
Residence						
urban	1.627398	0.5318229	1.49	0.136	0.8576829	3.087883
Region						
Kachin	0.733837	0.4446676	-0.51	0.61	0.2237766	2.40649
Kayah	1.146328	0.722848	0.22	0.829	0.3330892	3.94509
Kayin	0.550537	0.3980828	-0.83	0.409	0.1334438	2.271298
Chin	0.555403	0.3515044	-0.93	0.353	0.1606568	1.920074
Sagaing	1.384604	0.8699491	0.52	0.605	0.4041238	4.743915
Taninthayi	2.478299	2.128682	1.06	0.291	0.4602909	13.34366
Bago	1.528202	0.9621736	0.67	0.501	0.4448917	5.249369
Magway	0.602229	0.3590681	-0.85	0.395	0.1871752	1.937649
Mandalay	0.385604	0.2052801	-1.79	0.073	0.1358301	1.09468
Mon	0.102902	0.0617543	-3.79	0	0.0317388	0.333621
Rakhine	1.592757	1.205308	0.62	0.538	0.3614174	7.019242
Yangon	5.160343	4.429853	1.91	0.056	0.9593384	27.75782
Shan	1.356419	0.8525134	0.49	0.628	0.3957409	4.649182
Ayeyarwaddy	1.083508	0.6648784	0.13	0.896	0.3254653	3.607109
_cons	0.677403	0.6190784	-0.43	0.67	0.1129623	4.06219

Women decision regarding spending	RRR	Std. Err.	z	P>z	[95% Conf. Interval]	
Husband alone						
Women's education						
primary	0.441402	0.2172078	-1.66	0.097	0.1682557	1.157974
secondary	0.354483	0.1915216	-1.92	0.055	0.1229435	1.022083
higher	0.45007	0.3500154	-1.03	0.305	0.0980186	2.066578
Husband's education						
primary	1.597969	0.6891215	1.09	0.277	0.6862604	3.720896
secondary	1.929393	0.8510849	1.49	0.136	0.8127228	4.580351
higher	0.697486	0.471561	-0.53	0.594	0.1853744	2.624349
Own house						
Own	2.841577	0.8634289	3.44	0.001	1.566452	5.15468
Compared earn						
more than him	1.912897	1.778061	0.7	0.485	0.3093777	11.82753
less than him	5.10721	4.621655	1.8	0.072	0.8667782	30.09258
about the same	3.956665	3.642489	1.49	0.135	0.6512039	24.0404
Occupation						
Private business	1.13164	0.3720271	0.38	0.707	0.5941218	2.155466
Own business	2.351561	1.04579	1.92	0.055	0.9835775	5.622172
Government	1.44424	0.8106694	0.65	0.513	0.4806729	4.339394
Wealth index						
poorer	0.551473	0.2390289	-1.37	0.17	0.2358203	1.289635
middle	0.527278	0.2307593	-1.46	0.144	0.2236237	1.243259
richer	0.478356	0.2309649	-1.53	0.127	0.1856799	1.232359
richest	0.526749	0.300837	-1.12	0.262	0.1719751	1.6134
Women's age						
25-34	1.907054	0.6808525	1.81	0.071	0.947259	3.839346
35-49	8.206909	3.826349	4.51	0	3.290937	20.46631
Living children						
1-3 children	2.095964	0.7225382	2.15	0.032	1.066475	4.11924
4 and above children	5.22022	3.740378	2.31	0.021	1.281705	21.26128
Sex of household head						
Head of household	0.100722	0.0432843	-5.34	0	0.0433843	0.233841
Residence						
urban	2.711462	1.004957	2.69	0.007	1.311355	5.606436

Women decision regarding spending	RRR	Std. Err.	z	P>z	[95% Conf. Interval]	
Region						
Kachin	1.295469	0.8853302	0.38	0.705	0.3393995	4.94473
Kayah	1.275821	0.9183257	0.34	0.735	0.3112448	5.229712
Kayin	0.296179	0.281618	-1.28	0.201	0.0459411	1.909449
Chin	0.930254	0.6717508	-0.1	0.92	0.2259104	3.830604
Sagaing	0.503008	0.3888841	-0.89	0.374	0.1105341	2.28904
Taninthayi	4.871717	4.461991	1.73	0.084	0.8092249	29.32884
Bago	1.537148	1.09755	0.6	0.547	0.3792654	6.229999
Magway	0.703458	0.4774117	-0.52	0.604	0.1860192	2.660224
Mandalay	0.340228	0.2143402	-1.71	0.087	0.098974	1.169549
Mon	0.231863	0.1689567	-2.01	0.045	0.0555863	0.967153
Rakhine	1.407133	1.199169	0.4	0.689	0.2648102	7.47714
Yangon	3.309097	3.097297	1.28	0.201	0.5284324	20.7219
Shan	2.247727	1.574296	1.16	0.248	0.569595	8.869942
Ayeyarwaddy	1.289254	0.8858273	0.37	0.712	0.3353438	4.95663
_cons	0.157895	0.1877959	-1.55	0.121	0.0153452	1.624667
Someone else	(base outcome)					