

Cohabitation and its Implications on Marital Stability and First Birth: A case of the Central Region of Uganda

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Thesis submitted in *partial* fulfillment of the requirements for the
degree of *Doctor of Philosophy* in Population Studies at the
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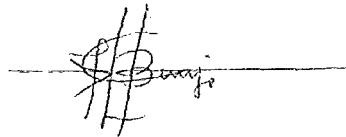
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MAY 2015



DECLARATION

This is to certify that this thesis I have presented for examination for the degree of Doctor of Philosophy in Population Studies at Mafikeng Campus of the North-West University is solely my own work except where I have indicated that it is the work of others and that it has never been presented for the award in any other University

A handwritten signature in black ink, appearing to read 'Charles Lwanga', is written over a horizontal line.

Signature:

October 2015

Charles Lwanga

DEDICATION

During the three years of my PhD programme, I have witnessed some of the happiest and the saddest moments in my life. My late Mother, Lucy Namirembe Bunjo, who supported me from the start of my studies, unfortunately passed on a month before submission. This thesis is dedicated to the memory of my mother and my father, the late John-Baptist Bunjo.

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ABSTRACT

This thesis is a study of cohabitation and its implications on marital stability and first birth in Central Uganda using micro-survey data collected in the study area using retrospective methods. The study also investigated the nuptiality patterns and differentials in Uganda using data from five rounds of the Uganda Demography and Health Surveys collected in 1988, 1995, 2001, 2006 and 2011 from women aged 15 to 49 and men aged 15 to 54. The results of this study have confirmed a declining trend in marriage and a rising pattern in cohabitation. The data seem to support the view that over time, marriage as a social institution could be weakening. The study also found the increase in the singulate mean age at first marriage from 20 in 1988 to 21 years in 2011 among women and from 23 in 1995 to 25 years in 2011 among men.

Based on the micro-survey data collected in the study area that used retrospective methods, the study examined the predictors and prevalence of cohabitation as a form of first union. The results found a higher proportion of women (77%) beginning their first union by cohabiting. The logistic analysis revealed that within categories of variables, significant determinants were: being of primary and secondary education, being brought-up by parents that were married, and having the attitude of advising peers to cohabit as a transition to marriage. However, the study found a lower likelihood of cohabiting among women affiliated to Islam and the Seventh Day Adventist Church.

The results of the proportional hazard model found that the risk of union dissolution for women who married directly compared to those who married after cohabitation increased by nearly 5 times and by 13 times for women who were cohabiting. Having given birth to three or more children in union reduced the risk of union dissolution for women in the study sample. The effect of cohabitation on the timing of a first birth showed no evidence that marriage after cohabitation influenced the time to a first birth. Notwithstanding the type of marriage (married directly, married after cohabitation or still at cohabiting stage), over 80% of the women in the study population had a first birth by the end of the second year following first union. The results also confirmed that over time marrying directly accelerated entry into motherhood.

TABLE OF CONTENTS

DECLARATION.....	i
DEDICATION.....	ii
ACKNOWLEDGEMENTS	iii
ABSTRACT.....	iv
TABLE OF CONTENTS.....	v
LIST OF TABLES.....	x
LIST OF FIGURES.....	xii
LIST OF ACRONYMS AND DEFINITIONS.....	xiii
OPERATIONALISATION OF KEY CONCEPTS	xiv
CHAPTER 1: OVERVIEW OF THE STUDY.....	1
1.1 Introduction.....	1
1.2 Problem Statement.....	4
1.3 Objectives of the Study.....	5
1.4 Significance of the Study	6
1.5 Scope of the Study	6
1.6 Structure of the Thesis	7
CHAPTER 2: LITERATURE REVIEW AND ANALYTICAL FRAMEWORK.....	8
2.1 Introduction.....	8
2.2 Nuptiality Patterns	8
2.3 Cohabitation	12
2.4 Cohabitation and Union Stability	14
2.5 Cohabitation and First Birth	17
2.6 Individual Level Factors.....	20
2.7 Marriage and Cohabitation	24
2.8 Theoretical Approach	26
2.8.1 Economic Theory of Marriage.....	26
2.8.2 Trial Marriage Theory	27
2.9 The Analytical Framework.....	27
CHAPTER 3: DATA SOURCES, METHODS AND ORGANISATION.....	31

3.1	Introduction.....	31
3.2	Background of the Study Area.....	31
3.2.1	Geography and Population Composition	31
3.2.2	Economy	32
3.2.3	Marriage and Divorce Bill (MDB) of 2009	32
3.2.4	Rationale for the study area	33
3.3	Study Design	36
3.3.1	Event History Calendar Method.....	37
3.3.2	Sample Size and Sampling Technique.....	39
3.3.3	Uganda Demographic and Healthy Survey (UDHS)	41
3.3.4	In-depth Interview guide	42
3.4	Qualitative Data Processing	43
3.5	Data Quality Assurance.....	44
3.6	Ethical Consideration.....	45
3.7	Limitations	46
CHAPTER 4: NUPTIALITY PATTERNS AND DIFFERENTIALS IN UGANDA		47
4.1	Introduction.....	47
4.2	Method of Analysis	47
4.2.1	Variables considered in the analysis	48
4.3	Results	49
4.3.1	Proportion Never Married	49
4.3.2	Age at First Marriage	51
4.3.3	Proportion Married.....	54
4.3.4	Proportion Cohabiting.....	57
4.3.5	Polygyny.....	60
4.3.6	Marital Dissolution	66
4.4	Discussion	71
4.6	Limitation	76
5.1	Introduction.....	77
5.2	Methods of Analysis	78
5.2.1	Diagnostic tests	79
5.2.2	Variables Considered in the Analysis	80

5.3	Results	82
5.3.1	Age at First Cohabitation	83
5.3.2	Women's Level of Education	83
5.3.3	Religious Affiliation	83
5.3.4	Childhood Place of Residence	84
5.3.5	Employment Status	84
5.3.6	Expectation about Union Stability	86
5.3.7	Peer Influence	86
5.3.8	Parental Education Attainment	86
5.3.9	Parental Union Status.....	87
5.4	Differentials in cohabitation as a form of first union by Background Characteristics.....	87
5.4.1	Variables Considered in modelling as Potential Predictors	90
5.5	Findings of the Unadjusted Analysis.....	91
5.6	Findings of the Adjusted Multivariate Analysis	93
5.7	Results of the Diagnostic Test for the Logistic Regression Model.....	94
5.8	Other factors Influencing first cohabitation (Qualitative Analysis).....	95
5.9	Discussion	97
5.10	Summary of findings.....	100
5.11	Limitation	101
CHAPTER 6: COHABITATION AND MARITAL STABILITY		102
6.1	Introduction.....	102
6.2	Methods of Analysis	103
6.2.1	Diagnostic tests	107
6.2.2	Variables Considered in the Analysis	107
6.3	Results	109
6.3.1	Differentials in Mean Time-to-Dissolution of Union for Women by Background Characteristics.....	109
6.3.2	Woman's Union Status	110
6.3.3	Education of Woman	112
6.3.4	Religious Affiliation	113
6.3.5	Employment Status	115
6.3.6	Expectation About Union Stability.....	117

6.3.7	Number of Children	118
6.3.8	Marriage Type	120
6.3.9	Parental Union Status.....	121
6.3.10	Age at First Union.....	122
6.4	Risk Factors of Union Dissolution.....	124
6.5	Results of the Diagnostic Test	130
6.5.1	Checking and Testing for the PH Assumption.....	131
6.6	Dynamics of Union Instability (Qualitative Analysis)	132
6.7	Discussion	134
6.8	Summary of findings.....	138
6.9	Limitation	139
CHAPTER 7: COHABITATION AND FIRST BIRTH.....		140
7.1	Introduction.....	140
7.2	Methods of Analysis	141
7.2.2	Variables Considered in the Analysis	143
7.3	Background characteristics	145
7.4	Results	146
7.4.1	Effect of Cohabitation on the Timing of a First Birth	146
7.5	Timing of the first birth (Qualitative Analysis)	150
7.6	Discussion	151
7.7	Summary of findings.....	154
7.8	Limitation	155
CHAPTER 8: SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS		156
8.1	Introduction.....	156
8.2	Summary of findings and discussion	156
8.2.1	Nuptiality patterns and differentials.....	157
8.2.2	Correlates of Cohabitation.....	159
8.2.3	Cohabitation and Union Dissolution.....	160
8.2.4	Cohabitation and the Time to a First Birth	162
8.3	Theoretical Implications.....	163
8.4	Conclusion and recommendations	164

8.5	Implications for research	166
References		167
APPENDICES		182
Appendix 1 Event History Calendar		182
Appendix 2 Individual In-depth Interview Guide		184
Appendix 3 Uganda National Council of Science and Technology (UNCST) approval		186

LIST OF TABLES

Table 4.1 Proportion never married by age group, UDHS 1988 to 2011	50
Table 4. 2 Change in proportion never married by age group, UDHS (1988 to 2011).....	51
Table 4.3 Trend in Singulate Mean Age at First Marriage by Background Characteristics and Sex in Uganda, 1988 to 2011	53
Table 4.4 Trend in the proportion of married men and women in Uganda by age group, UDHS (1988 to 2011).....	55
Table 4. 5 Change in the proportion of married men and women in Uganda by age group, UDHS (1988 to 2011).....	57
Table 4. 6 Trend in the proportion cohabiting in Uganda by age group, UDHS (1988 to 2011).....	58
Table 4. 7 Change in the proportion cohabiting in Uganda by age group, UDHS (1988 to 2011).....	60
Table 4. 8 Differential in the proportion of currently married women reporting having at least a co-wife and men having more than one wife by background characteristics in Uganda, UDHS (1988 to 2011)	62
Table 4. 9 Percentage change in the proportion of currently married women reporting having at least a co-wife and men having more than one wife by background characteristics in Uganda, UDHS (1988 to 2011).....	64
Table 4. 10 Proportion separated or divorced by age group in Uganda, UDHS (1988 to 2011).....	67
Table 4. 11 Proportion widowed by age group in Uganda, UDHS (1988 to 2011)	69
Table 5.1 Distribution of women respondents by background characteristics, Central Uganda 2013.....	83
Table 5. 2 Differentials in percentage of women cohabiting as a form of first union by background characteristics	89
Table 5. 3 Multivariate logistic regression results linking first cohabitation and marriage for women, and individual characteristics: Central Uganda, 2013	92
Table 5. 4 Results of Diagnostic Analysis	95
Table 6. 1 Descriptive Statistics, proportion ever dissolved first union, mean time to first union dissolution (Kaplan Meier estimates) and Log Rank χ^2 , Central Uganda.....	111
Table 6.2 Specification Errors of the Link Function.....	130
Table 6.3 Test of Proportional-Hazard Assumption.....	131
Table 6. 4 Results of Cox Proportional Hazards Regression Showing the Relative Risk of Time to First Union Dissolution by Background Characteristics, Central Uganda 2013 ...	129

Table 7. 1: Distribution of women respondents by background characteristics, Central Uganda 2013.....	146
Table 7. 2 Decrement Life Table Estimates showing the proportion of women in union without first birth by background characteristics, Central Uganda 2013.....	148

LIST OF FIGURES

Figure 2. 1 Analytical framework showing the process that will be modelled in the model.	30
Figure 3. 1 Map of Uganda showing the study districts.....	35
Figure 4.1 Proportion of never married women by age group in Uganda, 1988 to 2011	51
Figure 4. 2 Trend in the proportion never married men by age group in Uganda, 1988 to 2011	51
Figure 4. 3 Trend in proportion of married women in Uganda, 1988 to 2011	55
Figure 4. 4 Trend in proportion of married men in Uganda, 1995 to 2011.....	56
Figure 4. 5 Proportion of women in a cohabiting union in Uganda, 1988 to 2011	58
Figure 4. 6 Proportion of men in a cohabiting union in Uganda, 1995 to 2011.....	59
Figure 4. 7 Trend in proportion of women dissolving their union by age group in Uganda, UDHS (1988 to 2011).....	68
Figure 4. 8 Proportion of men dissolving their union by age group in Uganda, UDHS (1988 to 2011).....	68
Figure 4. 9 Trends in proportion of women widowed by age group in Uganda, UDHS (1988 to 2011).....	70
Figure 4.10 Trends in proportion of men widowed by age group in Uganda, UDHS (1995 to 2011).....	70
Figure 5. 1: Fractional Polynomial adjusted for covariates	90
Figure 6. 1 Survival distribution of union dissolution by women's union status	112
Figure 6. 2 Survival distribution of union dissolution by women's education	113
Figure 6. 3 Survival distribution of union dissolution by religious affiliation	115
Figure 6. 4 Survival distribution of union dissolution by employment status.....	117
Figure 6. 5 Survival distribution of union dissolution by the aspect that cohabitation maintains union stability	118
Figure 6. 6 Survival distribution of union dissolution by number of children	119
Figure 6. 7 Survival distribution of union dissolution by sexual union type	121
Figure 6.8 Survival distribution of union dissolution by parental union status	122
Figure 6.9 Survival distribution of union dissolution by age at first union	123
Figure 6.10 Survival distribution of union dissolution by birth cohort.....	124
Figure 6.11 Cox-Snell Residuals Graph.....	131

LIST OF ACRONYMS AND DEFINITIONS

CDC	Center for Disease Control and Prevention
DRB	Domestic Relations Bill
EAs	Enumeration Areas
GDP	Gross Domestic Product
GDHS	Ghana Demographic and Health Survey
ID	Identification number
KM	Kaplan Meier
LC	Local Council
MDB	Marriage and Divorce Bill
MFPED	Ministry of Finance, Planning and Economic Development
ML	Maximum likelihood
NSFG	National Survey of Family Growth
PH	Proportional Hazard
PL	Product Limit
SDA	Seventh-Day Adventists
SDT	Second Demographic Transition
SMAFM	Singulate Mean Age at First Marriage
STIs	Sexually Transmitted Infections
UDHS	Uganda Demographic and Health Surveys
UBOS	Uganda Bureau of Statistics
UNCST	Uganda National Council of Science and Technology
UN	United Nations
WHO	World Health Organisation

OPERATIONALISATION OF KEY CONCEPTS

Cohabitation	This is a union where a man and woman who decide to live together as if they are married.
Marriage	This is a legal form of union between a man and a woman and may either be customary, religious or civil.
Marital dissolution	This denotes separation or divorce. In legal terms, separation and divorce refer to different issues; however, for this study, they are referring to the same because to have a divorce in Uganda involves a complex process and most couples separate instead of divorcing.
First Union	This is a form of union where a single man and a single woman decide to live together for the first time either as married or cohabitants.

CHAPTER 1: OVERVIEW OF THE STUDY

1.1 Introduction

One of the most important social changes to have occurred in the twentieth century has been in the institution of marriage (Nassiri & Bakhtiari, 2012). Marriage is the socially and legally sanctioned union usually between a man and a woman according to customs and laws of different societies (Henslin, 1985). The changes in the institution of marriage have been manifested in the decline in marriage rate, delay in marriage and increase in divorce and non-marital cohabitation (Kiernan, 1991).

Cohabitation, sometimes called consensual union or *de facto* marriage, refers to unmarried heterosexual couples living together in an intimate relationship (UBOS & ICF International Inc, 2012). Cohabitation as a form of union closely mirrors marriage in that it shares nearly all the important attributes of marriage including intimate sexual union, common residence, economic interdependence, and childbearing and upbringing. However, it should be noted that until the eighteenth century, the difference between marriage and cohabitation was blurred in many societies (Jasper, 1994). Marriage as is known to date developed into an institution in the nineteenth century after it was transformed from a religious practice to civil law (Winfred, 1990). Although cohabitation has existed for a very long time, modern trends in cohabitation are qualitatively different from those of the past because of the high prevalence.

Over the past few decades, issues related to cohabitation, marriage, marital stability and time to first birth have been prominent in family demography in the developed world (Baizán, Aassve, & Billari, 2003). In these countries, it is suggested that cohabitation was a preparatory stage to marriage (Heuveline & Timberlake, 2004). There is also evidence suggesting that cohabitation is associated with increased incidence of union instability with the greatest risk experience among cohabitants whose unions are within ten years (Budinski & Trovato, 2005). Cohabitation also affects other population processes such as declining marriage rates and fertility rates (Axinn & Thornton, 1992). The emerging forms of cohabitation originated in the now developed countries. In the United States of America, the proportion of unrelated adults of the opposite sex living intimately in what became

known as cohabitation because of sharing residential unit increased by more than 300% between 1970 and 1980 (Spanier, 1986). By 1990, the number of cohabiting couples had reached nearly 2.9 million (Seltzer, 2000). A similar trend was observed in Canada since early 1980s (Wu, 2000) and in Sweden since the late 1970s (Hoem & Hoem, 1988). In France more than 65% of first marriages had cohabited since early in the 1980s (Leridon, 1990). Other developed countries with significant proportion of cohabitants include Finland, the United Kingdom and Germany (Kiernan, 2000; Kiernan & Estaugh, 1993). Most of the cohabitating couples in these countries were mostly young, males, limited formal education and belonged to the lower socioeconomic groups (Bumpass & Sweet, 1989; Seltzer, 2000; Wiersma, 1983). This suggests that economic pressures were important factors influencing cohabitation in these societies.

In most African societies, marriage has always been early and cohabitation in its present form and magnitude is a new phenomenon. However, the rate of cohabitation has greatly increased in some countries including Botswana and South Africa, where it is becoming a threat to the institution of marriage. For example, cohabitation increased among the Tswana society in Botswana and greatly reduced the marriage rate (Mookodi, 2004). This has been attributed to five factors, namely economic insecurity in which women depend on men; marriage uncertainty where women lack options in union choice; premarital pregnancy or childbearing where the man's family enter into what is known as "*kadimo* or *go adima mosadi*" meaning a living arrangement based on borrowing women; a transition stage to enable couples raise "*lobola*" bride price for marriage; and cultural and structural changes such as replacing bridal gifts for monetary gains, which has increased the cost of marriage (Mokomane, 2005b).

Traditional family formation in most societies in Uganda required a formal marriage as the onset of family formation. Premarital childbearing and cohabitation were discouraged to maintain the sanctity of the institution of marriage as the foundation of society responsible for nurturing new generations. These values were enforced by the amount of bride price which was pegged to the virginity status of women (Otiso, 2006). The amount of bride price varied widely across different societies depending on whether the girl was a virgin or eloped or a divorcee, family status, groom's economic status, and ethnic group. Because

virginity was important to the traditional society, there were capital punishments (for example death or starvation to death) for girls who become pregnant before marriage. The practice of divorce was low because it required the return of bride price. However, family formation behaviour in Uganda appears to have experienced similar trends as it is being observed elsewhere (Mashau, 2011; Mokomane, 2005b; Mookodi, 2004). The main features of the emerging family formations are increasing proportion of premarital cohabiting unions and childbearing. This family formation practice has been attributed to modernization and other forces of social change, which have led to the tolerance of premarital sexual intercourse and increasing prevalence of premarital pregnancy and child bearing (Mukiza-Gapere & Ntozi, 1995).

Evidence from Uganda Demographic and Health Surveys (UDHSs) shows an increasing trend in cohabiting unions. The proportion of women aged 15 to 49 in cohabiting unions increased from nearly 14% in 1988 to 22.3% in 2001 and nearly 27% in 2011. The social transformation resulting from modernization has also led to differences in socioeconomic characteristics which may have influenced family formation through the timing of marriage or cohabitation (Otiso, 2006). Some of these socioeconomic changes include increasing trends in the empowerment of women, which is indicated by the increase in the ratio of female to male earned incomes and increase in the level of literacy among women (Ministry of Finance, Planning and Economic Development (MFPED), 2007). This may have changed the cultural values and norms towards marriage as an important institution of family formation, thereby encouraging cohabitation as an alternative to marriage at least in the short term, especially for couples who perceive themselves as more independent, flexible and who reject dominant social values.

Anecdotal evidence in Uganda suggests that the increase in cohabitation is also exacerbated by the increasing economic challenges and a response by people in poorer economic backgrounds to delay marriage, making cohabitation a survival strategy, which has also been observed in a previous study in industrial countries (Oppenheimer, 1994). However, in a number of settings, low level of education, unemployment and low levels of employment have been associated with increased propensity to cohabit (Seltzer, 2000; Smock & Manning, 1997). Cohabitation has also been used as preparatory phase or

transition to marriage (Bumpass & Lu, 2000; Mashau, 2011; Ogunsola, 2011). Another study observed that cohabitation is encouraged because it allows a greater sense of freedom, offering sexual and emotional closeness without restrictions as opposed to marriage (McDonald, 2000).

However, while some studies show that the relationship between premarital cohabitation and marital instability has weakened (Reinhold, 2010), others still show that the relationship still exists (Dush, Cohan, & Amato, 2003; Mokomane, 2005b; Wagner & Weiss, 2004). Despite this observation, cohabitation in African societies is on the increase. However, the factors contributing to cohabitation and its effect on union dissolution and first birth are unknown or at least not well understood. In the case of Uganda, where premarital cohabitation and union dissolutions are becoming increasingly common (Ministry of Justice and Constitutional Affairs, Uganda, 2009) the effect of premarital cohabitation on union dissolution and first birth has remained largely unknown.

1.2 Problem Statement

Researchers in family demography have become increasingly concerned about the change in nuptiality patterns leading to the rise in cohabitation as a model path towards union in developed countries (Budinski & Trovato, 2005; Bumpass & Sweet, 1989; Heuveline & Timberlake, 2004; Kiernan, 1991). In recent decades, marrying directly has apparently become less popular in developing countries (Otiso, 2006). Between 1988 and 2011, the proportion of women aged 15 to 49 years cohabiting or living together in Uganda almost doubled from 13.8% to 26.3%. Rates were higher in the Central regions compared to other regions. Available statistics shows that 35% of the women were in cohabiting relationships in 1995, 27% in Western, nearly 20% in Northern, and 19% in the Eastern region. By 2001, rates were 37% for the Central region, 29% for the Western, 27% for the Eastern, and 7% for the Northern. Corresponding rates for 2006 were 38% for the Central, 25% for Eastern, 22% for Northern and 15% for the Western region; and by 2011, 34% of the women in the Central, 24% in the Northern, 22% in the Eastern and 19% in the Western were in cohabiting (living together) unions. During the same time, the number of women aged 15 to 49 years who were married decreased from 50.8% (UDHS, 1988) to 35.4% (UDHS, 2012). Kiernan (1991) examined changes in nuptiality behaviour among couples in countries in the developed world. However, little is known about such changes among

the developing world, more specifically an African society. Similarly, researchers have advanced reasons for the increasing trend in cohabitation in the developed countries; but little is known about the predictors of cohabitation among an African society. Striking though, is the fact that, as this emerging form of union is spreading in Uganda, it is coinciding with the increasing incidence in marital or union instability (Otiso, 2006). The empirical question is: what effect does premarital cohabitation have on fertility in general and first birth in particular?

The increasing popularity and tolerance of cohabitation has left policy makers and scholars thinking about its implication for marriage and time to first birth (Ministry of Justice and Constitutional Affairs, Uganda, 2009). Against this background, this study attempted to close the gap in literature by investigating four key questions with regard to cohabitation as a form of first union in Central Uganda:

- What is the nuptiality pattern and trend for Uganda?
- What are the predictors of cohabitation as a form of first union?
- What is the influence of cohabitation as a form of first union on marital or union stability?
- What is the effect of cohabitation as a form of first union on the timing of first birth?

Attempts to obtain answers to these, and other related questions may partly provide the explanation as to why cohabitation is increasing in Central Uganda.

1.3 Objectives of the Study

The aim of this study is to examine cohabitation and its effects on marital stability and time to first birth.

Specifically, the study seeks to:

- i. Examine patterns and differentials in nuptiality in Uganda;
- ii. Investigate the patterns and identify the predictors of cohabitation in central Uganda;
- iii. Determine the effect of premarital cohabitation on union stability; and
- iv. Examine the effect of cohabitation on the time to first birth in central Uganda.

1.4 Significance of the Study

Traditionally, the family system in Uganda plays an important role in the political, cultural and socioeconomic development of the country. A family is the basic unit of any society where reproduction, nurturing, and socialization of children as well as emotional support take place. Even though a family is formed after marriage, the environment within which it operates is getting changed due to modernization and other forces of social dynamics that include cohabitation, marital dissolution due to divorce or separation and time to first birth. Understanding the link between cohabitation, marriage and the time to first birth is, therefore, important in understanding the effect of cohabitation on other demographic processes.

In addition, entering union at early ages has implications for marital instability as some young people may be trapped into family responsibilities before developing their professional career (Budinski & Trovato, 2005; UBOS & Macro International Inc, 2007). Young women, in most of the cases, are victims of early family formation as they would trade-off career development for child rearing. This study is, therefore, intended to contribute to the scanty knowledge on cohabitation in sub-Saharan Africa and assist planners and policy makers to develop evidence-based policies.

1.5 Scope of the Study

Studying the role of men in cohabitation and their marital experiences in the Ugandan settings is complicated in a society where polygyny is common and socially tolerated. In a polygynous setting, adult men can take a woman as a wife at any time as either first, second or third in rank. Studying patterns and time of men's entry into marital life has very little importance to assess the effect of cohabitation and marriage on fertility, unlike women who are supposed to get married to a single partner at a time and reproduce children within that marriage. For women living in traditional societies where contraceptive supplies are limited, the age at which she enters into a union and the stability of that marriage has implications on the time to first birth and the total number of children she would give birth to in her time (Bongaarts & Potter, 1983). The background information about the woman respondent and her spouse/partner in the past through retrospective inquiries is assumed

to capture some of the socio-economic and demographic variables predicting the likelihood of cohabitation, marriage, marital dissolutions through divorce or separation and child birth in the Central Region of Uganda. To relate background information of the respondents to the present and previous partners or husbands, data has to be collected only from women respondents. Focusing on women only is justified from the point of view of undertaking demographic research that has direct relevance to understanding factors affecting the timing of reproduction (for details also see Bongaarts & Potter, 1983:4).

1.6 Structure of the Thesis

This study consists of eight chapters. Following the first introductory chapter, Chapter two deals with the literature analysis on the determinants of cohabitation, marriage, marital stability and first birth and discusses the probable explanations for the recent changes in union formation. In addition, it gives detailed overview on marriage and the child bearing in Uganda, the theoretical analysis and the analytical framework. The data and methods of the study are dealt with in Chapter three where the data, study site, research design and sampling, data preparation, data analysis and limitations of the study are discussed. This is followed by Chapter four which presents an overview and descriptive analysis of the nuptiality pattern in Uganda. The findings are contained in Chapters five to seven, Chapter five dealing with prevalence and predictors of first time cohabiters, chapter six with the effect of cohabitation on marriage and marital stability and Chapter seven with the effect of cohabitation and marriage on the timing of first birth. In the last chapter, Chapter eight, we attempt to summarise the findings of the previous Chapters and to draw specific conclusions emerging from the study and considerations for policy implications.

CHAPTER 2: LITERATURE REVIEW AND ANALYTICAL FRAMEWORK

2.1 Introduction

Coexistence of cohabitation and marriage has a historical feature of nuptiality in developing countries where it is presumed to be more common among the poor, less educated and those in rural areas. While in developed countries it may be perceived differently and be more pronounced among the upper social class, the educated and those in urban areas. Developing countries are currently witnessing an increase in the incidence of cohabiting union and high levels of premarital childbearing never witnessed before (Mokomane, 2013; Palamuleni, 2010). However, the predictors of these unions remain unclear. The current increase in cohabitation somewhat resembles the pattern observed in developed countries where it is taken to be either an alternative to singlehood or a trial period before marriage (Oppenheimer, 1988).

This chapter reviews literature which is of relevance to the problem being investigated and also presents the analytical framework used to guide the study. Considering the availability of data, most of the evidence on cohabitation, marital stability and first birth comes from developed countries. The literature review is organized under seven major subheadings: nuptiality patterns, cohabitation, cohabitation and union stability, cohabitation and first birth, individual level factors believed to influence family formation, marriage and cohabitation trends, and the analytical framework.

2.2 Nuptiality Patterns

Nuptiality patterns have recently changed in the population of several countries (Kiernan, 2001; Kuperberg, 2014). The shift in marriage patterns has been accompanied by a rise in cohabitation, delay in marriage, a more fragile state of marital stability, and an increase in non-marital childbearing (Kiernan, 1991; Mokomane, 2005; Seltzer, 2000). Kiernan (2001) argues that in recent times, it is common practice for a majority of couples to marry after giving birth to children. This trend started in the developed world, mainly among couples who had separated but could not obtain divorce, and has been spreading to developing countries (Kennedy & Bumpass, 2008).

Contemporary literature on family demography in sub-Saharan Africa indicates changes in marriage trends and patterns. The proportion of married women is decreasing and the proportion of women who are cohabiting is rising (Kalule-Sabiti, Palamuleni, Makiwane, & Acheampong, 2007; Palamuleni, 2010). Specifically, Palamuleni (2010) attributes this change in nuptiality patterns to changing social and economic conditions including rising levels of education, increase in women labour force participation, urbanization and modernisation. These conditions have had a positive effect on women's social and economic status in society. This line of argument is based on the economic theory of marriage developed by Becker (1974). This theory describes marriage as a function of economic benefits where individuals wish to maximize their own well-being and production. Becker further argues that less educated women usually marry due to perceived gains they expect from husband's earnings; however educated women are less likely to marry because their skills can be maximized elsewhere in the market (Becker, 1974).

Zheng (1998) also assessed change in marriage behaviour in Canada and argued that the decline in marriage was supplemented by an increase in cohabitation. Previous studies among sociologists highlighted the effect of education on marriage and concluded that although education postpones marriages, there exists inverse relationship between education and marriage (Lesthaeghe & Surkyn, 1988; Raymo, Iwasawa, & Bumpass, 2009; Takyi, 2001). Dintwat (2010) and Mookodi (2004) attributed the change in nuptiality behaviour in Botswana to education and socioeconomic development since the 1970s. These authors further argue that not only does socioeconomic change weaken initiation rituals done by elders, but also made employed young women economically independent. As a result, economic independence has diminished the role extended families had on marriage and reproduction of their children.

With regard to South Africa, changes in marriage patterns especially among the black population is attributed to the economic differences and the effect of historical events including racial discrimination and the effect of apartheid (Palamuleni, 2010; Posel,

Rudwick, & Casale, 2011). Garenne, Tollman, Kahn, Collins, & Ngwenya (2001) and Kalule-Sabiti et al. (2007) argue that the downward trend towards marriage observed on the continent is partly attributed to the declining economic status of African men, rising levels of education; and the increasing women financial independence from men.

Changes in nuptial behaviours have been accompanied by rise in cohabitation and a fall in marriage in some countries. For example, in the United States and South Africa (Copen, Kimberly & Mosher, 2013; Posel & Rudwick, 2012). In addition, these changes have also been accompanied by rise in separation and divorce (Stanley, Rhoades, & Markman, 2006). Marital dissolution may occur when couples separate, divorce or when one of the partners die. Separation for reasons other than widowhood may be linked to several factors, including economic, emotional, and cultural. According to the economic theory, Becker (1974) emphasized the need for interdependence in marriage. In the past, interdependence in marriage would trap women in unstable marriages. However, the expansion economic opportunities for women have improved women's social status in society. This has made women to become self-reliant thus increasing propensity to dissolve unions.

It is noteworthy that Udjo (2001) argues that sexual union separation or divorce may also be due to decline of social stigma. This is because separation or divorce indicates one's failure. Explanations about the increasing prevalence in union dissolution seems to be silent about modernisation which is believed to have significantly diminished social stigma that comes with it, thereby increasing the prevalence of marital dissolution (Becker, 1981). Modernisation is associated with changes in traditional norms and ethos which in the past helped to keep the marriage institution without disruption. It is because of such changes that Becker (ibid) further argued that an increase in divorce encourages additional divorces. Furthermore, modernisation comes with industrialisation, urbanisation, female education and labour force participation, and individual freedom which collectively reduce social stigma, thus increasing marital dissolution (Kavas & Gunduz-Hosgor, 2010; Preston

& McDonald, 1979). Women's exposure to the above factors, according to economic theory, increases their access to economic resources and as a result reduces incentives for women to stay in unhappy marriage. This implies that whereas in the past union dissolutions were regulated by societal norms, current trends seem to be governed by one's future plans of maximising individual happiness.

Among several cultures in Uganda, except for infertile women or those practicing witchcraft, union dissolution used to be rare (Ntozi & Kabera, 1988). Among the Baganda of Central Uganda, women were taught at their natal home as they are being prepared for marriage to be submissive and tolerant of the husband (Muyinda, Kengeya, Pool, & Whitworth, 2001). Nonetheless, in the case of conflict, usually the elders from the husband's family and the wife's paternal aunts would endeavour to save the union through constant advice and counselling (Ntozi & Kabera, 1988; Otiso, 2006). However, because of the increase in cohabitation and the influence of modernisation, such cultural intervention has been eroded, paving way for the increase in union dissolution.

Examining the nuptiality pattern in Uganda is of both, demographic and socioeconomic relevance. First, a young age at first marriage coincides with childbearing for girls and high completed family size in natural fertility populations as women who start reproducing early get a head start on other women in the population (Mulder, 1989). It is, however, important to point out that where girls marry older men, a large age gap between the two spouses may lead to marginalization of the young women and their status in society. As a result, this affects marital satisfaction thus leading to separation and divorce (Teachman, 2002; UBOS & ORC Macro, 2001). Late marriage, on the other hand, is associated with more life experiences and well-developed role performance. Although, these factors are appropriate for marital satisfaction, they may also lead to union dissolution (Booth & Edwards, 1985). Second, entering a union (marriage or cohabiting) implies an onset of a woman's exposure to the risk of pregnancy as well as defining the length of her reproduction.

2.3 Cohabitation

Cohabitation as a form of union in developed and developing countries is a union when a man and woman agree to live together in an intimate relationship as husband and wife. Cohabitation and marriage may look similar when it comes to fulfilling the conjugal obligation. However, they are different in that marriage is legal and cohabitation is not. This is because, besides being a religious practice, marriage is recognized by the civil law (Winfred, 1990).

Among developed countries, the prevalence of cohabitation became common in the 1960s. This is the time when western Europe experienced the second demographic transition (SDT) which led to changes in norms, attitudes and family formation (van de Kaa, 1993 as cited in Covre-Sussai, 2013). The SDT is believed to have been caused by several factors some of which are secularization, privatization, individualization and urbanization. As a result, these factors partly contributed to changes among individuals from being a collective to individual behaviour, female economic independence and detraditionalisation of society thus leading to cohabitation (Covre-Sussai, 2013). Although in the developed world, individuals who cohabit are considered to be less stable (DeMaris & Rao, 1992), cohabitation is taken to be a model path towards marriage (Heuveline & Timberlake, 2004).

In Latin America, cohabitation as a form of union is said to be associated with social class (Esteve, Lesthaeghe, & López-Gay, 2012). Social class is a concept usually used to show individuals who belong to the same economic system. As a result, differences in social class also imply differences, in for example, access to education and authority. These authors further argue that females from the so-called high social class were found to have a high prevalence of marriage; and females from the low social class had high incidences of cohabitation. Other explanations linking cohabitation, marriage and social class in Latin America are based on the same notion that the incidence of cohabitation is more prevalent among the lower and less educated, females with low levels of economic independence, and those with low decision making (Covre-Sussai, 2013). This does not only suggest that cohabitation may not be a choice among the poor, but also indicates that a new wave of cohabiting unions among middle and higher social groups is becoming common as a result of economic hardship.

Budlender, Ntebaleng, & Sandile (2004) observe that while the choice to cohabit in developed countries is more pronounced among the middle class social group, in South Africa, it is outside the control of the poor. The authors add that the incidence of cohabitation in South Africa is reported more among Blacks and Coloureds who are economically disadvantaged than it is among Indians and Whites. However, according to the economic theory, women independence reduces interdependence between partners (Becker, 1974) which on the one hand, suggests that cohabitation is perhaps equivalent to that of marital union. On the other hand, partners may also benefit economically from a shared household thus making a cohabitating union more attractive than marital union. This may also suggest that the opportunity cost of rising incomes of educated women and labour participation rates is the falling gains from marriage compared to cohabiting. Additionally, if an individual is faced with competing alternatives available, marriage may not be attractive to educated women (Becker, 1985).

In Africa, cohabitation is an old tradition common among Eastern and Southern African groups (Dintwat, 2010). Historical evidence suggests that cohabitation and marriage have been in coexistence for a long time (UN, 1990). This is because in most tribal groups, traditional marriage ceremonies are usually concluded by paying bride price. Dintwat, (2010) argues that although cohabitation may be taken to be inferior in Botswana, people still cohabit. The author further notes that while some people cohabit because they are unable to pay bride wealth (*lobola*); some young people prefer cohabiting than marriage because paying bride price would be like buying a person. In Uganda just like in Botswana, the inability to pay bride price among men does not stop them from getting a wife. It is now common to pay bride price after when the intending couples have lived together for some time while mobilising resources and in some cases, it takes place when the partner has given birth to children (Otiso, 2006).

Previous research in developed countries has also linked several background and individual factors to cohabitation (Willoughby & Carroll, 2012). For example, Willoughby and Carroll (ibid) found race, gender, religion and parental marital status to influence young adults' choice to cohabit in the United States. While peer influence, mother and father

occupation, parental residence, and family income were found to be significant in Kenya (Muriithi, Ngige, & Mugenda, 2011).

2.4 Cohabitation and Union Stability

Literature on family and social demography has highlighted transformation in family structure, from direct marriage to marriage after cohabitation. The literature shows how cohabitation, which was common in the developed countries, has continued to grow unabated and has spread to other countries (Kennedy & Bumpass, 2008). Cohabitation allows intending couples to live together as husband and wife before they get committed to each other through legalised marriage. Bumpass and Sweet (1989) argue that cohabitation would screen out potential incompatible partners before commitment. Using the marital search model, Oppenheimer (1988) maintains that premarital cohabitation provides a way through which intending couples would get to know each other before marriage.

While the prevalence of cohabitation is increasing in developed and developing countries, it is coinciding with the positive association between cohabitation and marital instability (Stanley et al., 2006). A study by Kalmijn, Loeve, & Manting (2007) emphasized the role of a woman's relative income as having a positive effect on separation. They stated that the movement of relative income towards male dominance increases dissolution risks, for cohabiting couples. However, it decreases separation risks among the married. Due to economic independence, these researchers further argue that movement towards female dominance increases separation risks in both married and cohabiting couples. Explanations as to why premarital cohabitation is associated with marital instability, emphasizes the role of self-selection (or selectivity) (Crawford, Goodman, Greaves, & Joyce, 2011). Self-selection is a popular theme all over the literature of premarital cohabitation and marital instability. With regards to this study, self-selection happens when women who were most likely to cohabit before marriage also had characteristics which made them more likely to dissolve their union. Such women possess relatively non-changing characteristics which predict cohabitation and usually possessed by cohabiters (Axinn & Thornton, 1992). Some of these characteristics are religiosity, education level, presence of children, number of previous marriages, and age.

Controlling for the selection effect, DeMaris & Rao (1992) assessed the effect of premarital cohabitation on marital stability. These authors found that couples would end their marriage earlier, if they cohabitated prior to marriage, than couples who marry directly. A large body of social demography literature has, in addition to self-selection or cohabitation effect, observed cohabitation experience as leading to marital dissolution (Axinn & Thornton, 1992; Lillard, Brien, & Waite, 1995). The above indicate that the question about premarital cohabitation and marital instability is not a new subject throughout the literature of family demography, particularly the developed world (Manning & Cohen, 2012).

In explaining the above relationship, Stanley et al., (2006) state that self-selection shares some similar views with the inertia theory (or the commitment theory). These researchers describe cohabiting couples as individuals who fast track the process of union towards marriage without initial commitment. They argue that cohabitation experience weakens commitment between cohabiting couples. Reinhold (2010) used National Survey of Family Growth (NSFG) data pooled from 1988, 1995 and 2002 in the United States to examine the effect of premarital cohabitation and marital instability and concluded that, for the recent marriage cohorts, the effect has weakened. Using NSFG data for women in the United States for 1995, 2002, 2006-2010, Kuperberg (2014) also presented similar findings. This is because of two reasons: First, cohabitation is tolerated by society which makes it common among the young; and second, young cohabiters are more heterogeneous than previous cohorts which make self-selection non-existent. It is because of these reasons that these authors further suggested that direct marriage is becoming uncommon and will suffer from self-selection.

In relation to the above phenomenon Svarer (2004), who assessed the effect of self-selection on marital instability in Denmark using register data, also found no correlation between the two. Using data¹ from Australia, David de Vaus and his colleagues (De Vaus, Lixia, & Weston, 2003, 2005) noted that the effect is perhaps due to a measurement effect which should consider union duration rather than marriage. It is further argued that when union duration is taken into account, for the recent cohorts, the difference between

¹ Household, Income and Labour Dynamics in Australia (HILDA) 2001, Australian Life Course Survey (ALCS) 1996; and Negotiating the Life Course (NLC) 1997.

individuals who marry directly and those that first cohabit and then marry with regard to separation rates, the effect of self-selection disappears (De Vaus et al., 2005; Kuperberg, 2014). Therefore, one may conclude that an increase in the proportion of cohabiting union among the population in recent times makes the effect of self-selection among cohabitation not significant. This is particularly true in countries where premarital cohabitation is becoming the norm, tolerated and not selective. In summary, for recent cohort, those who marry after cohabitation and separate, would still separate, if they had married directly. However, information on the situation in the developing world seems to be limited.

Among African societies, literature on social demography has for long underscored the importance of the family. Some of these include social organization, taking care of the young and the aged, social control, and as a center of reproduction and religious activities (Takyi, 2001). Takyi (2001) contended that family interruption resulting from marital dissolution has sweeping socioeconomic consequences on individual families and society. This is because marriage serves as a gateway towards procreation. As is happening in the developed world, efforts to understand the causes of marital disruption in developing countries point to autonomy among women and other family characteristics (Takyi, 2001). Women's autonomy and independence to some extent leads them into premarital sexual union which is believed to be linked to marital instability.

Although the question about the association of cohabitation and marital dissolution seems to have no consensus, using the diffusion approach, Liefbroer & Dourleijn (2006) suggested that as cohabitation become more common, the negative effect it has on marital stability vanishes. This diffusion approach implies that as cohabitation becomes commonly tolerated in society, intending couples become less selective; instead, it is the married who may suffer from selectivity. A recent study by Manning and Cohen (2012) examined data from the 2006 to 2008 NSFG in the United States and concluded that, overall, the association between cohabitation and marital instability was insignificant for women. Further examination attributed this to several risky factors including premarital fertility, family structure, educational attainment and number of premarital sex partners (Manning & Cohen, 2012). They concluded that because the majority of recent couples cohabit first

before marriage, attention should be shifted from the association between cohabitation and marital instability that has weakened, to heterogeneity among cohabiters.

Literature reviewed above show that findings from past studies strengthen the existence of the association and recent ones, present weak or no evidence (Reinhold, 2010). Much as there has been an increase in the number of these studies since the 1990s, important gaps about what we know still remain: First, a lot of empirical evidence comes from developed countries perhaps because of data limitations in developing countries like Uganda.

2.5 Cohabitation and First Birth

In the attempt to understand cohabitation and its influence on other demographic factors, researchers in social and family demography have used the difference it has with marriage. The researchers emphasize the importance of the timing of the first child in defining the family (Davis, 2008; Leridon, 1990; Manning, 1995). Research on family demography has for long suggested that marriage is the ideal environment for child birth (Kiernan, 2001). Nevertheless, a woman may also bear a child while single or increasingly within a cohabitating form of sexual union.

Explanations regarding the difference between cohabiting and married individuals and their marital relationships in developed countries, have been key to family demography as far back as 1990s (Davis, 2008; Manning, 1995). In these countries, the transition from cohabitation to marriage was seen to be associated with having children (Manning (1991) as cited by Manning, 1995). This indicates that women who cohabit and later marry are expected to have their first birth earlier than women who marry directly. However, economists have observed that in a traditional society where a husband is the sole breadwinner and the wife, a mother, having a first marital birth comes earlier; nevertheless, in a society where sharing of economics and domestic work is common, first marital birth comes later (Davis, 2008). In relation to the foregoing, Clarkberg, Stolzenberg and Waite (1995) concluded that, cohabiting women tend to be more educated, freer and may not take marriage as the only ideal environment for having births. As a result, premarital cohabitation may also be associated with late childbearing because education delays the

time to first births. In the case of Uganda, it is not clear whether the time taken to first birth is similar for women who cohabit prior to marriage to those who marry directly.

Research among American women who have never cohabited and women who have ever, did not show significant differences with regard to the time to first marital birth for non-pregnant cohabiters (Manning, 1995). The author further noted that differences in the time taken to first birth would occur when family background characteristics are either not controlled or when a cohabiter by the time she marries, was pregnant. This suggests that, marriage is still the preferred environment for child birth. Previous research from Europe noted that entering into cohabitation is taken as a gateway to marriage particularly when there is a desire to have children (Manning, 1993). Interesting though, is the fact that after the onset of marriage, the influence of past cohabitation experience towards having a birth became negligible (Leridon, 1990). Unlike in Europe where the transition from cohabitation to marriage seems to be linked to the decision to have a birth, in the United States it is associated with socioeconomic status (Copen et al., 2013, p.2). Copen et al. (2013) note that higher levels of education and income influence cohabiting women to get married; however, this is contrary to the economics viewpoint in which Becker (1981) argued that such women would prefer to remain cohabiting than to marry.

Manning (1995) points out that among women with cohabitation experience in the United States, the transition from cohabitation to marriage seems unlikely to influence first marital birth. Nevertheless, she argued that the time to first marital birth appears to be influenced by the duration since cohabitation or marriage. By using life table techniques, Raymo et al (2009) noted that although premarital cohabiters became parents earlier than those who did not, the difference was insignificant.

Previous theories have tried to explain the influence union formation has on fertility and, particularly, the first birth. According to the life course approach (Buchmann, 1989), childbearing is more common among married women. This is perhaps due to the fact that married couples possess shared long-term commitment often associated with having a child. In addition, from the social point of view, pressure and expectation from relatives towards giving birth might in one way influence the time to first birth among married women

compared to those in cohabiting unions. Supporting the life course argument, (Bongaarts & Potter, 1983:4) revealed that the higher coital frequency among married women explains why they would get their child faster.

Economic theory (Becker, 1981) states that the hazard of having a first birth after union formation is higher among the married compared to those cohabiting. It is argued that marriage is an institution where children are supposed to be produced and reared more efficiently as it requires the division of labour. It is further argued that in a union, children are part of union-specific capital offering legal compensation. This implies that women who are cohabiting are likely to take longer to have the first birth after union formation as it is considered less beneficial than those who are married. This further implies that having a first birth while cohabiting would not only lower her chance of marrying in the future because a woman would no-longer be attractive as she was before, but also would not conform to social norms and expectations. In addition, in the event that a cohabiting relationship ends, unmarried men may fear to marry such women for fear that they may keep emotional links with their child's biological father which may endanger the stability of their future households. The above, however, is not a surprise in countries where most children bearing occur within wedlock as marriage implies a level of commitment which creates stability and security for both the mother and the children.

In line with the economic theory is the fact that fertility decisions involve economic costs (Baizán, Aassve, & Billari, 2004). Giving birth is a function of the cost of children, not only does it involve the opportunity foregone, but direct costs required in bringing-up a child and loss of human capital accumulation. However, these costs vary from society to society and if there is institutional support as it is in several rich countries, for example in Germany, the effect is likely to be minimal. This explains why in many of these countries, birth takes place within wedlock which offers the legal protection and direct monetary support. In Uganda for example, this form of institutional support is lacking which partly explains an increasing trend towards cohabitation and premarital birth.

Using data from the 1995 Spain Fertility and Family Survey, Baizán, Aassve and Billari (2003) noted that the relative risk of first birth rises 25.2 times, particularly in the first three years for women who marry directly. In contrast, it is seven times for those who cohabit,

which declines for three years and thereafter remained stable. The increase is, however, smaller with regard to a marriage of a cohabiting couple, the hazard increased by an additional 3.2 times. The trend is similar in Sweden and Germany. It is 11.2 times in Sweden among individuals who married directly and 5.4 times for cohabiters and increases until the sixth year after union formation. Although the hazard in both cases is lower in Germany, the situation is not different, the hazard increases 5.2 times among the directly married and for cohabitation, the risk is 3.3. With regard to Germany, the hazard declines a few years after marriage, but it remains stable among cohabiting unions. Taken as a whole, these findings suggest that union formation is not only seen by women as the most appropriate ground for having a first birth, but also to have the birth within marriage other than in a cohabiting union. In addition, it suggests that the few years following a union have the greatest influence on fertility.

2.6 Individual Level Factors

Other factors may also have an influence on cohabitation, marriage, marital stability and first birth among women. The most important ones often cited in the literature are education, place of residence, religious affiliation, woman's activity status, parental union status, parental education status, peer influence and age at first union.

Women's education level is a well-known factor in postponing major lifetime events, such as entry into union particularly in the developing world. In addition, it serves as a formative phase to access the required skills necessary for the labour market. Previous studies elsewhere have observed that despite cohabitation being common among different population groups, women who are less educated are among those with the highest rates of cohabitation and to have children outside marriage (Musick, 2007). Being in school has a negative effect on union formation (marriage or cohabitation), however, higher education attainment for women has a stronger positive effect for direct marriage formation (Pau Baizán, Aassve, & Billari, 2003; Kostova, 2007; Koytcheva, 2005). Amato & Booth (1995) argued that because of education, women handle less customary marital roles which leads the fall in the marriage rate and a rise in cohabitation. This suggests that the relationship between woman's education level and cohabitation appears to be inconclusive.

In view of the above, the evidence linking education and union stability is based on information from Western societies. In sub-Sahara Africa and Uganda in particular, more women are becoming educated. However what is not clear is whether the effect of education on marital stability reported in the Western cultures is the same or different. The assumption is that if the effect in developing countries is the same in Uganda, one would expect lower union instability among the educated women. Considering parental education status, it is argued that low parental education increases the chances for the daughter to have a premarital child as well as entering into a cohabiting union (Musick, 2007). As for parental marital history, available evidence points to the fact that the risk of divorce increases for women whose parents have ever dissolved their marriage as they were growing up (Liefbroer & Dourleijn, 2006).

With regard to union stability, particularly among the developed world, available research provides contradicting results. While some studies have found educated women to be positively associated with high union separation risks (Hans-Peter Blossfeld, 1995), others show no relationship in several countries (Liefbroer & Dourleijn, 2006) and yet others show a negative relationship (Berrington & Diamond, 1999). The above, suggests that education involves opportunity costs, postpones childbearing, and is associated with increases partner communication. All these are expected to increase the age at which women enter into union, weaken social barriers to union stability and lower the chances of getting a premarital child thus affecting fertility.

Childhood place of residence, especially when an individual is growing up from birth to 15 years of age affects his or her future union life style. In a study carried out in Europe, Liefbroer & Dourleijn (2006) noted that, with the exception of Italy, women raised in urban centers were more likely to dissolve their unions compared to those raised in the countryside. The above implies that, not only does the urban environment expose a growing individual to unusual cultural setting: it also weakens shared community values. These changes undermine shared community values leading to changes in social order in which relationships occur. As the community loses influence, one's intimate relationship becomes more central to self-identity (Mukiza-Gapere & Ntozi, 1995).

In demographic analysis, the age of a woman at which she enters into union in many societies is of particular interest because it usually influences her behaviour with regard to fertility, union formation and marital dissolution (Budinski & Trovato, 2005; Musick, 2007). In addition, age may be used as a control to investigate temporal changes. It is argued that women who enter into marital union early are, on average, expected to enter either cohabiting unions or breakup (Sarkar, 2009). From the available evidence, it is a known fact that behaviour change is cohort based whereby cohabiters are more likely to be young and less educated (Bumpass & Lu, 2000). However, others maintain that women, who enter first union while old, have an increased risk of union dissolution. This is based on the assumption that the long period spent in privacy while searching makes it harder for them to adjust their private life. This, in turn, may affect their marital union leading to increased risk of separation. Takyi (2001) argues that among African societies, women who marry early usually tend to have age-discrepant marriages. As a result, this leads to a partner-communication-gap thus affecting the stability of their sexual union status.

It is a well-known fact that the family is key in socializing individuals as they grow. However, peer influence through peer group adaption plays a major role in influencing behaviour among the young (Nazio & Blossfeld, 2003; Wolfinger, 2001; Zito, 2013). Studies carried out in West Germany, East Germany and Italy found that, for the current cohorts, the decision to cohabit is more influenced by peers - in what is known as pre-cohort adoption than cohorts of previous generations (Nazio & Blossfeld, 2003:p.52). This, therefore, means that their decision to marry or cohabit may be influenced by peer influence especially when they model their own behaviour to that of their peers. For example, Mokomane (2005b), in her study on union formation in Botswana, noted that some women decided to cohabit as a result of peer influence. This review raises an interesting question with respect to Uganda: To what extent is an individual's decision to cohabit or marry influenced by peers' views?

Economic interdependence constitutes an important prerequisite for individuals to enter into cohabitation or marriage. However, this raises an important question in the Ugandan context, which one of the two sexual unions – cohabitation or marriage is more suitable for cost sharing? Manting (1994) described the increasing trend in cohabitation in developed

countries as resulting from women emancipation, economic and social independence. However, in the developing world, available evidence shows that it is women's economic dependence (Martin, 2002; Mokomane, 2005b). In these countries, women suffer from high unemployment. This suggests that many women cannot adequately maintain autonomous households, forcing them to accept cohabitation at least, as a short time measure. This, then, suggests that women's employment is more likely to increase the risk of union dissolution.

With respect to religion, there are divergent views. On the one hand, there is a strong belief that individuals from countries where religiosity is strong would be less likely to cohabit (Lehrer, 2004). On the other hand, Liefbroer and Dourleijn (2006) who assessed the effect of religion on marital dissolution using data from 23 countries in Europe found a high number of dissolution unions among couples in Spain and Italy, both of these known to be strong Catholic countries. They attributed this to the Catholic Church's resistance towards unmarried cohabiters thus forcing those who could not wed, out of the cohabiting form of union. Research has increasingly shown a positive relationship between religiosity and marital stability (Booth, Johnson, Branaman, & Sica, 1995). Similar findings were found by Call & Heaton (1997). The latter further state that couples who were not affiliated to any religious affiliation were found to have an increased risk of union dissolution compared to those who regularly attended Church. Most importantly, the relationship between religious groups and marital bonds also differ. This implies that individuals who take religion to be central in their lives are likely to have stable marriages. One of the challenges of religion as a factor is the failure to adequately measure religiosity. It is possible for someone to belong to a certain religion, when in fact, he is not religious.

An additional mechanism through which religion may influence sexual union stability is participation in religious activities. Participation usually influences family relationship which promotes family understanding thus mitigating conflicts within a family (Takyi, 2001). Viewed from another perspective, particularly among patriarchal societies in Africa, religion may strengthen differential gender roles between men and women. This, in one way, may lead to women's economic dependence on men. Failure to be economically independent may make it difficult for women to leave bad relationships.

Society views union formation as an ideal environment for a woman to become pregnant, bear and rear children (Baizán et al., 2004). Thus, forming a union would be one of the ways for couples who want to have children. However, for some individuals, unplanned pregnancy or birth may trigger a decision to live together (cohabit) or marry. Previous studies have also observed that a pregnancy to a single woman may accelerate union formation because of the assumed benefits such as social and economic protection children are expected to get within a union (Goldscheider & Waite, 1986; Reed, 2006). Conventionally, the prevalent view concerning the sequence of events as individuals grow, suggests that a pregnancy may lead to marriage before the child is born or soon after birth. However, the extent to which premarital pregnancy may accelerate marriage formation has changed in the recent decades. This is because of the increasing trend of cohabitation unions which is being tolerated by society.

In light of the above review, this study will try to explore whether issues discussed in the above also correlate with cohabitation, marriage, marital instability and the timing of first birth in the central region of Uganda as they have shown elsewhere.

2.7 Marriage and Cohabitation

Marriage is one of the important social institutions which ensure reproduction, continued lineage and clan. It contributes to defining one's identity in society and is usually the focus and beginning of human life which a normal adult individual must fulfil. This partly explains why, failure to marry and producing children is taken as a curse among some societies (Otiso, 2006). Marriage is usually a process in many African societies. It involves two families and several stages, beginning with courtship that progresses to a customarily sanctioned wedding, and to a stage where those intending to marry would fulfil the requirements of legal marriage. Therefore, each stage in the marriage process often endorses legitimacy of the previous one. During the marriage process, there would be phases where sexual relations would be allowed, especially when their intentions to marry and subsequently, a stage of full cohabitation (Posel & Rudwick, 2012).

According to African religion, marriage brings the three layers of human life together: the departed; the living; and the ones to come. In traditional Africa, parents played a major

role by guiding or selecting a suitable mate for their children (Otiso, 2006). However, current trend shows that their role is changing from guiding and selection, to parental approval. It is now the norm for young people intending to marry to make their own selection. The above, however, suggests that marriage is increasingly becoming an individual agreement other than between two families. This is perhaps due to the influence of socioeconomic modernisation that has negatively affected the kinship system thus leading to the increase in cohabitation and pre-marital birth.

As is happening with other countries where ethnic groups are communal in Uganda marriage is one important social institution which unites the people. In addition, married men and women command high status in society while the unmarried ones are given little respect and are taken to be incomplete. For instance, among the Baganda in central Uganda, it was considered to be a curse for someone of marriageable age to die before marrying. In addition, because of the importance of marriage in a patrilineal society, the body of any man, who would die without marrying and giving birth to children, would be passed through a hole made in one of the walls for burial. However, there are several regulations governing a respected union (cohabitation or marriage) and these vary from one society to another. Such guiding principles involve customs, values and norms that are required to be fulfilled before marriage would take place. For example, for some tribes, marriage is unlikely to take place if the bride and the husband-to-be are either from the same clan or within the lineage of close or distant cousins. In the light of the above and with the exception of cohabitation, most marriages begin with courtship, then dowry and wedding.

With regard to selecting the bride or groom and training children on matters concerning marriage, it was the responsibility of the parents who made sure that their children get well behaved, respected and obedient partners from respectable families. For instance, among the Bahororo in western Uganda, Baganda in central Uganda, and Iteso in eastern Uganda, the parents of the grownup son would consult relatives in the search for a well behaved girl whom they can bring to their family lineage as a daughter in law (Mukiza-Gapere & Ntozi, 1995). This perhaps explains why, in the past, marital dissolution was low. However, as traditions are dynamic and change with time, the process of getting a

spouse and hence forming a sexual union has changed overtime. Today, most children choose their wives and the norms are not followed as they should be, giving rise to increased cohabitation.

Like marriage, having children is highly respected in society. This is because the family system in Uganda is patrilineal and the only way a clan or lineage would continue is by procreation. In addition, children are taken to be a blessing and are an important source of future insurance. As discussed, a woman is supposed to get married and produce children for the clan and it is considered a curse if a woman fails to conceive. This discussion implies that marrying and having children are still considered important for many Ugandan societies. However, premarital children were considered by many to be shameful (Ntozi & Kabera, 1988).

2.8 Theoretical Approach

Theories in economics have endeavored to explain reasons for cohabitation and marriage. Two theories namely Becker's economic theory of marriage and trial marriage theory are reviewed in this section with the intention of contextualizing cohabitation in the Ugandan perspective by developing an analytical framework for the proposed study.

2.8.1 Economic Theory of Marriage

The economic theory of marriage was first proposed by Becker (1974) who suggested that marriage is motivated by the desire to maximize individual well-being and production. Becker (ibid) argues that individuals marry because they benefit from each other's specialized role and expertise. In traditional societies, married women usually specialize in non-market activities, for instance, childbearing and long-term contracts with their husbands whose investment skills are often in the market. Nevertheless, these roles have changed in the modern economy, where both men and women get involved in domestic and economic activities. This implies a reduction in the traditional benefits of marriage.

The above description demonstrates how the gender-based division of labour and the relative advantage of men in the market and domestically, for women constitute key gains from marriage. Amato & Booth (1995) criticized the theory on the grounds that due to the

modernization effect (as represented by education, urbanization and employment), women take on less customary marital roles; which emphasize marriage leading to the fall in marriage rate and an increase in non-marital cohabitation. In Uganda this may appear to be one of the factors leading to the increasing prevalence of non-marital cohabitation among the educated and in urban areas (Otiso, 2006). In addition, because of the high levels of poverty, the economic benefits as illustrated by the economic theory may be inadequate to encourage marriage.

2.8.2 Trial Marriage Theory

The theory proposes that in a society where marriage is not certain, cohabitation may offer an opportunity for trial marriage; and in this case, individuals would get to know each other, discuss roles and develop communication skills before marriage. This, in theory, would reduce the likelihood of marriage breakdown between the spouses. The theory proposes cohabitation works as a filter to separate spouses who are not compatible (Brudel, Diekmann, & Englehardt, 1999). Although the theory has attracted some acceptance, other studies found that premarital cohabitation increases the risk of marriage instability and dissolution due to the selection effect (Brudel et al., 1999; Budinski & Trovato, 2005; Ogunsola, 2011). Selection effect is when people who were most likely to cohabit before marriage also had characteristics which made them more likely to struggle when they marry thus dissolving their unions. However, the theory cannot exhaustively explain factors promoting cohabitation in Uganda, where cohabitation is increasingly becoming socially a tolerated form of sexual union and treated synonymously with marriage. In addition, the perception that cohabitation is a step in marriage may not apply to poor communities, whose incentive to marry is affected by other factors like wellbeing of children (Lichter, Qian, & Mellott, 2006).

2.9 The Analytical Framework

This thesis, as pointed out in Chapter one, is a study of patterns of cohabitation and its implication for marital stability and first birth. However, a review of theoretical frameworks on cohabitation and marriage cannot adequately explain cohabitation and its effects on marital instability and first birth in central Uganda. This section presents the ways in which some theoretical issues introduced in literature analysis in Chapter two, have been

integrated to guide the main proposition of this research. In essence, the study uses knowledge from economic and trial marriage theories, to which the author adds first birth as presented in the analytical framework.

The analytical framework in Figure 2.1 shows how the socioeconomic characteristics of the woman (age, education, residence, religion, employment status, peer influence, and parental union status) operate through union status variables of marrying directly, marrying after cohabiting and, cohabiting to affect union stability and first birth. These represent unchanging and time-varying characteristics of the respondent and are assumed to affect the form of union formation either directly or indirectly. For instance, if union status such as marrying directly changes, union stability necessarily changes from being in union to dissolution. Or, if a rise in educational standards influences the type of first union, then depending on the risk associated with the type of union, a woman may dissolve her union or may take longer to have a first child.

The age at which a woman enters a union has a direct bearing on her behavior with respect to type of union, fertility and consequently union dissolution (Budinski & Trovato, 2005; Musick, 2007). It is asserted that women who enter marital union early either do so through cohabiting or the union breakup (Sarkar, 2009). Takyi (2001) maintains that among African societies, women who marry early have age-discrepant marriages because of the partner-communication-gap that, in turn, affects union stability. Therefore, age at first union may indirectly affect union stability through type of union and, indirectly or directly affect the time to first birth.

Childhood place of residence is known to be an important social indicator. It serves as a proxy for local or community and is assumed to influence her union life style. This is because it may positively or negatively influence cultural settings in a number of ways thus weakening shared community values. It is expected that those raised in urban areas are more likely to cohabit as opposed to their counterparts with a rural background. Also, residence may determine the level of social interaction of people which may subsequently affect the timing of first birth. Furthermore, place of residence has an important influence on the amount and type of social experiences individuals are exposed to, which

consequently affect type of first union, the risk of union dissolution and, the timing of first birth.

With respect to religion, one would expect strong believers to be less likely to cohabit; however, previous studies have shown divergent views. This is because religious affiliation may show different results, if compared to religiosity. Whereas, for example, the Catholic Church resists cohabitation, and one would expect Catholics to stay away from it. In addition, one would expect the married to have stable marriages and to have a first birth earlier compared to other religious affiliations. Thus religion as a proxy may not affect union stability and the timing of first birth in isolation but may do so in consonance with the type of first union.

Manting (1994) describes the increasing trend in cohabitation in developed countries as resulting from women emancipation, economic and social independence. However, in the developing world, available evidence shows that it is women's economic dependence (Martin, 2002; Mokomane, 2005b). However, in these countries there are low labour participation rates for women which suggest that many women may adequately maintain autonomous households, forcing them to accept cohabitation at least, as a short time measure. Thus, employment status like residence may affect union stability through union status and may directly influence the time to first birth.

Peer influence, through peer group adaption, plays a vital role in shaping women's behavior as they grow-up and the type of first union. This is particularly true with the young women who are seen to model their behaviors to that of their peers. That is, peer influence greatly determines the woman's behavior patterns in the years to come. Just like residence, peer influence has an important effect on social experience individuals are exposed to, which eventually affects union stability and the time to first birth.

Parental characteristics are important in improving the quality of children as they are growing up. There is a general belief that low parental education raises the risk of the daughter's entering into a cohabiting union at young age. It is worth noting that when the parents are highly educated, their daughters are likely to have better economic

opportunities outside marriage and thus, they are expected to get married directly, likely to have stable marriages because of spousal communication and, also likely to have children earlier upon marriage. With regard to parental marital history, available evidence reveals that the risk of divorce decreases for women who grew up in a potential stable marriage. In view of this, married parental status is likely to decrease the risk of entering into a cohabiting union thus influencing union stability but also directly affecting the time to first birth.

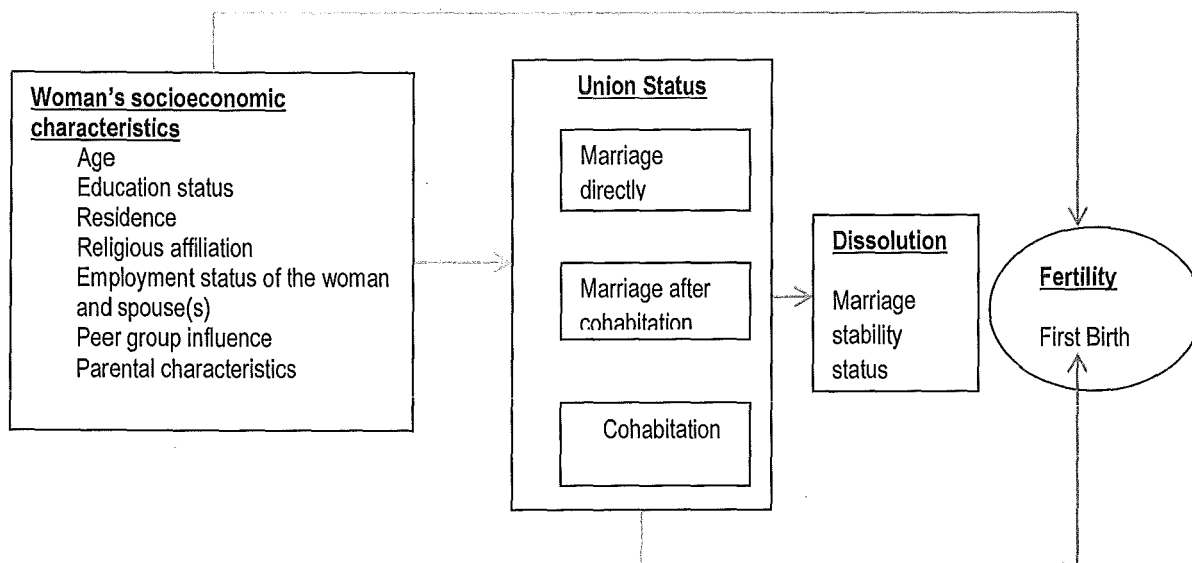


Figure 2. 1 Analytical framework showing the process modelled in the model

CHAPTER 3: DATA SOURCES, METHODS AND ORGANISATION

3.1 Introduction

This chapter provides detailed information of the study area and setting, study design, sample design and data collection methods. It also provides a detailed description of data quality, data processing, data analysis methods, ethical issues and study limitations.

3.2 Background of the Study Area

3.2.1 Geography and Population Composition

Uganda is a landlocked country located in East Africa and lies across the equator. In the east it is bordered by Kenya, in the south by Tanzania, in the southwest by Rwanda, in the west by the Democratic Republic of Congo, and in the north by South Sudan. It is located between 10 29' South and 40 12' North latitude, 290 34 East and 350 0' East longitude. The country comprises of four traditional regions namely Central, Western, Eastern and Northern. These regions are subdivided into a total of 112 districts (see Figure 3.1). The estimated total population according to the 2014 census is 34.9 million people with a growth rate of 3.03% per annum. The majority of the people (about 77%) live in rural areas (UBOS, 2012). Uganda is culturally diverse and according to the 2002 census, it is made up of 56 recognised ethnic groups with varying customs, traditions, and well known by their dialects. According to the 2002 census results, the major ethnic groups are Buganda (17.7%), Banyankole (10%), Basoga (8.9%), Bakiga (7.2%), Iteso (6.7%), Langi (6.4%), Acholi (4.9%), Bagisu (4.8%), Lugbara (4.4%) and other small groupings which constitute 31.4%. The Baganda are predominant in the Central region (63%), Banyankole in the Western (30%), Basoga in the Eastern (30%) and Langi in the Northern (31%). Regarding religious affiliation, the population is grouped into nine different religious beliefs. Nearly 42% of the population is Catholic, 37% Anglican, 12.4% Muslim, about 5% are Pentecostals. Other Christians constitute 2.8%, traditional constitute 0.4% and others 1.3%.

3.2.2 Economy

Economically, agriculture is the most important sector which employs the majority of the population and the country earns her main foreign exchange from the sale of coffee (UBOS & ICF International Inc, 2012). At the time of independence in 1962, Uganda had considerable economic potential with a 5% growth Gross Domestic Product (GDP) per annum; however, the economy and social infrastructure suffered a long period of economic mismanagement especially during the civil and military unrest of 1970s and early 1980s. Overall, the growth of the economy was much less in the 1970s through early 1980s and this contrasted with a population growth rate of about 2.6% per annum. The combination of economic mismanagement and a rapidly increasing population meant that the GDP per capita declined hurriedly. Nonetheless, in 1986, Government introduced a number of programmes including structural adjustment which reversed prior economic setback. More positively, the real GDP growth grew by nearly 6.4% in 1987; 7.2% in 1988; and 6.6% in 1989. Recent statistics show that the growth in GDP varied between 5.6% and 7.1% per annum (UBOS, 2006a, 2012). The country's future economic strength is expected to be derived from the export of oil and gas reserves.

In addition, the economy has witnessed the growth of the informal sector economic activities, with 36% of the household having informal business in the Central region, 26% in the Western, 24% in the Eastern and 14% in the Northern region (UBOS, 2009). Majority of informal business were in agricultural sector (27%), and trade and services (24%). Mining and quarrying, and fishing constituted only 2%.

3.2.3 Marriage and Divorce Bill (MDB) of 2009

This Bill has a long history. It was first presented to parliament in the 1970s and at that time, the objective was to improve women's rights in marriage and regulating customary, Hindu, Civil, Christian and Islamic marriages, however it failed to pass. Since the 1970s, the increasing trend in case of gender-based domestic violence is one of the main challenges facing the Government of Uganda (Ministry of Justice and Constitutional Affairs, Uganda, 2003). In response to this, a comprehensive study was undertaken by the Uganda Law Reform Commission which led to the Domestic Relations Bill (DRB of 2003). The main objective of the 2003 the DRB was to combine the law relating to marriages,

separation and divorce, providing marital rights and duties, and to guide all recognised marriages in Uganda. In addition, the bill is intended to deal with age of marriage, consent to marriage and sexual rights, offences of adultery and marital rape, and outlaws widow inheritance. The 2003 the DRB was presented to parliament in 2006 and was rejected by Muslim groups because it sought to outlaw polygyny, bride price, cohabitation, and to increase the legal age of consent to marriage from puberty to age 18. As a result of the protest by Muslim groups, the 2003 DRB was reviewed, giving way to the 2009 MDB and if enacted, it will improve women's rights, prohibit women inheritance, grant certain rights to cohabiting couples and equalise previously discriminatory divorce provisions (Ministry of Justice and Constitutional Affairs, Uganda, 2009).

3.2.4 Rationale for the study area

The central region is ravaged by high rates of cohabiting (living together) unions among all regions in Uganda. According to the UDHSs, the proportion of women in cohabiting union in 1995 was about 35% in the Central region, about 19% in the Eastern region, approximately 20% in the Northern region and 27% in the Western region. Corresponding rates in 2001 were about 37% in the Central region, 27% in the Eastern region, 7% in the Northern region and 29% in the Western region. Regarding 2006, rates were 38% for the Central region, 25% for Eastern, 22% for Northern region and 15% for the Western region. Using the 2011 UDHS data 34% of the women in the Central region, 22% in the Eastern region, 24% in the Northern region and 19% in the Western region were in cohabiting unions. In view of this, to study cohabitation and its effect on dissolution and first birth, it is therefore worthwhile to study a region with high rates thus justifying the selection of the central region.

The Central region comprises of 24 districts including Kampala district where the capital city, Kampala, is located. Central region has the same land area as the Kingdom of Buganda with a total land area of 61,403 square kilometres. The majority of the people in the Central region are called "Baganda" and speak "*Luganda*", one of the main dialects in Uganda. This study is based in two of the districts in the Central region, namely Luwero and Wakiso.

Luwero district was created in 1974 by splitting the former East Mengo district. At that time, it comprised of four counties, namely Buluri, Nakaseke, Katikamu and Bamunanika. In 1997, Buluri County attained a district status in the names of Nakasongola and later, in 2005, Nakaseke became a district. Currently, the Luwero district with 13 sub-counties comprises of Bamunanika and Katikamu counties. The district is bordered by Nakasongola in the north; Nakaseke in the west; Kayunga in the east; Wakiso in the south; and Mukono in the southeast. In the early 1980s, Luwero district was the epicentre of the civil war that brought the current National Resistance Movement government in power. The district, according to the 2014 census, has 458,158 people with its population growing at an estimated annual rate of 2.5%, attributed to natural increase. According to the 2002 census, only 17% of the total population was urban; population density was 198 persons per square kilometre.

In terms of economic activity, nearly 66% of the households in Luwero district depend on subsistence agriculture with the main cash crops being coffee, pineapples, and tomatoes for cash, and cassava, sweet potatoes, bananas, maize, beans, vegetables, tomatoes, cabbages and yams as both food and cash crops. The adult literacy rate of the district is estimated at 82.1% with 79% of the population above age 10 being literate, of which 49.7% are females (UBOS & ICF International Inc, 2012). In terms of religious affiliation, 37% belong to the Anglican Church, followed by Catholics at 32% and 22% Muslims. With regard to ethnicity, the Baganda constitute the majority at 76% while the other 24% constitute other minority groups.

Wakiso district was created in 2000 comprising of Kyadondo and Busiro counties; it has 17 sub-counties all of which belonged to Mpigi district. The district encircles Uganda's capital city, Kampala. Its headquarters is Wakiso which is located 20 kilometres northwest of Kampala. It is bordered by six districts; Mityana in the northwest; Mukono in the east; Nakaseke and Luwero in the north; Kalangala in the south; and Mpigi in the southwest. The population of the district according to the 2014 census was estimated to be 2,007,700 people. Between 1991 and 2002, the population growth rate was estimated to be approximately 4.1%, higher than the national average of 3.2%. Wakiso district is the

second most populated district in the country with a population density of nearly 545 persons per square kilometre.

The main economic activity of the district comprises of agriculture and services. The main crops grown include coffee, sweet potatoes, beans, cassava, ground nuts, Irish potatoes, tomatoes, onions, cabbages and soya beans. However, because the district is rapidly becoming urban, the main activity is shifting from agriculture to trade, industry and services. The literacy rate for the population aged 10 years and above stands at 91%. With respect to health services, 85% of the households have access to health facilities within a 5 kilometre distance. Malaria is the most common disease.

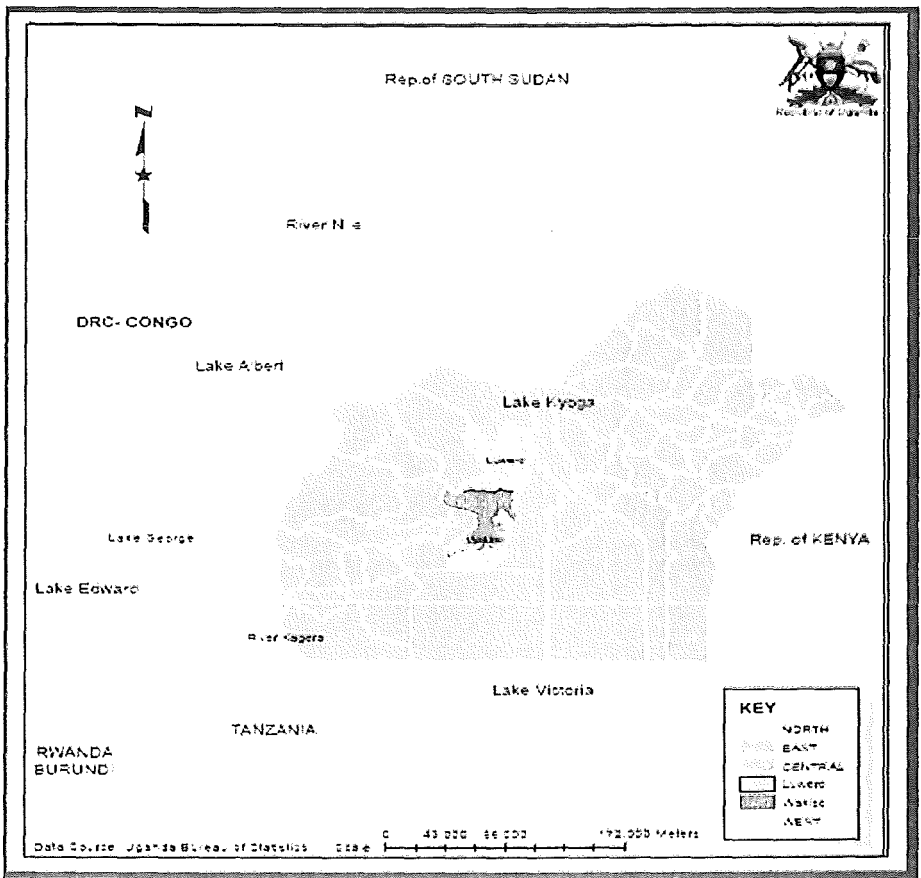


Figure 3.1 Map of Uganda showing the study districts

With respect to the family system and marriage pattern in Luwero and Wakiso districts, people are organised on a patrilineal clan basis and practice a patrilocal system. In a

patrilineal system, a child of a couple belongs to the father's clan. This is because of continuity of lineage and inheritance. As a result, a parent values sons more than daughters. In addition, it is the custom that a wife after union goes to live with the husband's people. The system requires a man to pay for the right to marry a woman. The man pays the 'bundle' (Omutwaalo as it is locally known). Monogamous and polygynous unions are the main forms marriages. Majority of women enter into union early and usually transfer to the spouse's houses either as married or cohabiters. The four marital unions are identified as customary, religious, civil or cohabitation. Customary marriage varies across and within different ethnic groups. Union arrangements usually begin with courtship, bridewealth and marriage. In the past, marriages were arranged by parents or close relatives and friends. This was done to avoid marrying spouses from families which practice witchcraft, and other unacceptable social behaviours such as barren women and close kin members, but valued spouses from hard-working families. However, the current trend is that boys approach girls without parent's approval (Otiso, 2006).

Religious marriages are common among Christians and Muslims, and usually come after dowry payment. Christian marriages are monogamous and common among Christian denominations such as Catholics, Anglicans, Pentecostals, Orthodox, Seventh-Day Adventists (SDA) and others. In addition, Christian marriages are accompanied by issuing a marriage certificate. Regarding Muslims, their marriages are usually arranged to ensure compatibility and are usually presided over by the Imam who recite the different sections of the Koran. In addition, the Imam oversees the signing of the agreed contract and exchange vows. Civil marriage is usually conducted by the district registrar of marriages for couples who are not willing to take on customary, religious or the cohabiting type of marriage. Cohabitation is another unique form of union, but is not a legal form of union.

3.3 Study Design

The study used a cross-sectional design through the analysis of marital history data collected using the retrospective questionnaire and the UDHS data. A cross-sectional research design is a study design where data is collected from either the whole population or a section of the population at a particular time. It is cross-sectional because data collected informs of the situation in the study population at a particular time.

3.3.1 Event History Calendar Method

Most African countries have been conducting censuses since 1960s, World Fertility surveys in the late 1970s, and now UDHSs since the late 1980s. One of the objectives of the cross-sectional surveys is to explain levels and patterns of marriage, its predictors and effect on reproduction (UBOS & Macro International Inc, 2007). Nevertheless, one of the limitations of cross-sectional surveys is the failure to measure marriage patterns and their predictors on a continuous basis. The alternative methods used to overcome this limitation are the longitudinal study design and/or the prospective study design where subjects are followed overtime; however these methods are expensive. Allison (1984) proposed the event history calendar method (Event History method) as an alternative to the standard cross-sectional study designs.

The event history study method is a statistical approach that collects data on the timing of events from an individual retrospectively and the changes over time (Antoine, Bry, & Diouf, 1987). Examples of such events are entry into sexual union, entry into motherhood, end of sexual union, birth and death. The event history method has several advantages: firstly, it can be used to relate the timing of the event of interest to the socio-demographic variables (Tekle & Vermunt, 2012); secondly, it collects continuous data which enables the researcher to reconstruct events on a continuous basis and changes overtime; thirdly, it gives information about past events and relates them to the present and future outcomes as well as predicts future changes (Blossfeld, Golsch, & Rohwer, 2012), thus offering causal understanding of social processes; and, fourthly, it is possible to deal with two unique processes simultaneously namely censoring if the event did not occur and accommodating the effects of time-varying covariates (Allison, 1984, 1999). Time-varying covariates are variables which are constantly changing such as education, age, residence, parity and employment status, whose effect as predictor variables on events such as cohabitation, union dissolution and first birth constantly changing over time. With respect to first union, the main aim of this study was to relate time-varying and time constant variables to cohabitation and union dissolution. In view of the above, the event history calendar method was used because it could collect retrospective data on cohabitation, marriage, dissolution, fertility and several sociodemographic variables across time for women aged between 15 and 49 years.

Event History Calendar Questionnaire

Quantitative data was collected from women who were aged 15 to 49 years at the time of the survey. This study excluded women older than 49 years. This is because cohabitation was rare in the past as social customs that regulated the institution of marriage and childbearing were still strong (Otiso, 2006). Therefore, cohabitation and premarital childbearing were unlikely among older women. While using the event history calendar, data was only sourced from women. As described in Section 1.6, the choice of women compared to men was justified because studying patterns and timing of women's entry into marital life is more informative to assess the effect of union on marital stability and fertility (Bongaarts & Potter, 1983). Data was collected by year not months. This is because the event history calendar (Event History calendar) covered the individual woman's lifetime until age 49 years and it was thought that women would find it difficult to remember events which could have occurred to them early in life on a monthly basis. In addition, the individual structured woman questionnaire collected background information not collected by the life history calendar questionnaire.

The event history calendar questionnaire collected data on marital history, employment, education, birth and death histories of children, parental characteristics, and residence. Some of this data collected was time varying. Dates of birth of the woman respondent, the year in which she first cohabited or married, the year in which marital separation, divorce or windowed took place and the year in which she could have married for the second or third time were recorded during the interview. The research domains of the event history questionnaire reflected the objectives of the study. Specifically, respondents were requested to recall their date of birth, the timing of schooling and sequence, entry into employment, timing of family formation and timing of births to children. In addition, information was solicited on children's survival status; parental employment status; parental survival status; and parental union status. Data on sociodemographic variables was obtained using the individual woman questionnaire.

A number of procedures were introduced to minimise the recall bias: firstly, a grid-like format of the life history calendar facilitated the collection of time-linked retrospective data; secondly, the respondent's ability to rapidly and accurately recall the timing of life events

experienced by women aged 15 to 49 years was enhanced by collecting data on a year-to-year basis (Freedman, Thornton, Camburn, Alwin, & Young-demarco, 1988); thirdly, during the interview respondents were given sufficient time to think and respond; and fourthly, temporal land marks linked to personal and public life events such as birth, union, schooling, war and the like were used to anchor the respondent's memory and place them to the landmark. Events if known are useful in assisting the respondent remember the timing of the event thus increasing accuracy (Schröder & Börsch-Supan, 2008). The grid-like format of the life event calendar was divided into parts linked to the objective of the study. A compressed version of the life history calendar is shown in the Appendix 1. Unless otherwise stated, cohabitation, marital stability and the fertility analysis that follows only use this information collected from women born between 1964 and 1998. However, this study also used data from five rounds of the UDHSs.

3.3.2 Sample Size and Sampling Technique

This section describes how the sample size for the event history study was determined. It also provides a detailed description of the sampling techniques. Like any scientific study, sampling was intended to get a representative sample of the population such that information collected could be considered generally applicable for the whole population within the limits of the random error (Bartlett et al., 2001). In the present study, women aged between 15 and 49 years were targeted. This is because this age range has implications for fertility and union stability.

Sample Size: In the present study, the sample size was determined using the Cochran (1977) formula. The sample for each district was determined as 'n'.

$$n = \frac{Z_{\alpha/2}^2 pq}{\lambda^2} \quad (3.1)$$

Where:

n is the sample size;

$Z_{\alpha/2}$ equals 1.96 at 95% confidence interval;

p is the proportion of women in age range 15-49 years who have ever cohabited which in this case is taken to be 0.5 and $q = 1-p$ for a maximum sample;

λ is the margin of error, which in most typical surveys range between 1% and 5%, in the present study it was taken to be 4%.

The calculated sample size is therefore 600.25 women per district translating into a minimum sample size of 1200 women respondents for the two districts from which data was sourced.

Sampling technique: In the process of drawing a representative sample, a multistage random sampling technique was used to select enumeration areas. First Luwero and Wakiso districts were selected out of the 24 districts found in central Uganda. In the second stage 20 enumeration areas (EAs) were randomly selected from a list of villages in each district. In Wakiso district, selected EAs included Nkumba Central, Lyamutundwe, Mpala, Nkumba Bufulu, Namusera, Kyoga, Kasangombe, Kisimbiri Central, Bukalango, Busujja, Kigagga, Kiteredde, Nansana Ochieng II, Nansana East1A, Nansana East11B, Nansana West 11B, Kimwanyi B, Kyaliwajala B, Nakwero B, and Buwate. In Luwero district, a random sample conducted resulted in Katwe, Lumu, Binyonyi, Kavule, Kakokolo, Kalongo, Kasana Market, Katale, Kasana PWD, Kalongo Miti, Kiwogozi, Bukolwa Gwafu, Upper West, Kisawe, Bukalasa Lower, Nakasero, Kigulu, Kitante, and Katikamu Proper EAs.

The selected EAs were pre-visited and at this stage, a list of households with at least one eligible woman aged 15 to 49 years was generated by the Local Council (LC1) chairpersons. This list provided a basis for the third-stage sampling. The LC chairperson is a village chief elected by village members to administer the village on behalf of the central government. In all a total of 30 households from the list of households for each enumeration area were randomly selected in the third-stage resulting in 600 households from each district. In each household, every eligible woman was briefed about the objective of the study and was requested to participate. For households which had more than one eligible woman, one woman was selected randomly to avoid collecting highly correlated information which would lead to biased estimates. The restriction of the study to

only women aged 15 to 49 years was based on the fact that the age of entry into union and the type of union have implications for fertility and union stability. During the first, second, and third stages of the random selection, random numbers generated using Microsoft Excel were used.

3.3.3 Uganda Demographic and Healthy Survey (UDHS)

The UDHSs collected data from women aged 15 to 49 years and men aged 15 to 54 years. Women and men were asked questions on sociodemographic characteristics, childbearing experience, marriage and sexual activity, employment, maternal and childcare, HIV/AIDS and sexually transmitted infections (STIs). The surveys employed nearly the same sampling frames from which a representative sample was drawn. Sampling involved two stages. The first stage involved the selection of EAs while the second stage involved the selection of households. Except for 1988 UDHS which did not include men in the survey, in the household, all women aged 15 to 49 and men aged 15 to 54 were eligible for the interview. Sample size is one of the key parameters of a sample design that has an effect on the accuracy of the survey compared to other factors (Bartlett, Kotrlik, & Higgins, 2001). In the present study, the current marital status variable was used, making the sample size for women to be 4730, 7070, 7246, 8531 and 8674 for 1988, 1995, 2001, 2006 and 2011 UDHSs, respectively. Similarly, the sample size for men was 1996, 1962, 2503 and 2295 for 1995, 2001, 2006 and 2011 UDHSs, respectively.

The DHS model B questionnaires designed to collect data from countries with low contraceptive prevalence were used in UDHSs data collection. The DHS B model includes the household, women's and men's questionnaires. The model questionnaires were modified to suit relevant aspects in the population, family planning and health issues in Uganda. These questionnaires were developed in English, but were translated into major local languages namely Ateso, Luganda, Lugbara, Luo, Ngakarimojong, Runyankole/Rukiga and Runyoro/Rutoro. The individual woman questionnaire was administered to all eligible women aged 15-49 years that were listed in the household questionnaire. In addition to collecting data on family planning and health issues, women's and men's questionnaires provided information on the respondents' background characteristics including age, education, marital status, wealth index, type of residence,

region of residence, occupation, and ethnicity. The men's questionnaire was a reduced version of the women's questionnaire, excluding pregnancy, postnatal care and breastfeeding, immunisation, health, nutrition, and maternal mortality.

3.3.4 In-depth Interview guide

In-depth interviews were used to collect qualitative data to enrich statistical findings and also explore new issues in depth. The method provides an opportunity to understand the phenomenon being investigated by identifying attitudes and perceptions of respondents regarding cohabitation. A total of twenty four (24) in-depth interviews were done targeting young and old women, educated and non-educated and, cohabiting and married women from each district. Respondents for in-depth interview were purposively selected and included 12 women who had married directly and 12 women who were cohabiting as a form of first union. A sample of the interview guide which was used to collect qualitative data is included in Appendix 2 and the data collected through in-depth interviews revolved around the following themes:

Cohabitation

- Perception and attitude towards cohabitation before marriage.
Under this theme, information on the attitude and perception regarding marriage following cohabitation as a form of first union were identified.
- Cohabitation and timing of first birth.
Participants gave reasons explaining the relationship between cohabitation and timing of first birth.
- Reasons for cohabitation before marriage.
Here participants explained why they cohabited first as a form of union before marriage.
- Premarital cohabitation and marital stability.
Here participants explained whether or not premarital cohabitation is related to marital instability.
- The relationship between the number of children and marital instability

- Sharing a husband and union stability.

Here the discussion under this theme was on the association between polygyny and union stability or instability.

Direct Marriage

- Perception and attitude towards direct marriage.

Under this subject, information on the attitude and perception regarding direct marriage as a form of first union were identified.

- Direct marriage and timing of first birth.

Respondents gave reasons explaining the relationship between direct marriage and timing of first birth.

- Reasons for direct marriage.

Under this theme, respondents explained why they married directly as a form of union.

- Direct marriage and marital stability.

In this case, respondents explained whether or not women who directly marry are associated with marital dissolution.

- Number of children and marital instability.

Here the description focused on whether or not having many children is related to union stability.

- Sharing a husband and union stability.

Under this subject, the focus was on establishing the association between polygyny and union stability or instability.

3.4 Qualitative Data Processing

With the study objectives and thematic areas in mind, qualitative data collected through in-depth interviews was transcribed and word processed. This data was captured and analysed with the help of EZ-Text (version 3.05) software. EZ-Text software is a qualitative

software developed for the Centers for Disease Control and Prevention (CDC) of the United States to assist in creating and managing qualitative databases (Carey, Wenzel, Reilly, Sheridan, & Steinberg, 1998). Using EZ-Text, a data entry template customized to the in-depth guide questionnaire was developed and responses to a question entered from the word processed summary notes of the interviewer.

After data entry, each question was assigned a descriptive code that was used during data analysis. These descriptive codes are labels which corresponded to the theme and question number. The EZ-Text software is advantageous over the manual method in that it was used to carry out database searches and sorting to find text responses which met a specific condition. While analysing data, the EZ-Text report agent module, the assigned codes and the unique identification number (ID) as a filter were used to run responses corresponding to each question. This generated data which corresponded to a particular theme, type of participant and responses which were considered important. It is from these reports that data was further summarized into themes used during data interpretation.

3.5 Data Quality Assurance

This section deals with measures followed to ensure data quality. It includes the training of research assistants, pretesting of the event history calendar and individual questionnaire, fieldwork and field editing. A total of twelve research assistants consisting of women and men and two field supervisors were recruited and trained for two weeks on how to use the event history calendar. The training that was conducted in the second and third week of August 2013 consisted of instructions on the objectives of the study, interviewing techniques and consistency, clarity and review of the questions including translation. Also included is the use of landmarks to remember the timing of events, mock interviews with role playing, field procedures, and ethical obligations for interviewers. The supervisors were given further training on field editing.

At the beginning of the second week of training, the event history calendar and individual woman questionnaire were pretested in the local language of 'Luganda'. This was intended to ensure that interviewers practice the questionnaire in the field, make sure that the questions were clear and well understood by respondents. The pre-test was conducted

in one of the study districts, in a village different from the one selected for the interview. Following the pre-test, feedback from the field was discussed. The discussion was used to finalise both the event history calendar and the individual woman questionnaire. The data editing guide was then developed. Two data collection teams comprising of six research assistants and one supervisor who doubled as the field editor were formed. For each team, there were three female interviewers, three male interviewers and one supervisor, who supervised fieldwork activities. Data collection took two weeks beginning from the fourth week of August to the end of the first week of September, 2013.

Field editing was done, first by the enumerator and then by the field supervisor on the same day of the interview to check for omissions, errors, consistency and legibility. After data collection, all the questionnaires were office edited to check for inconsistencies, ensure that it was legible. This was followed by data coding where some non-numerical data was transformed into numerical values using codes. Data coding was followed by data entry. The data entry team comprised of two data entry clerks and one supervisor and the process lasted for one month. Data cleaning and validation was made possible with the use of double entry. As a result, data validation was done with the help of the computer and thereafter edited. Following the data cleaning and validation, and using the *reshape command* in STATA/LC version 12 (StataCorp, 2011), data was converted from person-oriented data to person-period data. This is because parental marital status was analysed as a time-varying covariate. Person-oriented data is where an individual has only one record. However, through person-period data an individual has as many records as the observation before an event occurs or is censored (Allison, 1982). Person-period data usually includes information on the survival time as well as for censored observations.

3.6 Ethical Consideration

In soliciting information from women respondents using the Event History calendar method, their informed consent was required. They were assured that their privacy, anonymity and confidentiality would be respected. The process of conducting the survey was approved by the Uganda National Council of Science and Technology (UNCST) (see Appendix 3). The UDHSs data was set with all identifying information removed. Ethical consideration for UDHSs was observed by ensuring privacy, anonymity and confidentiality. In addition, the

conduct of the survey conformed to the World Health Organisation's (WHOs) ethical and safety recommendations for research on domestic violence (WHO, 2001). Furthermore, informed consent was obtained from all the respondents before they responded to the questions.

3.7 Limitations

In spite of its strength, this thesis has limitations which should be acknowledged; firstly, information on which analysis for the different chapters is based was self-reported, thus it might have been affected by social desirability biases; and secondly, marital status data in general is unreliable and difficult to verify.

CHAPTER 4: NUPTIALITY PATTERNS AND DIFFERENTIALS IN UGANDA

4.1 Introduction

Profound changes in nuptiality behaviour have been noted to occur in several countries. These changes include a rise in the age at first marriage, decline in marriage rates, increase in cohabitation, and increase in union dissolution (Kiernan, 2001; Kuperberg, 2014). The change in nuptiality behaviours has been accompanied by a rise in non-marital childbearing (Kiernan, 1991; Mokomane, 2005; Seltzer, 2000). This trend started in the developed world and has been spreading to the developing world, at varying levels (Kiernan, 2001). In recent years, limited work on social demography of African countries has also indicated changes in marriage trends and patterns; and they have attributed the change to changing social and economic conditions (Dintwat, 2010; Kalule-Sabiti et al., 2007; Palamuleni, 2010). Although attempts have been made to examine nuptial patterns in Africa, there is a gaping hiatus concerning scholarly work about trends in nuptial behaviour in Uganda.

This chapter contributes to the limited work by using five UDHS datasets, the mean ages at first marriage approach and the proportions never married, married, cohabiting, dissolved, and windowed for men aged 15-54, and for women aged 15-49 to examine patterns of nuptiality in Uganda. In addition, the chapter is a prelude to examining and understanding the predictors of cohabitation and the effect of cohabitation on marital stability and first birth.

4.2 Method of Analysis

The proportions married, never-married, cohabiting, widowed, separated, divorced or single, living in polygynous union of men and women were computed using the 1988, 1995, 2001, 2006 and 2011 UDHS current marital status data. Also, using the Hajnal (1953) method, these datasets were used to estimate the singulate mean age at first marriage (SMAFM) for both men and women (Newell, 1988). The Hajnal method assumes that (i) mortality and migration were not significant, (ii) the proportion single in each group was fairly constant overtime and no one marry before age 15, (iii) marriage was irreversible, (iv) sex only occurred within marriage and, (v) only those who married were considered in the calculation. Many of the assumptions may lead to misleading results. This is because in

the Ugandan society, although the age at which one is allowed to marry is 18, girls still marry before age 15 and sex does not only occur within marriage. This may lead to high estimates of SMAFM which implies late exposure to sexual intercourse when, in fact, it is true that in such a society sexual intercourse comes earlier. This could potential proffer a wrong picture. In a situation as explained in the above, SMAFM does not capture this anomaly. However, important to note in this analysis is that the DHSs datasets are generally of good quality and compare well with similar datasets from countries within Sub-Saharan Africa, thus making them reliable for this type of analysis. The analysis employs never-married proportions for the five-year age groups and estimated SMAFM for the age range 15 to 55. The proportion of individuals, who by age 50 were still never-married, was estimated by using the average proportion still never-married for ages 45-49 and 50-54. The SMAFM expression used takes the form in (4.1).

$$\text{SMAFM} = \frac{[1500 + (5 * \sum_{i=15}^{49} S_i)] - \left[50 * \left(\frac{\sum_{i=45}^{49} S_i + \sum_{i=50}^{54} S_j}{2} \right) \right]}{100 - \left(\frac{\sum_{i=45}^{49} S_i + \sum_{i=50}^{54} S_j}{2} \right)} \quad (4.1)$$

Where:

S_i and S_j represent the proportions of women single at ages i, j and the component 1500 represent the person years spent by 100 women in a single state before anyone would begin to get married and based on the premise that menarche sets-in at age 15.

4.2.1 Variables considered in the analysis

Seven different measures in terms of proportions are calculated for five-year age groups. The singulate mean ages at first marriage as a measure of timing of family formation for the different socio-demographic factors known to affect nuptiality patterns are also computed. The singulate mean age was used to indirectly estimate age at marriage because it is known to influence marriage patterns (Bongaarts & Potter, 1983). The proportions calculated for those married, never-married, cohabiting, widowed, separated or divorced, single and in polygynous union were intended to show nuptiality trends, patterns and differentials in Uganda. In examining differentials in the timing of marriage using the SMAFM, the socioeconomic variables included were type of residence, education

attainment, religious affiliation and region of residence. Place of residence was categorised as rural or urban; education was categorised as no education, primary, and secondary or higher education; religion was categorised as Catholics, Anglican, Muslim, and others (SDAs, Pentecostal and Orthodox Christians); region was categorised as Northern, Eastern, Western and Central. These variables were included in the analysis because they are known to affect the timing of marriage thus affecting nuptiality patterns (Bongaarts & Potter, 1983). For each proportion constructed, five indicators for women and four for men were computed for the period 1988 to 2011. In analysing dissolution, individuals who divorced or separated were combined in order to have meaningful interpretation of results because of small numbers. However, widowhood was analysed separately because women are generally known to live longer than men.

4.3 Results

This section presents results in terms of proportions never-married, SMAFM, proportions married, cohabiting, in polygynous union, dissolved, and widowed.

4.3.1 Proportion Never Married

Marriage is one of the key events during the transition to adulthood. Although individuals highly expect that they would finally marry, some end-up postponing first union formation. Table 4.1 presents the trend in the percentage distribution of the never married women and men. This trend is further illustrated by Figures 4.1 and 4.2. Generally and as expected, the proportions never-married decline with increase in age. As age increases from 15 to 49 years, there were more men who remained never married at each age group than women. The percentage of never-married men and women is highest for the age group 15 to 19, declines to low levels after age 24. Table 4.1 further shows that there were more men between ages 15 and 24 who were still never married compared to women. With the exception of 1995 where the proportion of never married women decreased, overall, there was an increase in the number of women in 2001, 2006 and 2011. The percentages ranged from 21.5 in 1988, 17.9 in 1995, 22.1 in 2001, 24.1 in 2006 and 25.5 in 2011. The proportions of never-married men, on the other hand increased monotonically from 31.9% in 1995 to 37.1% in 2001, 38.1% in 2006 and 39.8% in 2011. Beyond age 40, the percent

of never married women and men is very small suggesting that most people prefer being in union than being single.

Compared to 1988, the proportion of never married women increased by 4% in 2011. However, between 1988 and 1995, the proportion of women never married declined by 3.6% before it gradually increased by 4.2 in 2001, 2.0% in 2006 and 1.3% in 2011 (Table 4.2). Between 1995 and 2011, the proportion of never married men increased by about 8%. In general, changes in the proportion never married may probably suggest that marriage rates have started to decline in Uganda. The difference between men and women for 1995 was about 14%, 15% for 2001, 14% for 2006, and 14.3% for 2011. Furthermore, when the never married proportion is examined throughout the period under investigation, the data suggests that women more than men were more likely to get married before age 30. This difference is a reflection of the fact that women get married earlier and start childbearing at a young age.

Table 4.1 Proportion never married by age group, UDHS 1988 to 2011

Age group	Women					Men*			
	1988	1995	2001	2006	2011	1995	2001	2006	2011
15-19	62.1	54.9	69.4	77.8	77.3	90.7	94.1	98.1	96.3
20-24	19.2	15.2	17.8	23.5	27.2	47.0	56.1	58.9	65.3
25-29	5.8	7.2	7.6	6.0	7.2	18.1	17.8	22.8	21.9
30-34	3.0	2.3	3.0	2.9	3.3	4.3	6.7	4.2	7.4
35-39	1.5	1.9	2.6	1.9	2.0	2.4	4.9	2.8	1.4
40-44	1.5	0.6	0.9	1.4	0.8	1.3	3.0	0.0	0.6
45-49	1.0	1.4	0.5	0.7	2.0	2.8	4.3	0.6	0.7
ALL	21.5	17.9	22.1	24.1	25.5	31.9	37.1	38.1	39.8

Source: UDHS data, 1988, 1995, 2001, 2006 & 2011; * Men were not interviewed during the 1988 UDHS

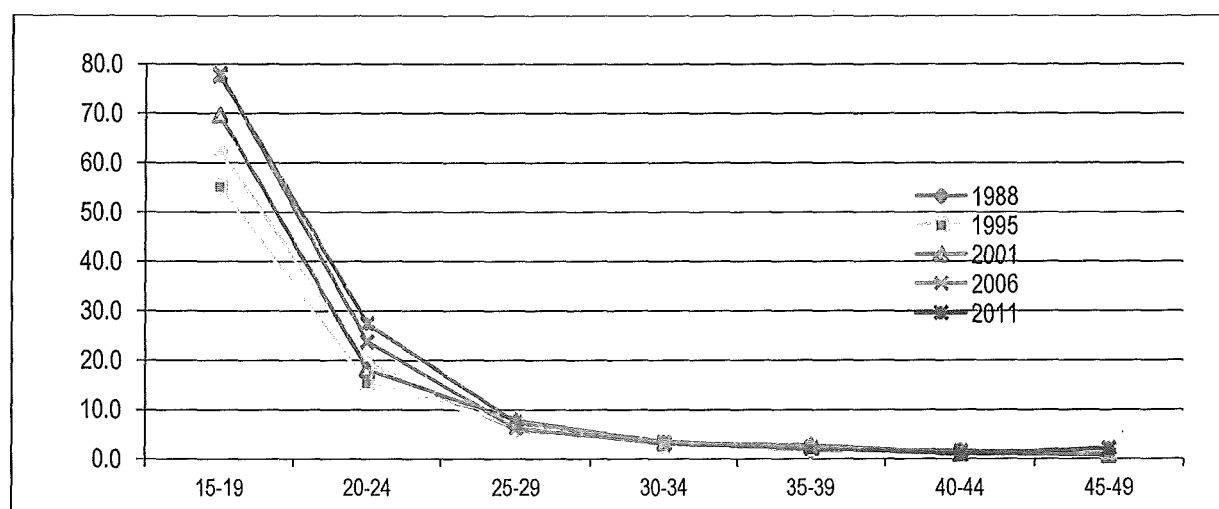


Figure 4.1 Proportion of never married women by age group in Uganda, 1988 to 2011

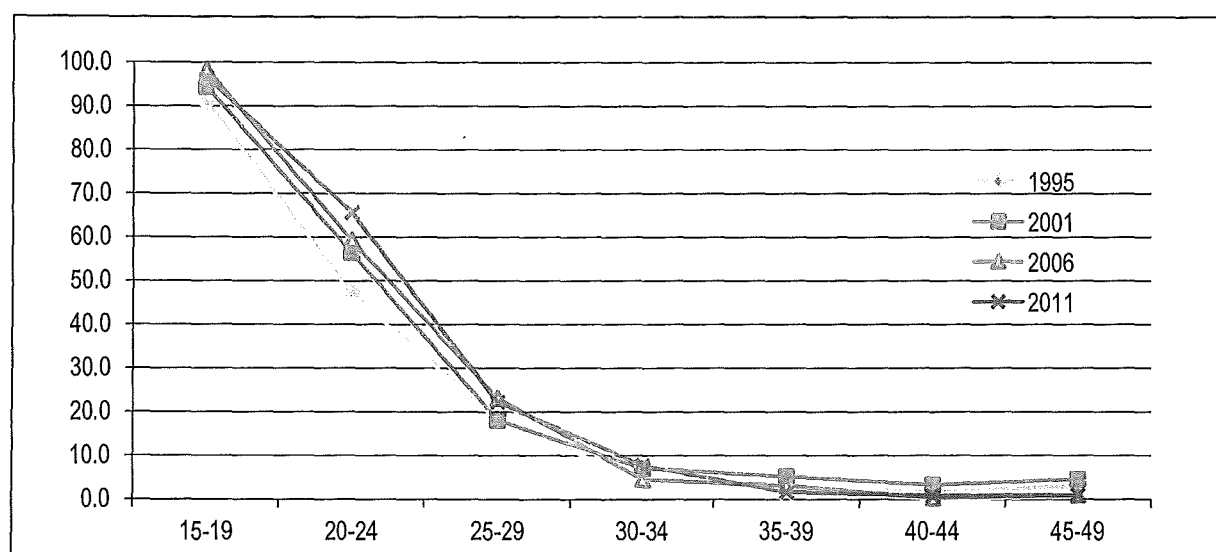


Figure 4. 2 Proportion never married men by age group in Uganda, 1988 to 2011

Table 4. 2 Change in proportion never married by age group, UDHS (1988 to 2011)

Age group	Women				Men*		
	(1995-1988)	(2001-1995)	(2006-2001)	(2011-2006)	(2001-1995)	(2006-2001)	(2011-2006)
15-19	-7.3	14.5	8.4	-0.5	3.4	4.0	-1.8
20-24	-4.1	2.6	5.7	3.7	9.1	2.9	6.4
25-29	1.4	0.4	-1.6	1.1	-0.3	5.0	-0.9
30-34	-0.7	0.7	-0.2	0.4	2.4	-2.5	3.2
35-39	0.3	0.7	-0.7	0.1	2.5	-2.1	-1.4
40-44	-0.9	0.3	0.5	-0.5	1.7	-3.0	0.6
45-49	0.4	-0.9	0.2	1.3	1.5	-3.6	0.0
ALL	-3.6	4.2	2.0	1.3	5.2	1.0	1.7

Source: UDHS data, 1988, 1995, 2001, 2006 & 2011; * Men were not interviewed during the 1988 UDHS
 (-) show a decline and non-negative indicate an increase

4.3.2 Age at First Marriage

In societies where premarital births are rare or where sex before marriage is disapproved, age at first marriage marks the onset of exposure to frequent sexual intercourse and to the risk of childbearing. For women in particular, early age at first marriage usually implies early age at childbearing and high fertility in the absence of contraception (UBOS & ICF International Inc, 2012). This is because women who marry at an earlier age usually have a long period of exposure to the risk of pregnancy. On the other hand, marrying late

enables couples to form union when they have developed their careers and have income which enables them to have a happy and stable life (Binh, 2012).

The previous section examined the proportionate trend of those who never married. This section uses data on the proportion never-married to investigate the trend in the mean age at first marriage. Table 4.3 displays estimates in SMAFM by the different socioeconomic variables known to influence the timing of marriage among women and men. The results in Table 4.3 show that in Uganda marriage begins earlier among women than men. In general, SMAFM indicate that an average Ugandan man marries at about 25 years which according to Bogue (1969, as cited in Kalule-Sabiti et al., 2007, p.96) may be qualified as being a late marriage pattern and women at nearly 21 years, qualified as marriage at maturity. Although marginal, the results tabulated shows that SMAFM has been rising since 1988, demonstrating that many people are marrying later probably after attaining education and other skills necessary in the job market. SMAFM rose by nearly two years between 1995 and 2011 among men and women. The difference in SMAFM between men and women for the period between 1995 and 2011 is more or less constant, standing at approximately four years. Further, there are variations in SMAFM due to several factors among both men and women.

Table 4.3 further shows that the men and women SMAFM in urban areas is higher than in rural areas. Compared to 1995, among men, SMAM increased by 2 years in urban areas in 2011; and a similar increase was observed in rural areas. Over the same period, the SMAM for women increased by 2.3 years in urban areas in 2011 and in the rural areas, it increased by nearly 2 years. For the urban areas, except in 2006 where the difference in SMAM between men and women was about one year, it was nearly 3 years for 1995, 2001 and 2011. With regard to rural areas, the difference in SMAM between men and women was approximately 4 years during the period 1995 to 2011.

The results in Table 4.3 further show that the trend of late marriage is developing. The increase among men between 1995 and 2011 was one year for those with primary, secondary or higher education. The trend for women was similar to that of men. The difference in SMAFM between men and women is about 3 years for those with primary and

secondary or higher level of education. Table 4.3 further shows that Muslim and Catholic men marry earlier than Anglicans, SDA, Pentecostals or Orthodox Christians. As for women, SMAM is roughly the same (20 years) for all religious groups. Among Catholics, the difference in SMAM between men and women is about 4 years over the period 1995 to 2011. The corresponding difference with other religious affiliations ranges between 3 to 4 years among the Anglicans; 4 to 5 years for Muslims and 3 to 6 years for other religious groups.

Table 4.3 Trend in Singulate Mean Age at First Marriage by Background Characteristics and Sex in Uganda, 1988 to 2011

Variable	Men				Women				
	1995	2001	2006	2011	1988*	1995	2001	2006	2011
Residence									
Urban	24.2	25.2	24.4	26.0	20.5	20.4	21.6	22.8	22.7
Rural	22.2	23.0	23.7	23.9	19.2	18.1	19.2	20.0	19.8
Education									
No Education	22.7	20.9	24.9	22.7	18.0	17.4	17.3	18.4	18.9
Primary	21.9	22.8	23.0	23.4	19.2	18.4	19.2	19.6	19.5
Secondary+	24.8	26.1	26.3	26.1	23.6	21.2	23.2	23.7	22.9
Religion									
Catholics	22.5	23.7	24.1	24.3	19.8	18.9	20.0	20.2	20.5
Anglican	23.9	23.7	23.8	25.2	19.9	19.2	20.4	20.9	20.8
Muslim	21.5	24.0	25.4	23.7	17.5	18.1	19.1	20.4	20.2
Other (SDA, Pentecostal and Others)	23.5	25.8	25.4	25.1	17.7	19.7	19.9	21.4	21.6
Region									
Northern	22.5	22.9	23.7	24.0	19.1	17.8	19.4	19.7	19.8
Eastern	22.9	23.1	23.5	23.5	18.3	18.2	18.9	19.8	19.9
Western	22.7	23.8	23.8	25.1	20.4	19.6	20.3	20.6	20.9
Central	23.3	25.6	25.6	25.5	19.3	19.6	20.8	22.0	21.8
ALL	22.9	23.7	24.2	24.6	19.6	19.0	20.0	20.6	20.7

Source: UDHS data, 1988, 1995, 2001, 2006 & 2011; *No men were interviewed during the 1988 UDHS; and for that year, Northern referred to West Nile

Variation according to region of residence reveals that the Central region has the highest mean age at first marriage for both men and women followed by the Western region. Two regions with the lowest mean age at first marriage in 2011 were the Northern (24 years for men and 19.8 years for women), and Eastern (23.5 years for men and 19.9 years for women). This could be explained by the low level of urbanisation and development in the Eastern and Northern regions. The difference in SMAM between men and women in the Central region for the period 1995 to 2011 has been constant, averaging nearly 4 years. The difference for the Western region has been widening from 3.1 years in 1995 to 4.2 years in 2011. There has been a declining trend in the difference in SMAM for the Eastern

and Northern regions. The difference for the Eastern region declined from 4.7 years in 1995 to 3.6 in 2011, and that of the Northern region declined from 4.7 in 1995 to 4.2 in 2011.

The SMAM figures estimated in Table 4.3 have important demographic implications for Uganda: (i) an increase in SMAM for women of about one year from 19.6 years in 1995 to approximately 20.7 years in 2011 indicates that women are exposed to the risk of pregnancy for a long period and because the contraceptive prevalence rate is low (26% among those in union), it implies high fertility for the country, (ii) the difference in SMAM of about 4 years between men and women may imply effective communication between spouses thus leading to stability in union. However, due to low levels of women autonomy and Uganda being a patriarchal society, the advantage which would accrue from the difference of 4 years may take some time to be realised.

4.3.3 Proportion Married

In traditional African societies marriage has always been, and still remains, an important and universal institution. This is because it marks the beginning of a woman's regular exposure to the risk of childbearing and also defines the length of the woman's reproductive life in absence of contraception (Bongaarts, Frank, & Lesthaeghe, 1984; Johnson, Nouredine, & She, 2011). Table 4.4 presents results on the proportion of married men and women. Table 4.4 and Figures 4.3 & 4.4 clearly demonstrate that, over time, there has been a general decline in the marriage rate of both men and women. Overall, the proportion of married women within the reproductive group 15-49 dropped from 59.8% in 1995 to 35.4% in 2011. A similar trend was observed among men where the proportion declined from 58.7% in 1995 to approximately 40% in 2011. In general, this analysis reveals that overtime the proportion of women who got married before age 40 increased with age.

Table 4.4 Trend in the proportion of married men and women in Uganda by age group, UDHS (1988 to 2011)

Age group	Women					Men*			
	1988	1995	2001	2006	2011	1995	2001	2006	2011
15-19	24.6	34.0	14.5	12.0	8.1	5.6	4.8	0.7	1.1
20-24	53.3	64.3	44.6	45.8	30.0	44.6	35.6	30.0	15.9
25-29	62.8	70.2	53.1	63.8	43.3	71.1	67.0	61.0	49.0
30-34	63.2	70.5	53.4	67.0	49.1	85.2	77.0	80.2	57.1
35-39	61.7	71.7	54.4	66.4	51.8	84.3	81.8	82.1	71.8
40-44	59.0	62.3	54.3	63.6	53.3	86.1	84.3	83.6	77.7
45-49	62.7	61.0	50.7	61.8	48.8	86.2	85.5	87.0	78.8
ALL	50.8	59.8	42.4	49.1	35.4	58.7	52.8	50.6	40.1

Source: UDHS data, 1988, 1995, 2001, 2006 & 2011; *- No men were interviewed during the 1988 UDHS survey

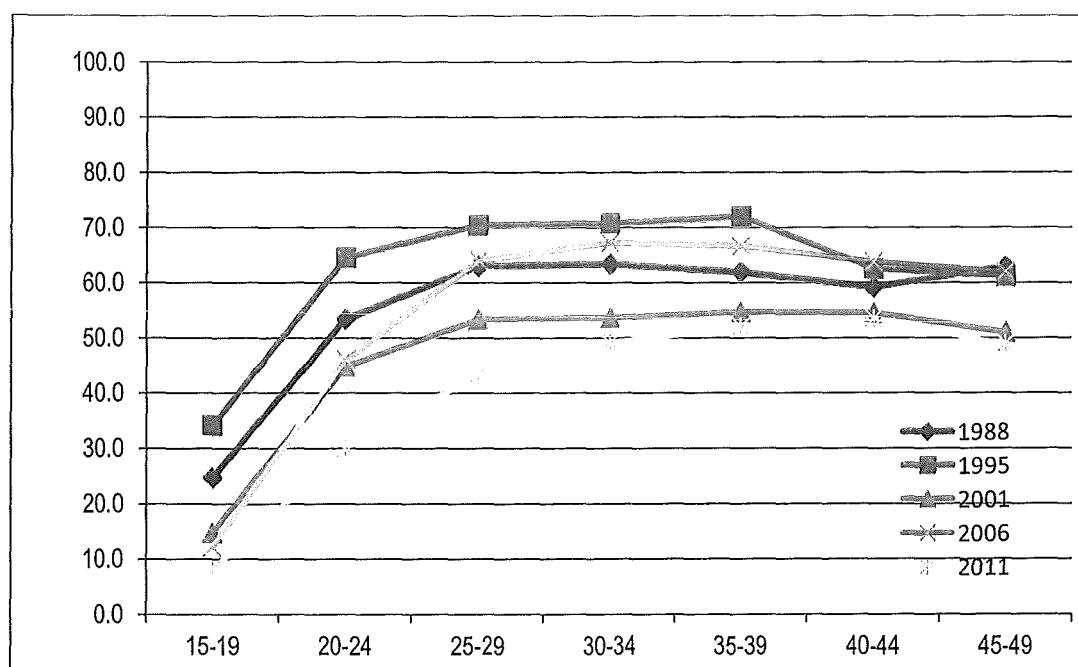


Figure 4. 3 Proportion of married women in Uganda, 1988 to 2011

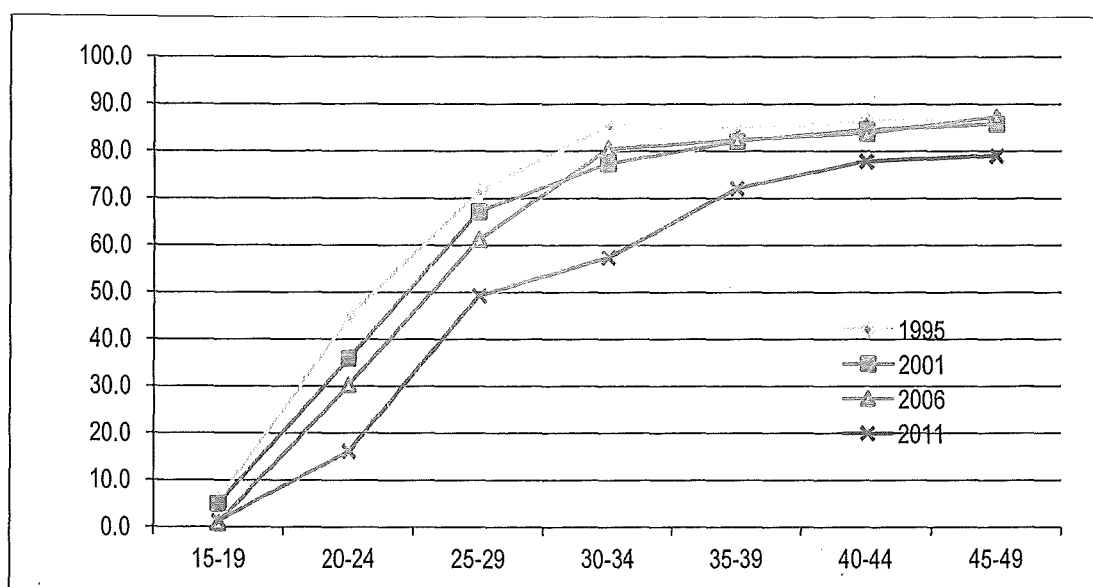


Figure 4. 4 Proportion of married men in Uganda, 1995 to 2011

The analysis further shows a general decline in the percentage of men and women eligible for marriage during the period 1995 to 2001 (Table 4.5). Compared to 1995, it can be seen that the proportion of married men declined by 5.9% in 2001; a decline of 2.2% between 2001 and 2006; and 10.6% between 2006 and 2011. In general, Table 4.5 suggests that the decline was more pronounced among the young age groups (15 to 19 and 20 to 24). In 2011, more declines were observed for men aged between 20 and 39. Overall, the decline in the proportion of married men could be a response to the need to attain education to improve chances of competing in the job market, thus making marriage not a priority (Ayiga & Rampagane, 2013).

Similarly, taking 1995 as a reference point, the proportion of married women declined by 17.4% in 2001 and increased by 6.6% in 2006 if matched with 2001. Also, if compared with 2006, the proportions further declined by 13.7% in 2011. These results further indicate that the proportion of married women declined more between 1995 and 2001, and between 2006 and 2011. The analysis further show that with the exception of 2001 and 2006 interval where there was a general increase in the proportion of married women for all the age groups, a declining trend was observed for the intervals 1995 and 2001, and 2006 and 2011 (Table 4.5).

Table 4. 5 Change in the proportion of married men and women in Uganda by age group, UDHS (1988 to 2011)

Age group	Women				Men*		
	(1995-1988)	(2001-1995)	(2006-2001)	(2011-2006)	(2001-1995)	(2006-2001)	(2011-2006)
15-19	9.4	-19.5	-2.5	-3.9	-0.8	-4.1	0.4
20-24	11.1	-19.8	1.2	-15.8	-9.0	-5.6	-14.1
25-29	7.4	-17.1	10.7	-20.6	-4.1	-6.0	-11.9
30-34	7.3	-17.1	13.6	-17.9	-8.1	3.1	-23.1
35-39	10.0	-17.3	12.0	-14.6	-2.6	0.3	-10.2
40-44	3.3	-8.0	9.3	-10.3	-1.7	-0.7	-6.0
45-49	-1.7	-10.2	11.1	-13.0	-0.8	1.5	-8.2
ALL	9.0	-17.4	6.6	-13.7	-5.9	-2.2	-10.6

Source: UDHS data, 1988, 1995, 2001, 2006 & 2011; (-) shows a decline and non-negative indicate an increase

4.3.4 Proportion Cohabiting

As already indicated (see Chapter one, pg1), cohabitation is commonly referred to as living together by the Uganda Bureau of Statistics (UBOS) (UBOS & ICF International Inc, 2012). It is defined as an informal union between a man and woman who accept to live together as husband and wife in the same household. Also, as it is with interdependent relationship, these partners are economically and emotionally reliant on each other. In the subsequent analysis, the term cohabitation will be synonymous to living together. Table 4.6 and, Figures 4.5 and 4.6 present results on cohabitation for men from 1995 to 2011 and for women from 1988 to 2011. The results show a sharp increase in cohabiting unions between ages 20 and 40. At national level, among women, the number reporting to be in cohabiting union as a percentage of all unions increased from 9.5% in 1995 to 26.3% in 2011.

As was observed with women, the trend is similar among men. Between 1995 and 2011, the proportion in cohabiting unions as a percentage of all unions increased from 2.3% to 14.9%, showing a dramatic increase of almost seven times of the proportion. In general, the proportion of cohabiting men and women decrease with age; more men than women were cohabiting. In addition, the prevalence was common among young adults aged between ages 20 to 35. Recent data from the table suggests that cohabitation is also becoming common among the adult generation.

Table 4. 6 Trend in the proportion cohabiting in Uganda by age group, UDHS (1988 to 2011)

Age group	Women					Men*			
	1988	1995	2001	2006	2011	1995	2001	2006	2011
15-19	8.8	8.3	12.6	7.5	11.5	2.1	0.9	1.0	1.2
20-24	16.2	10.6	28.9	20.5	34.0	1.8	5.9	7.8	14.7
25-29	17.1	10.3	24.9	17.4	37.9	3.1	8.9	8.5	23.6
30-34	16.6	10.4	26.1	15.4	32.0	2.0	9.5	8.7	28.1
35-39	15.7	8.9	23.4	12.0	27.0	3.6	5.8	5.0	16.9
40-44	10.5	8.4	19.7	10.8	22.7	1.9	4.2	7.5	16.2
45-49	10.5	8.3	18.0	10.3	15.5	0.0	3.4	4.5	12.6
ALL	13.8	9.5	22.1	13.8	26.3	2.3	5.5	5.8	14.9

Source: UDHS data, 1988, 1995, 2001, 2006 & 2011; *- No men were interviewed during the 1988 UDHS survey

Further differentials by age and year of analysis are shown by data in Table 4.7, Figures 4.5 and 4.6. Compared to 1995, it is recognised that more men and women were cohabiting in 2001, which later declined between 2001 and 2006 for women; and between 2006 and 2011, the trend increased again. Matching 1995 and 2001, women cohabiting increased steadily from age 25 to about 40 years and thereafter declined. In the case of men, the general trend is that the increase started from age 20 to about 35 and later declined.

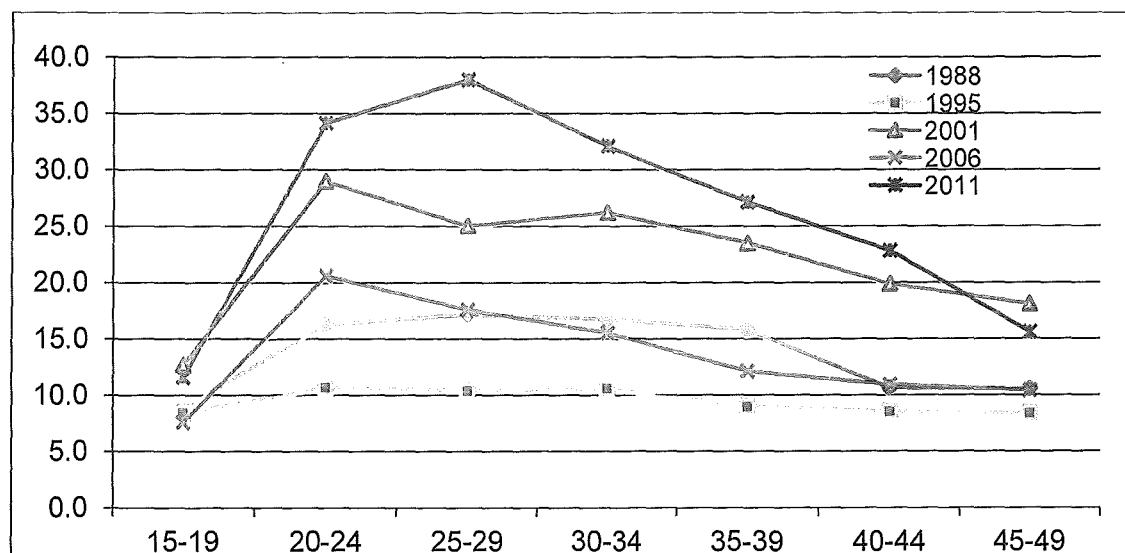


Figure 4. 5 Proportion of women in a cohabiting union in Uganda, 1988 to 2011

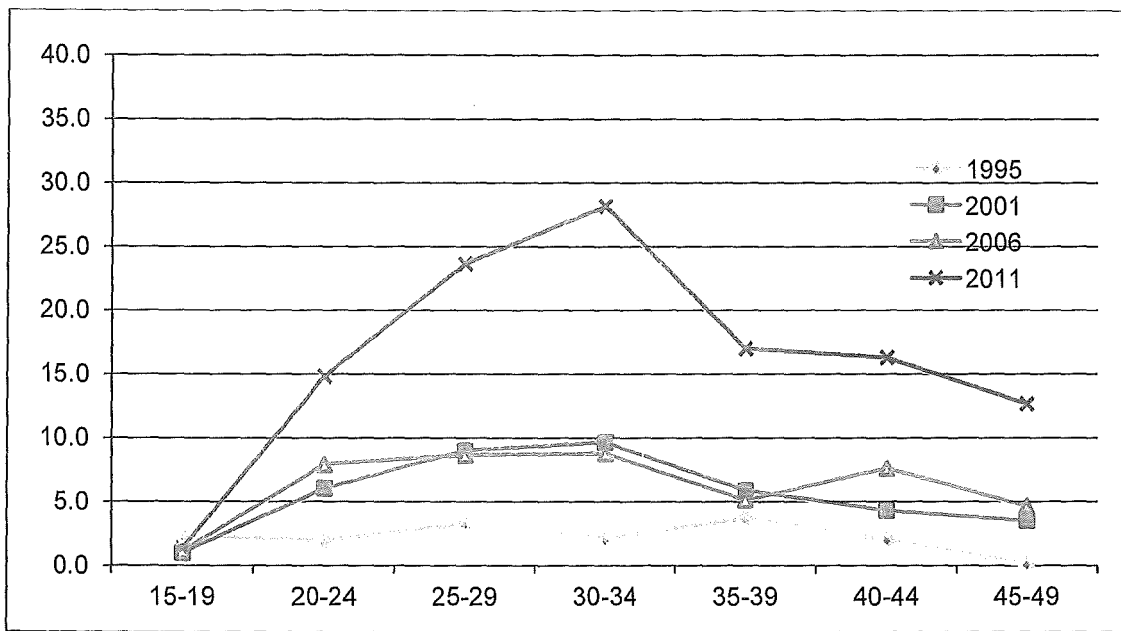


Figure 4. 6 Proportion of men in a cohabiting union in Uganda, 1995 to 2011

Also observed is a significant decline in cohabitation for women between 2001 and 2006. The increase in the proportion of cohabiting men and women in the interval 1995 to 2001 could be attributed to the decline in the proportion married (see Table 4.5). It should be remarked that the proportion of women aged between 15 and 40 who were cohabiting was high in 2011 at 12% in ages 15 to 19, rising to 38% in 25 to 29 and 32% in 30 to 34. Between 2006 and 2011, the increase in the proportion of women cohabiting may be ascribed to women autonomy resulting from the growing effect of universal primary and secondary education resulting in many women attaining secondary education or higher (Ayiga & Rampagane, 2013).

Table 4. 7 Change in the proportion cohabiting in Uganda by age group, UDHS (1988 to 2011)

Age group	Women				Men*		
	(1995-1988)	(2001-1995)	(2006-2001)	(2011-2006)	(2001-1995)	(2006-2001)	(2011-2006)
15-19	-0.5	4.3	-5.1	4.0	-1.2	0.1	0.2
20-24	-5.6	18.3	-8.4	13.6	4.1	1.9	6.9
25-29	-6.8	14.6	-7.4	20.4	5.7	-0.3	15.0
30-34	-6.2	15.6	-10.7	16.6	7.6	-0.9	19.4
35-39	-6.8	14.5	-11.4	15.0	2.2	-0.7	11.9
40-44	-2.1	11.3	-8.9	11.9	2.3	3.3	8.7
45-49	-2.2	9.7	-7.7	5.2	3.4	1.1	8.0
ALL	-4.2	12.5	-8.3	12.5	3.2	0.3	9.1

Source: UDHS data, 1988, 1995, 2001, 2006 & 2011; * No men were not interviewed during the 1988 UDHS survey; (-) show a decline and non-negative indicate an increase

4.3.5 Polygyny

Polygyny is a cultural practice in which a man has more than one wife concurrently. Research on family demography of African societies has for long argued that polygyny has implications for both fertility and marital instability (Kalule-Sabiti, 1983; Kalule-Sabiti et al., 2007; Ntozi & Kabera, 1988; Takyi, 2001). According to previous studies, this practice affect marital relations in a number of ways: (i), women in such unions are susceptible to tension and stress which leads to conflict among them, (ii) this type of union is liable to seniority of union (especially with the first wife) in the house which lead to disparity within the household, (iii) it widens the gap between partners which affect their emotional ties, and (iv) women feel threatened in the course of sharing a husband (Bove & Bledsoe, 2009; Takyi, 2001). With regards to fertility, the association seems unclear. While in some countries women in polygynous relationships have been found to have high fertility, in others, low fertility was observed, at least at individual level (Pebley & Mbugua, 1989).

During the UDHSs, the question about polygyny was included in both the woman and men questionnaires. Women who were in union were asked whether their husbands or partners had other wives, and if so, how many? Men were asked a question relating to the number of partners or wives they had. Results on the differentials and trends of polygyny among women and men by background characteristics are presented in Table 4.8. It is evident from the table that women reporting their spouses as having more than one wife has not significantly decreased (5%) in the period of 23 years from 33% in 1988 to 27.8% in 2011.

The prevalence among men increased from 15.8% in 1995 to 18.3% in 2006 before declining to 17.9% in 2011. It is further evident that polygynous unions among women and men increase with age which suggests that older men and women were more likely to live in polygynous unions than younger ones. It is also more prevalent among rural residents and decreases with increase in educational attainment.

The relationship between polygyny and wealth status of the household has no clear pattern. Given the cultural, customs and traditional beliefs of the Ugandan society, it is possible to attribute the observed trend in polygyny to: (i) less exposure of the older cohorts to factors of change, (ii) social status and prestige in society particularly among men, (iii) the belief that most if not all women must get married, (iv) the need to have many children as security for the future, and (v) the need to have enough labour for the family and a strong economic base.

Table 4.8 also shows an inverse relationship between polygyny and educational attainment. In the year 2011 for example, the proportion of women in polygynous union declined from 41% for those with no formal education to about 20% for women with secondary education or higher. The trend was similar for the year 1988, 1995, 2001 and 2006. The percentages were 34 to 28 for 1988, 32 to 28 for 1995, about 33 to 25 for 2001 and 39 to 23 for 2006. These results may imply that higher education attainment comes with exposure to factors of change from a polygynous to monogamous family structure.

Table 4. 8 Differential in the proportion of currently married women reporting having at least a co-wife and men having more than one wife by background characteristics in Uganda, UDHS (1988 to 2011)

Variable	Women					Men*			
Age group	1988	1995	2001	2006	2011	1995	2001	2006	2011
15-19	21.3	18.0	16.6	14.9	15.1	3.4	0.0	0.0	0.0
20-24	31.0	23.5	22.3	20.8	19.0	4.5	7.9	6.0	6.7
25-29	31.5	33.1	28.5	27.6	26.6	12.0	14.2	11.9	11.3
30-34	35.7	35.8	35.2	34.6	31.6	19.3	15.5	16.4	18.2
35-39	39.7	40.5	37.3	39.4	36.2	14.6	21.8	23.1	17.5
40-44	43.0	33.1	39.1	43.2	35.1	23.0	21.2	24.8	22.6
45-49	38.1	35.4	37.0	39.4	33.7	26.6	28.8	23.4	26.8
Type of residence									
Urban	31.2	29.1	29.1	23.2	21.9	16.7	14.5	14.7	11.4
Rural	33.3	30.6	29.7	31.9	29.7	15.4	18.3	18.8	20.0
Education									
No education	34.0	32.0	32.9	39.3	41.0	13.6	18.0	18.1	36.5
Primary	33.0	29.6	29.4	28.8	26.6	16.1	18.4	19.0	18.8
Secondary+	28.4	28.4	25.1	23.3	19.6	15.9	14.9	16.4	12.2
Wealth Index									
Poorest	na	28.3	31.5	38.1	35.9	11.7	18.1	26.0	24.3
Poorer	na	28.5	27.9	27.5	25.4	13.3	13.0	16.2	13.9
Middle	na	32.4	31.7	25.3	25.3	17.3	20.2	11.8	20.3
Richer	na	31.9	26.0	32.8	29.8	17.2	18.3	17.7	19.6
Richest	na	29.7	29.8	28.3	22.5	17.9	16.5	19.2	12.1
Region of residence									
Northern	33.1	20.0	20.0	40.1	37.0	8.8	23.0	25.3	24.2
Eastern	42.3	37.3	34.8	29.6	29.0	21.1	20.8	16.5	18.5
Western	28.5	33.8	37.3	24.6	20.9	20.3	13.5	14.0	12.5
Central	32.3	30.2	29.4	25.0	21.6	14.8	14.7	16.4	15.2
ALL	33.0	30.1	29.5	30.8	27.8	15.8	17.3	18.3	17.9

Source: UDHS data, 1988, 1995, 2001, 2006 & 2011; *No men were interviewed in 1988 and in that year Northern- referred to West Nile; na- not applicable; Responses of Don't know are excluded from the analysis.

Apart from 1995, when the proportion of men living in polygynous union increased slightly from about 14 to 16%, a similar trend was observed for 2001 and 2006. For instance, in 2011, the proportion of men in polygynous union declined from nearly 37% of those with no formal education to about 12% for men with secondary education or higher. Between 2001 and 2006, the corresponding proportions are on average 18% for men with no education and 16% for those with secondary education or higher. Regional differentials show that women in the Northern and Eastern regions were more likely to be in polygynous unions than their counterparts in the Western and Central regions.

Table 4.9 presents the percentage change in the proportion of the currently married in polygynous unions by selected background characteristics. Between 1988 and 1995, the proportion of women in polygynous unions decreased by about 3%. A similar reduction was observed between 2006 and 2011. The percentage however, increased by 1.3% between 2001 and 2006 before declining again by 3% in 2011. The percentage increase among men was 1.5 between 1995 and 2001; one percent between 2001 and 2006; and declined by 0.4% between 2006 and 2011.

Differentials by place of residence show that the proportion of women in polygynous unions fell by 2.1% in urban areas compared to 2.8% in rural area between 1988 and 2011. Between 2001 and 2006, the proportion of women decreased further by 5.8% in urban areas compared 2.2% in the rural areas. Between 2006 and 2011, a further decline of 1.3% was observed in urban areas compared to a decline of 2.2% among rural residents. The decline among urban men was 2.2% between 1995 and 2001 which further declined to 3.3% by 2011. Worth noting is that, in rural areas, there was percentage increase of about 3% between 1995 and 2001, and 1.2% between 2006 and 2011.

Differentials by age confirm a positive relationship between polygyny and current age. This relationship is not surprising since it is the young women cohorts who are more educated, and therefore, more influenced by modern values, who are likely to resent co-wives (Kalule-Sabiti, 1983:55). It is evident from the table that the proportion of women in polygynous union in the 15-19 year age group declined by 3.3% in 1995, 1.7% in 2006 and thereafter increased by 0.23% in 2011. In the 20-24 year age group, the decline was 7.5% between 1988 and 1995 which later declined to 1.8% between 2006 and 2011; and for the 40-44 year age group, it was 9.9% between 1988 and 1995. However, there was an increase of 6.0% in 2001 and 4.0% in 2006, before declining by 8.1% in 2011. For older women aged 45-49 year, the decline was 2.7% between 1988 and 1995, increased by 1.6% between 1995 and 2001 and 2.4% by 2006, and later declined by 5.7% between 2006 and 2011.

Table 4. 9 Percentage change in the proportion of currently married women reporting having at least a co-wife and men having more than one wife by background characteristics in Uganda, UDHS (1988 to 2011)

Variable	Women				Men*		
Age group	1988 - 1995	1995- 2001	2001- 2006	2006- 2011	1995- 2001	2001-2006	2006-2011
15-19	-3.3	-1.4	-1.7	0.2	-3.4	0.0	0.0
20-24	-7.5	-1.2	-1.4	-1.8	3.3	-1.9	0.7
25-29	1.6	-4.5	-0.9	-1.0	2.2	-2.3	-0.6
30-34	0.1	-0.6	-0.6	-2.9	-3.8	0.8	1.8
35-39	0.8	-3.2	2.1	-3.2	7.2	1.3	-5.6
40-44	-9.9	6.0	4.0	-8.1	-1.8	3.5	-2.1
45-49	-2.7	1.6	2.4	-5.7	2.3	-5.4	3.4
Type of residence							
Urban	-2.1	0.0	-5.8	-1.3	-2.2	0.2	-3.3
Rural	-2.8	-0.9	2.2	-2.2	2.9	0.5	1.2
Education							
No education	-1.9	0.9	6.4	1.7	4.4	0.1	18.4
Primary	-3.4	-0.2	-0.5	-2.2	2.3	0.6	-0.2
Secondary+	-0.1	-3.2	-1.8	-3.8	-1.0	1.6	-4.2
Wealth Index							
Poorest	na	3.2	6.6	-2.2	6.4	7.9	-1.7
Poorer	na	-0.6	-0.4	-2.1	-0.3	3.2	-2.3
Middle	na	-0.7	-6.4	-0.1	2.9	-8.4	8.5
Richer	na	-5.9	6.8	-3.1	1.1	-0.7	1.9
Richest	na	0.1	-1.6	-5.7	-1.4	2.7	-7.1
Region of residence							
Northern	-13.0	0.0	20.1	-3.1	14.2	2.3	-1.0
Eastern	-4.9	-2.5	-5.2	-0.6	-0.3	-4.4	2.0
Western	5.3	3.5	-12.6	-3.7	-6.7	0.5	-1.5
Central	-2.0	-0.8	-4.4	-3.4	-0.2	1.8	-1.2
ALL	-2.9	-0.6	1.3	-3.0	1.5	1.0	-0.4

Source: UDHS data, 1988, 1995, 2001, 2006 & 2011; *No men were interviewed in 1988 and in that year Northern- referred to West Nile; na- not applicable; Responses of "don't know" are excluded from the analysis; (-) show a decline and non-negative indicate an increase

Table 4.9 also shows significant changes in the proportion of men in polygynous unions for ages between 20 and 39 years. For the 20 to 24 year age group, the proportion increase was 3.3% between 1995 and 2001, which declined by 1.9% between 2001 and 2006, and later increased by 0.7% in between 2006 and 2011. In the 35 to 39 year age group, the proportion living in a polygynous union increased by 7.2% between 1988 and 1995, and later declined by 5.6% between 2006 and 2011.

It is further evident from Table 4.9 that apart from those without formal education, who had a general increase in the proportion of women and men living in polygynous unions, those with primary, secondary and higher education levels were observed to have experienced a

decline. The proportion of women with no education living in polygynous unions declined to 1.9% between 1988 and 1995. This decline was, however, followed by an increase of 0.9% between 1995 and 2001, 6.4% between 2001 and 2006, and 1.7% by 2011. Among men, the proportion increase was 4.4% between 1995 and 2001, which later increased to 18.4% between 2006 and 2011. Among those with secondary education or higher, the proportion of women in polygynous unions declined to 3.2% between 1995 and 2006, and further declined by 3.8% between 2006 and 2011. The corresponding decline among men was 1.0% between 1995 and 2001, followed by an increase of 1.6% by 2006 and a decline of 4.2% between 2006 and 2011. This trend, as described earlier, could be attributed to education attainment as a factor of change.

Regarding wealth index differentials, the proportion of poorest women living in polygynous union increased by 6.6% between 2001 and 2006 followed by a decline of 2.2% between 2006 and 2011. This compares with men whose increase was 7.9% between 2001 and 2006, and a decline of 1.7% by 2011. In the middle income group, between 2001 and 2006, women in polygynous unions decreased by 6.4%, followed by a further decrease of 0.1% by 2011 (Table 4.9). The corresponding figures for men was 8.4% for the period 2001 to 2006, and 8.5% for the period 2006 to 2011. Among women in the richest group, between 2001 and 2006, the decline was 1.6% and this was followed by a further decline of 5.7% between 2006 and 2011. The matching figure for men falling in the richest group was an increase of 2.7% between 2001 and 2006 followed by a decline of 7.1% between 2006 and 2011.

The proportion of women living in polygynous unions in Northern Uganda declined by 13% between 1988 and 1995 followed by an increase of 20.1% for the period 2001 to 2006, and later declined by 3.1% by 2011. Among men, from 1995 to 2001, there was a significant increase of 14.2%, followed by a low increase of 2.3% by 2006 and then a decline of 1% between 2006 and 2011. In the Eastern region, polygyny among women also declined by 4.9% between 1988 and 1995 and by 2.5% in 2001, followed by 5.2% between 2001 and 2006 and a further 0.6% by 2011. Among men, polygyny declined by 0.3% between 1995 and 2001, followed by 4.4% between 2001 and 2006, and later increased by 2.0% between 2006 and 2011. This trend is not unexpected because between 1988 and 1995, most

people in Northern region were staying in camps because of the civil war. A significant increase in polygyny in 2001 and thereafter could be attributed to the brutal civil war in which many men of marriageable age died. As the situation got better, it is possible that women outnumbered men; and because, according to custom, women must get married to be socially secure and respected, they had to accept the practice of polygyny.

In Western Uganda, polygyny among women increased by 5.3% between 1988 and 1995 followed by an increase of 3.5% by 2001. Between 2001 and 2006, the proportion of women declined by 12.6% and a further decline of 3.7% by 2011. With regard to men, a decline of 6.7% was observed from 1988 to 1995, followed by an increase of 0.5% between 2001 and 2006, before declining further by 1.5% between 2006 and 2011. In the Central region, a decline of 2.0% was observed among women between 1988 and 1995, followed by a decline of 0.8% between 1995 and 2001, a 4.4% decline by 2006 and a further decline of 3.4% between 2006 and 2011. For the men, the decline was 0.2% between 1995 and 2001, followed by an increase of 1.8% between 2001 and 2006, and later declined by 1.2% between 2006 and 2011. The decline in polygyny in Eastern, Western and Central regions can possibly be explained by change factors of modernisation: education health, monetization, urbanisation and mechanisation.

4.3.6 Marital Dissolution

Marital dissolution as an indicator of marital instability may occur as a result of either divorce or widowhood. The events of marital dissolution can be investigated using data on marital status. In many societies where data collection and management methods are not well advanced and remarriage (including levirate) is common, marital dissolution statistics are more likely to be underestimated. This is because the period couples would be separated tends to be short and may not be reported. However, if marriage is declining, we would expect individuals whose first marriage was dissolved, to be reluctant to remarry which may give a realistic representation of those who have ever experienced marital dissolution (Ntozi & Kabera, 1988). Generally however, in the Uganda society, remarriage of both the divorced and widowed is acceptable and the effect of marital dissolution on fertility, as a demographic process, may not be substantial.

Data on union dissolution with regard to separation or divorce for men between 1995 and 2011 and for women between 1988 and 2011 are presented in Table 4.10. Further illustration is also given by Figures 4.7 and 4.8. The graphical presentation of the tabulated results shows that union dissolution was declining over time, but on average increases with age. Differentials by age indicate that more women in the older ages (between 30 and 49) dissolved their marriages compared to young ones (before age 30) (see Table 4.10). Among men, high levels of union dissolution were observed between ages 35 and 49. Overall more women than men were observed to have dissolved their unions. The observed trend could be explained by the fact that more men might have remarried after dissolving their union than women.

Table 4. 10 Proportion separated or divorced by age group in Uganda, UDHS (1988 to 2011)

Age group	Women					Men*			
	1988	1995	2001	2006	2011	1995	2001	2006	2011
15-19	1.6	0.4	0.2	0.1	0.1	0.8	0.0	0.0	0.0
20-24	3.6	1.3	0.8	0.6	0.6	1.3	0.3	1.0	0.3
25-29	5.6	2.5	0.3	0.9	0.8	1.6	0.6	0.9	0.8
30-34	5.8	2.3	1.3	0.9	1.1	1.2	1.1	2.5	1.6
35-39	7.5	3.0	1.1	0.9	0.8	2.4	0.4	1.9	1.4
40-44	12.0	4.2	2.4	2.4	1.8	1.9	3.0	0.9	1.1
45-49	8.4	3.4	4.7	2.2	2.0	1.8	2.6	0.6	4.0
ALL	5.0	1.9	1.0	0.9	0.8	1.4	0.8	1.0	0.8

Source: UDHS data, 1988, 1995, 2001, 2006 & 2011; *- No men were interviewed during the 1988 UDHS survey

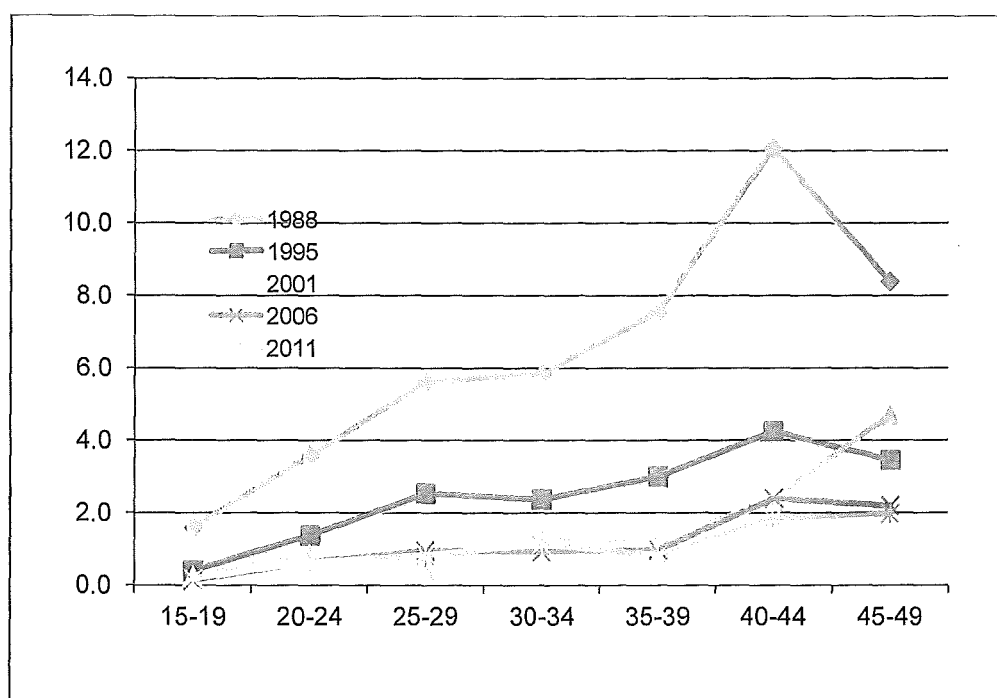


Figure 4. 7 Proportion of women dissolving their union by age group in Uganda, UDHS (1988 to 2011)

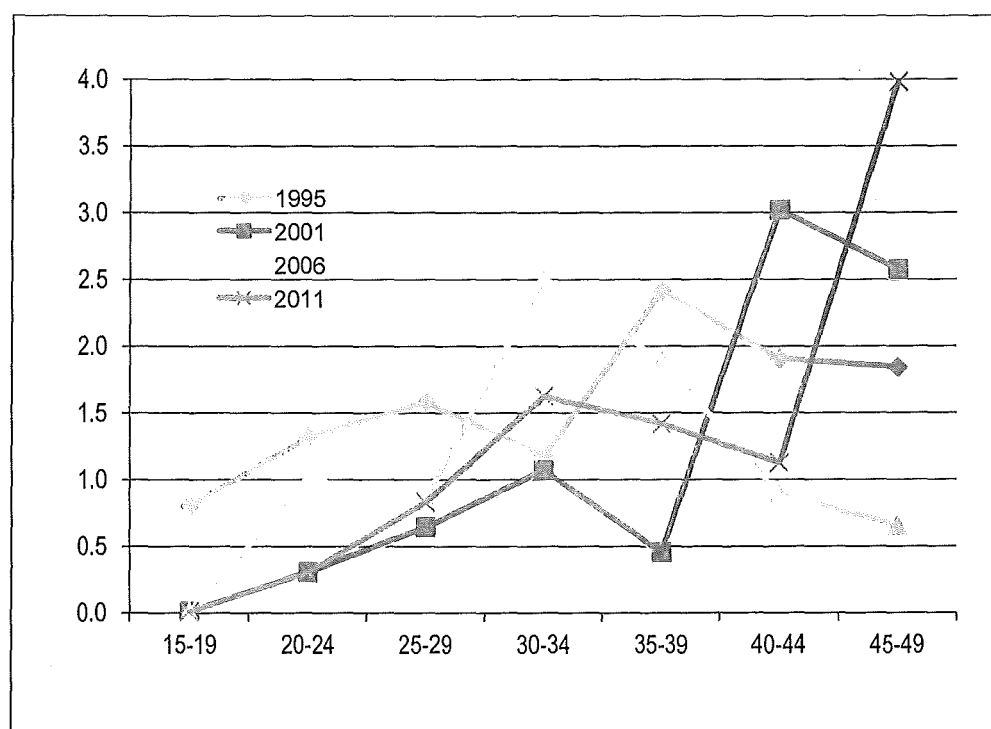


Figure 4. 8 Proportion of men dissolving their union by age group in Uganda, UDHS (1988 to 2011)

Widowhood, which is the status given to a person whose union is dissolved as a result of death of the husband or wife is important in demographic studies because it has implication for fertility (Ntozi & Kabera, 1988). This may be true for women who become widows while they are in the late stage of reproductive life. This however, depends on whether the cultural system supports women who choose to remain widows. Table 4.11 and Figures 4.9 and 4.10 present the trend in widowed for Uganda for women in reproductive ages between 1988 and 2011 and for men aged between 15 - 49 years between 1995 and 2011. Table 4.11 shows that the trend in women widowed increased with age, with the highest increase among women aged 45-49. Among men, the increase was observed for persons aged 35-39. Overall, the percentage of women widowed increased from 3.4% in 1988 to 4.1% in 2006 before declining to 3.7% in 2011. Nevertheless, the trend for men decreased monotonically from 1.4% in 1995 to 0.3% in 2011. The observed trend suggests that overtime, more men than women could have died.

Table 4. 11 Proportion widowed by age group in Uganda, UDHS (1988 to 2011)

Age group	Women					Men*			
	1988	1995	2001	2006	2011	1995	2001	2006	2011
15-19	0.4	0.2	0.0	0.1	0.1	0.0	0.0	0.0	0.0
20-24	1.4	2.4	0.8	0.7	1.2	0.0	0.3	0.0	0.0
25-29	1.9	2.4	2.6	2.5	1.1	1.0	0.3	0.9	0.3
30-34	4.0	6.2	4.8	4.3	3.4	1.6	0.0	0.0	0.3
35-39	7.1	7.0	7.5	7.5	6.6	2.8	2.7	0.9	1.8
40-44	11.4	13.5	10.2	11.6	10.9	1.3	1.8	2.7	0.6
45-49	11.1	16.0	13.1	16.3	17.6	4.6	0.9	1.9	0.0
ALL	3.4	4.3	3.6	4.1	3.7	1.4	0.6	0.6	0.3

Source: UDHS data, 1988, 1995, 2001, 2006 & 2011; *- No men were interviewed during the 1988 UDHS survey

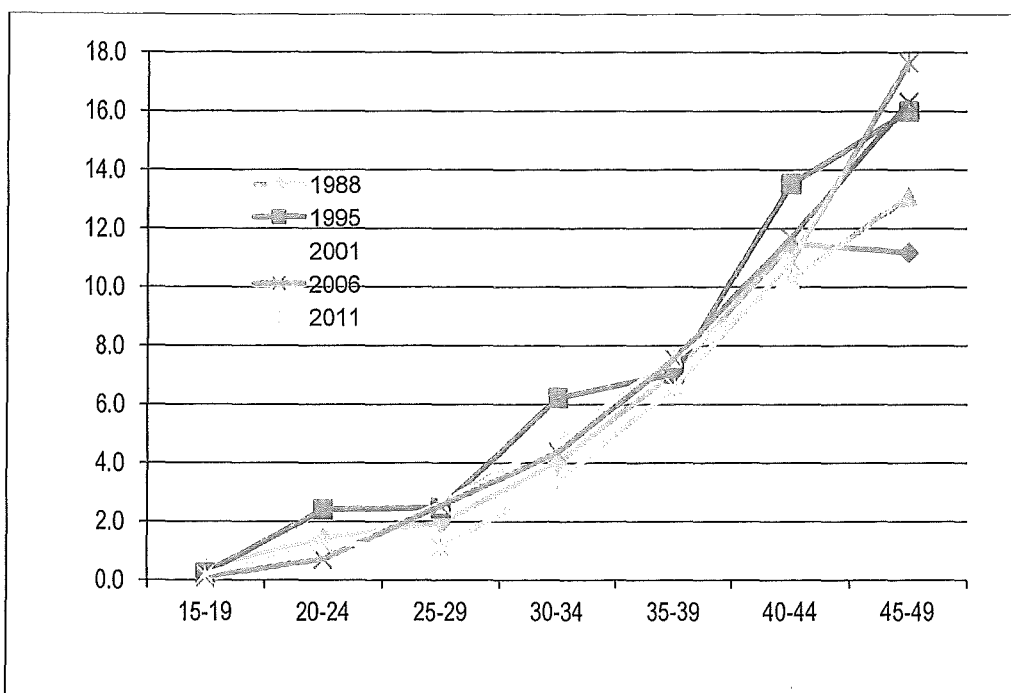


Figure 4. 9 Proportion of women widowed by age group in Uganda, UDHS (1988 to 2011)

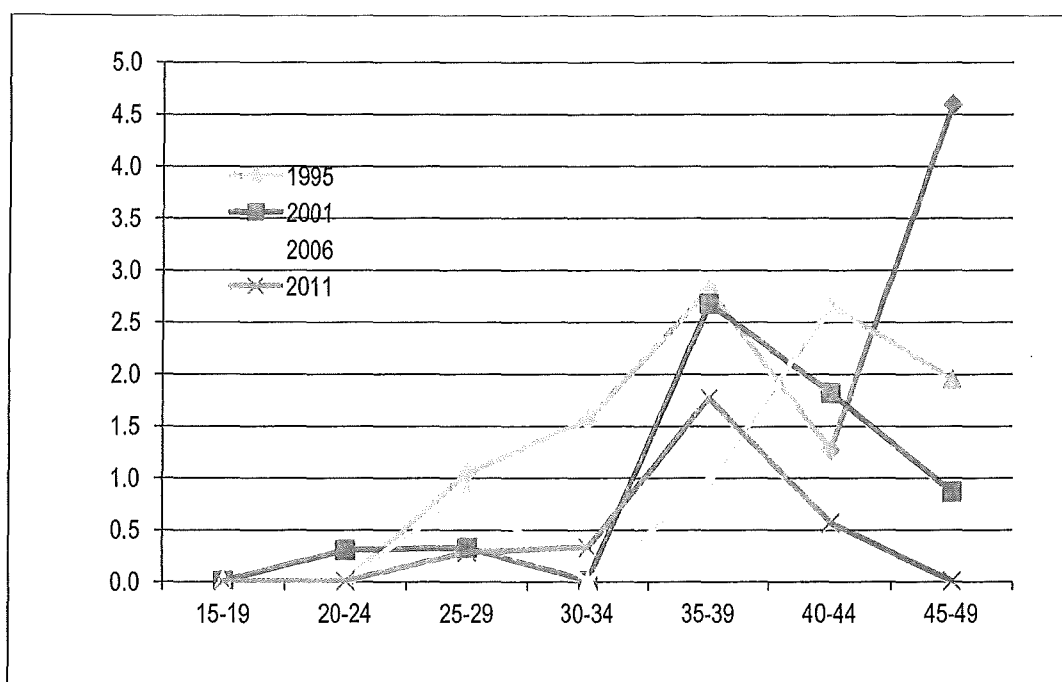


Figure 4. 10 Proportion of men widowed by age group in Uganda, UDHS (1995 to 2011)

4.4 Discussion

The primary objective of this chapter is to examine nuptiality trends, patterns and differentials in Uganda. The chapter is also used as an introduction to examining and understanding the correlates of cohabitation, the effect of cohabitation on marital stability and first birth presented in Chapters, five, six and, seven. Examining the nuptiality trends, patterns and differentials is a first step in understanding how any noticeable changes would influence future patterns in family formation. The measures of analysis used here are the proportions married, cohabiting, never-married, in polygynous union, dissolving their union and, widowhood. The singulate mean age at first marriage (SMAFM) was used to estimate the age at first marriage.

The findings from this chapter show some evidence that marriage levels in Uganda are declining and cohabitation is becoming more common. As the Uganda society continues to be influenced by modernisation forces, the factors which favoured marriage in general and the emergence of polygynous institutions weaken and disappear through the development of factors of change, for instance education. The emerging trend appears to support the proposition that marriage as a social institution could be weakening.

The rising trend in cohabitation could be attributed to a declining trend in marriage. A similar conclusion was arrived at by Copen, Kimberly, & Mosher, (2013) in the US and Posel & Rudwick (2013), Kalule-Sabiti et al. (2007) and Palamuleni (2010) in South Africa. This trend is not surprising for Uganda because there is indirect evidence which may be used to support this view. It is well known that education postpones marriage or early marriage limits educational attainment. In the case of Uganda, it is uncommon for a man or woman to attend formal high school education after first marriage (UBOS & Macro International Inc, 2007). In addition, education attainment is a key factor in achieving greater equality and emancipation for women thus relaxing the belief of universal marriage (Valerie & Welch, 1985). Evidence from a Canadian study found school enrolment to be responsible for lowering the rate at which individuals form unions (Zheng, 1998). This trend may further be explained by the high rate of unemployment and the rising living conditions in recent years, which makes it difficult for young men of marriageable ages to pay for the cost of marriage. Tolerance of cohabitation by the Uganda society may also be

used to explain the decline in marriage particularly among young adults which suggests that the rising trend in cohabitation may be either a transition to or a substitute to marriage.

The analysis found the SMAFM for women to have increased from 19 years in 1995 to about 21 years in 2011. Among men, SMAFM increased from nearly 23 years in 1995 to about 25 years in 2011. Another interesting finding is that the age difference in SMAM between the men and women has not changed significantly. Early marriage among women could be attributed to the cultural fear of loss of virginity (Ayiga & Rampagane, 2013). The observed trend in SMAFM has socio-demographic implications. This low age at marriage for women implies long exposure to the risk of pregnancy. As a result, if the contraceptive rate among married women remains low as is the case in Uganda (26% for women in union) (UBOS & ICF International Inc, 2012), the long exposure the risk of pregnancy would imply high fertility. This means that fertility (TFR=6.2 children) would either stall or take longer to decline. A small difference in SMAFM of about 4 years between the two sexes suggests better communication between spouses which is essential for maintaining stable relationships.

SMAFM was observed to vary with education, type of place of residence and region of residence. This variation may be linked to social and economic changes associated with education, residence and region. It is well known that the time spent in school is positively associated with the age at first marriage (Westoff, 2003). In the case of Uganda, married women are associated with low participation in education and vice versa. This is because once married, maintaining and caring for the family lies primarily more on women than men (UBOS & ORC Macro, 2001; UN, 2010). Therefore, the increase in educational opportunities of women is likely to postpone marriage, thus expressing differentials in age at first marriage. Differences in SMAFM between urban and rural areas were expected because women living in urban areas are likely to have more access to education facilities, are exposed to modern ways of living, and their labour force participation rates are usually high (Valerie & Welch, 1985). These factors make it difficult for women in urban to marry while young.

The observed variation in SMAM by regions of residence may be attributed to differences in socioeconomic development and culture. For example, the Central and the Western regions are more developed and are associated with higher participation levels in education than Northern and Eastern regions (Lubaale, 2013). Early marriage in the Northern region might be explained by two factors: (i) the civil war that lasted for nearly 20 years from 1986 to 2006. This war affected the traditional value system, means of production, and caused insecurity which led to displacement of the population. Majority of the formally displaced people were young and nearly 50% were under age 18 and about 25% lost one or both parents (Schlecht, Rowley, & Babirye, 2013); (ii) because of the civil war, the Northern region is characterised by low levels of development, high school dropout, and low access to and participation in education (UBOS & International Livestock Research Institute, 2007). Therefore, early marriage could have been used as a means of social and economic support. This observation is in line with prior studies which associated insecurity and conflict to early marriages (International Planned Parenthood Federation and the Forum on Marriage and Rights for Women and Girls, 2006; Schlecht et al., 2013; World Vision, 2013).

The Eastern region is characterised by low levels of economic development, highest level of poverty density and income inequality (UBOS, 2007). The high level of poverty density weakens family structures and leads to limited educational opportunities for children consequently affecting formalised marriage practices. As a result, poverty might have motivated children to enter into early marriages or unions. This view is consistent with previous research which associated highest poverty densities in Eastern Uganda with the high proportion of children in union (Lubaale, 2013).

Analysis of marriage relations revealed that the prevalence of polygyny is declining among women and increasing slightly among men. Polygyny was found to vary with age, place of residence and educational attainment. The observed differences in polygyny with old cohorts having higher rates compared to young cohorts could be associated with lack of exposure to the factors of change such as education and urbanisation. In most cases, old people are more likely to be traditional and bent to the old-fashioned notions of society when it was normative to have many wives. In addition, belonging to an older cohort of

women implies that such women might have been exposed to the risk of having a co-wife for a longer period than belonging to a recent cohort of women. This view is consistent with previous research which associated decline in polygyny in sub-Saharan Africa to the different stages of transition towards modernisation (Fenske, 2013; Hayase & Liaw, 1997; Kalule-Sabiti, 1983). Examples of modernisation factors of change are education, health, monetization, urbanisation and mechanisation. Education and urbanisation come with modernity which, on the one hand, weakens and sometimes reverse the advantages of living in polygynous relations and on the other, relax the belief that every woman must get married. The movement from the traditional methods of production to mechanisation could also have downsized the need to have enough labour for the family.

Differences in polygyny by type of residence with rural areas having higher rates compared to urban areas could be attributed to three factors: (i) polygyny is inversely correlated with educational attainment and cost of living. In Zimbabwe, low levels of polygynous unions in urban areas compared to rural areas were attributed to the high level of women education, high cost of living, high cost of raising and educating children and, to the weak kin-network (Hayase & Liaw, 1997). In urban areas, individuals have more access to schools thus, are characterised by high participation in education; (ii) in urban areas where the informal sector play a major role, women are usually important for production and reproduction; (iii) differences in material possession between rural and urban areas with rural areas having more access to land compared to urban areas (Otiso, 2006). In the rural areas, women contribute towards subsistence production and also reproduce children necessary for men's continued lineage, labour and status (Valerie & Welch, 1985). Jacoby (1995) in a study carried out in Côte d'Ivoire found the prevalence of polygyny to be high in rural areas which he linked to women's role in agricultural production. Therefore, the economic utility of polygyny observed in this study, for this population, seems to increase with increase in subsistence agriculture; and in places where society is most traditional. These factors could be used to explain the observed regional variation with rates highest in Northern and Eastern regions that are poorer, less developed, and have poor access education compared to Western and Central regions where education and urbanisation levels are much higher.

With respect to union dissolution, the findings from this study show that over time, separation or divorce among men and women has been declining. Nevertheless, rates for women were higher compared to that of men. This finding shows that more women than men dissolved their unions. However, in a society where polygyny and the patriarchal system are favoured, men are unlikely to report that they have ever dissolved their unions when they have other wives which explain the difference between men and women.

As with separation or divorce, union dissolution following widowhood showed an increasing trend among women with the highest increase among women aged 45-49. Regarding men, the trend declined monotonically. The findings show that over time, more women lost their partners than men did. It could also suggest that more men remarried than women did. Men usually marry women younger than themselves and they also have a lower life expectancy than women (Ntozi & Kabera, 1988). Because of HIV/AIDS and loss of cultural values, widow inheritance which would have reduced the number of widows was discouraged by the anti-HIV/AIDS campaign. Though a declining trend was observed, it follows from the above that the number of widows is expected to be higher than widowers. A similar conclusion was arrived at in Botswana (Dintwat, 2010).

Analysis of the never-married shows that the proportion never married declines with increase in age. However, in Uganda as a whole, the general trend suggests that overtime the percentage of never-married men and women slightly increased reaching an all-time high in 2011. This finding suggests that eligible men and women were postponing their unions. This finding might be associated with the effect of education and urbanisation, which may have increased the age at first marriage. For example in Uganda, free primary and secondary education could be used to explain why there is an increase in the percentage of the never married cohort among men and women who are old enough to marry or get married. Among women, this finding could also be attributed to the cumulative number of females attending primary and secondary education, and affirmative action in tertiary institutions. This is because, under the Uganda school system, it is not common to attend formal high school after marriage (UBOS & ORC Macro, 2001). This view is consistent with a previous study that linked increase in education to a slight increase in the age at first marriage in Uganda (Ayiga & Rampagane, 2013). This translates into an increase in the proportion people never married. Thus, in order for individuals to acquire

the education of their choice, they had to postpone entry into union. In a broader sense, results from this study contribute to our understanding of the nuptiality patterns. Further analysis can thus be done to establish the factors which predict cohabiting unions at individual level; and also explore how cohabitation influences marital stability and consequently first birth.

4.5 Summary of findings

This chapter investigated nuptiality trends, patterns and differentials in Uganda. The aim was to use the trend in macro level analysis as a first step in understanding marriage patterns. This would be a basis when examining, at individual level, the predictors of cohabitation and its influence on marital stability and first birth presented in chapters five, six and seven. From the findings presented in the various sections of this chapter, it is evident that marriage in Uganda has been declining and cohabitation becoming more common. Overall, these facts reveal that if the future trend is to depend on the recent past, there is a possibility that marriage will continue to decline and cohabitation to rise. Also, the analysis suggests that many Ugandans still prefer to be married or to cohabit than to remain single or never-married.

4.6 Limitation

As a first limitation of this analysis, the SMAFM may have been affected by errors in age reporting and marital status classification resulting from social desirability. Thus, some respondents could have married before age 15 and sex may have occurred outside marriage which may not have been accounted for on account of the Hajnal (1953) method used to compute SMAM thus affecting the value of SMAM.

CHAPTER 5: PREDICTORS OF COHABITATION

5.1 Introduction

In the previous chapter, we examined the nuptiality trends, patterns and differentials in Uganda. The trend in cohabitation was found to be increasing. Despite the rising trend in cohabitation as a form of union in Uganda, the prevalence and predictors of cohabitation as a form of first union has not been explored. Using data collected from central Uganda, this chapter uses univariate and bivariate analyses and binary logistic regression to examine the predictors of cohabitation as a form of first union.

The growing body of literature indicates that cohabitation as a form of sexual union has been rising in developed and developing countries; and is said to be influencing nuptiality patterns in recent times (Kiernan, 1991, 2001; Mokomane, 2005a, 2013; Posel & Rudwick, 2013). Recent demographic research on family demography indicates that 60% of women in the United States marry after cohabiting as a form of first union (Kennedy & Bumpass, 2008). In addition, in the United States, recent data suggests that 48% of the women between 2006 and 2010 cohabited with their partners before entering their first union (Copen et al., 2013). In their research, Heuveline and Timberlake (2004) argued that the trend of cohabiting prior to marriage has become a normal path among women in the United States. In addition, cohabiting prior to first marriage in the US was found to be declining with the increase in education attainment, about 70% of the women with less than high school diploma and about 47% of those with a bachelor's degree or higher cohabiting first as a form of union (Copen et al., 2013).

In Kenya, the prevalence of cohabitation among university students was found to be 27.4% (Muriithi et al., 2011) while in South Africa, the prevalence was lower among whites than African women (Posel & Rudwick, 2013). In 1991, the proportion of cohabiting unions relative to all unions in Botswana was 30.1% and by 2001, the proportion had risen to 48.1% (Mokomane, 2005a). Using the five rounds of UDHS data (discussed earlier in Chapter four), the results of the analysis showed that the proportion of women cohabiting relative to all unions increased from 13.8% in 1988 to 26.3% in 2011. Contrariwise, during the same period, the proportion of women who were married declined from 50.8% to 35.4%. In explaining such changes in nuptiality behaviour, Oppenheimer (1988)

emphasized women's educational attainment, increase in labour force participation rates, and change in women's attitude to marriage.

This chapter consists of 10 sections. After the introduction, the method of analysis is presented in section 5.2. This is followed by the background characteristics of the respondents presented in Section 5.3. This is followed in Section 5.4 by the description of the differentials in first union status by the selected background characteristics. This is followed by the findings of the unadjusted analysis in Section 5.5. In Section 5.6, the findings of the adjusted multivariate analysis are presented. The results of the diagnostic tests are discussed in Section 5.7. In Section 5.8, the findings of the qualitative survey are presented. In particular, we want to identify other factors influencing cohabitation as a form of first union. This is followed by the discussion in Section 5.9. In Section 5.10, the summary of findings are presented and limitations in Section 5.11.

5.2 Methods of Analysis

The analysis for this chapter includes three stages: (i) univariate; (ii) bivariate and (iii) multivariate analysis. Univariate analysis was used to describe the variables, while the relationship between the dependent variable measured whether or not a woman cohabited as a form of first union and the independent variables was established at a bivariate level. The chi-square test statistic was used to assess whether the relationship between the dependent variable and independent variables is statistically significant. At multivariate level, logistic regression was used to determine the net effect of independent variables on the dependent variable. In modelling, women who married directly as a form of first union were the reference category, giving us a subsample of 865 women respondents for the analysis. The logit function obliges the model prediction to be between 0 and 1, as it is always the case when modelling probabilities (Hosmer & Lemeshow, 1989). In addition, the age of the woman was modelled as a continuous variable to avoid loss of data resulting from uncertainty in defining cut-off points (Cleves, Gould, Gutierrez, & Marchenko, 2010; Royston, Ambler, & Sauerbrei, 1999). The relationship between cohabitation as a form of a first union was established using multivariate fractional polynomial which is a statistical approach that models the influence of continuous covariates on the outcome variable in a regression. The advantage with using multivariate fractional polynomials is that, it shows

different effects for different ages. According to Kohler & Kreuter (2012), the logit model takes the form shown in (5.1).

$$\ln\left(\frac{P_i}{1-P_i}\right) = \alpha + \beta_i X_i \quad (5.1)$$

Where:

$\ln\left(\frac{P_i}{1-P_i}\right)$ - are the log odds that a woman 'i' would cohabit;

X_i - is the vector of explanatory variables and;

β_i - are the coefficients.

Thus, given the above regression equation, the expected probability $\hat{p}$ that $Y=1$ for a given value of X is calculated as,

$$\hat{p} = \frac{e^{B_0 + B_1 X}}{1 + e^{B_0 + B_1 X}} \quad (5.2)$$

The fitted model was subjected to a number of diagnostic tests to assess its validity as described in Section 5.3.1.

5.2.1 Diagnostic tests

The fitted model was subjected to three tests: (i) the link-test; (ii) the classification analysis and (iii) the Hosmer-Lemeshow goodness of-fit (H-L gof). The link-test was used to examine whether the explanatory variables were specified correctly and also to assess whether the analytical model used was appropriate (Hilbe, 2011; Kohler & Kreuter, 2012). This test uses the "hat and hat-squared" statistic. When the model describes the data correctly, the "hat squared" should not be significant ($_hatsq: p>0.05$) and the "hat statistic" should be significant. This suggests that any additional explanatory variables (including interaction variables) could only be significant by chance (Cleves, Gould, Gutierrez, & Marchenko, 2010). The classification analysis was used to show the percentage of cases the model explains (Hilbe, 2011).

The Hosmer-Lemeshow goodness of-fit (H-L gof) statistical approach was used in this study to assess the overall fit of the model. The H-L gof statistic divides the data into groups and according to Hosmer & Lemeshow (2000) and Kohler & Kreuter (2012), the default is 10 groups (or number of covariates plus one). The analytical model used for this chapter has nine variables thus 10 groups were used. This method compares the frequency values to estimate a chi-square value known as H-L gof. The H-L gof statistic and the p-value are used as a basis to examine how well the model describes the observed data. It tests the hypothesis “that there is no difference between observed and expected values”. Statistically, a lower H-L chi-square value statistic and an insignificant p ($p>0.05$) imply less variance in the fitted model thus, suggesting that there is no significant difference between the observed and predicted values. This implies that the model fits the data well, at the acceptable level of significance. On the contrary, if the H-L chi-square statistic value is significant, the model does not fit the data well because the observed and expected values are significantly different. According to Kuss (2002), the Hosmer-Lemeshow test statistic “H” takes the form shown in (5.3).

$$H = \sum_{k=1}^K \frac{(O_k - E_k)^2}{N_k \pi_k (1 - \pi_k)} \quad (5.3)$$

Where:

O_k -observed events;

E_k -expected events;

N_k -observations;

π_k - predicted risk for the k^{th} risk decile group;

K - is the number of groups (number of covariates plus one).

5.2.2 Variables Considered in the Analysis

Cohabitation as a form of first union was considered as a dependent variable because second or higher unions are likely to be associated with high incidence of cohabitation. It was constructed on the basis of the question, “In what year did you first live together with your partner in the same household as if married?” and “when did: (i) the introduction

(customary marriage) take place, religious ceremonies (religious marriage) take place or civil registration take place?”. During the interview, these questions were followed with the question, “how many times have you ever been married?”. It is from these questions that cohabitation as form of first union was measured. Worth mentioning is that marriage in Uganda is a process and whoever lives together in the same household with her partner regards herself, in the local sense, as a married person. Therefore, a woman who was living with a man in the same household, as if married, and did not fall in any of the above recognised marriage types, was reported as cohabiting thus the cohabiting variable. A cohabiting woman as a form of first union was coded “1” and “0” for those who married directly. Married women were only those who married directly for the first time according to the custom, the law or religion.

A woman’s level of education was used as an approximation for the measure of human capital. Economists usually use this variable to test the independence hypothesis that gains from marriage decreases as the earnings and labour force participation of women rises (Becker, 1981). The rise in earnings and labour force participation rates are often associated with a rise in the education of women. Available evidence shows that in Uganda, about 13% of females aged between 15 and 49 have never attended formal education (UBOS & ICF International Inc, 2012). This was used as a basis to generate four categories, namely: no education, primary, secondary and tertiary education. Religious affiliation was captured as a proxy for religiosity. Respondents were asked about their religious affiliation. Specifically, they were asked to indicate whether they were Catholic, Anglican, Muslim, Pentecostal, SDAs, and Orthodox Christians. Employment status variable is an indicator of the connection one has to the labour market. It demonstrates the prospects an individual woman has to face in the labour market. It was captured and modelled as a dummy variable showing whether the woman during the time she entered into first union, was working or not.

Childhood place of residence in which an individual was nurtured during childhood may influence one’s view and response to a number of social issues. It is expected that individuals who grow up from different places may also behave differently in society (Liefbroer & Dourleijn, 2006; Lillard et al., 1995). Participants were asked to indicate whether they grew up from “urban”, “semi-urban” or “rural” areas. Peer influence is often

associated with peer social adaptation. Available information shows that individuals usually model the behaviours of their peers. It was captured and included in the model as a categorical variable indicating whether an individual woman would advise her friend to cohabit as a transition stage to marriage or not to cohabit at all. With regard to expectation that cohabitation maintains union stability, women were asked to respond “yes” or “no” to the question, “Does cohabiting first result in union stability?”

Paternal and maternal education was perceived differently from the economists’ view as a proxy for human capital in the labour market. Instead, it is taken to represent the socioeconomic advantage young people may have in the family while growing up (Barber & Axinn, 1998; Willoughby & Jones, 2012). It was assumed to have a causal effect on a woman’s behaviour during her early stage of development. During data collection, the level of education of the father and mother were captured as no education, primary, secondary, post-secondary and “I do not know.” In modelling using logistic regression, 3% cases of paternal education and 3.5% of maternal education cases for which respondents indicated “I do not know” were dropped because they were noncommittal and post-secondary was labelled “tertiary”. This explains why cases reduced from 865 to 819 as presented in Table 5.4. Therefore, in the final model, the categories were collapsed into four as, no education, primary, secondary and tertiary education. With regard to parental marital status, the general theory among sociologists has always postulated that in the course of growing-up, children would be influenced by the behaviours of their parents (Bandura, 1978). Women were asked to indicate whether and when during the process of development, parents were cohabiting, married, separated, divorced or single.

5.3 Results

This section presents the background characteristics of the respondents and the target population. The study targeted a total of 1200 women respondents. However data was collected from 1191 respondents. Of the 1191 women, 865 were in union. Nearly 77% of women in union cohabited upon entering into first union and about 23% married directly. The background characteristics considered were age, education, religious affiliation, childhood place of residence, employment status, expectation about union stability, peer influence, parental education attainment and parental union status.

5.3.1 Age at First Cohabitation

In the survey, data on age at first cohabitation were collected by asking the respondents to state their date of birth and date at which they started living together with a partner for the first time in the same household as if married. It was from these two variables that the age at first union was computed. The median age of women respondents was found to be 28 years while the mean was 29 years. The age of the women respondents was captured as a continuous variable and is often included in models after categorizing. Nonetheless, Royston, Altman, & Sauerbrei, (2006) argued that turning continuous variables into dummy variables using categorization may lead to loss of important information. This is because categorizing leads to several problems including loss of information, reduction in predictive power, and uncertainty in defining the cut-point (Royston et al., 1999). In view of the above, the relationship between cohabitation as a form of first union and age as a continuous variable was established using multivariate fractional polynomials (FP). This is a statistical approach used to establish relationship between the dependent variable and the predictor continuous variable.

5.3.2 Women's Level of Education

A woman's level of education has been well-documented to be among the factors which influence lifetime events including family formation (Dintwat, 2010; Gurmu & Mace, 2013). Besides, education equips an individual woman with skills for carrier development and expectation necessary to compete favourably in the labour market. Furthermore, education may influence an individual's choice of a partner, type and time of union and marriage practices, and the level of economic interdependence (Becker, 1974). Considering the women interviewed in the survey, over half of the respondents (60.1%) had attained at least secondary education and of these, 13.9% had tertiary education, nearly 34% had primary level education and only about 5% had no education (Table 5.1).

5.3.3 Religious Affiliation

Although religious affiliation may not automatically mirror religiosity, the general belief is that individuals from families with strong religious values are unlikely to cohabit (Manning, Longmore, & Giordano, 2007; Willoughby & Carroll, 2012). This is because a strong

religious belief may be a proxy for religiosity. In addition, religion indirectly strengthens the control of elders over their children's sexuality thus influencing their morals on the one hand, and that of society, on the other. The distribution of women respondents according to their religious affiliation shows that about 78.8% of the respondents were Christians and of these 36% were Catholics, 26% Anglican, about one in eight were Pentecostal and 4.3% were SDA. Muslims constituted only 18.5%. The remaining 4% belonged to other beliefs.

5.3.4 Childhood Place of Residence

The environment in which an individual is nurtured during childhood may influence one's view and response to a number of social issues. It is therefore expected that individuals who grow up from different places may also behave differently in society thus affecting shared community values (Mukiza-Gapere & Ntozi, 1995). This is because living in urban or rural areas may, for example, have an influence on the type of education and the skills one acquires which may in turn influence the decision to form a union and the type of union to be formed. Urban women are expected to control their sexual life compared to their rural counterparts. Respondents were asked to state their type of place of residence before they formed their first union. The results are summarised in Table 5.1. The results show that 67.9% of the women said they lived in rural areas, 23.2% lived in semi-rural areas while only 9% grew up in urban areas.

5.3.5 Employment Status

The employment status of the respondent may reduce the intensity of economic interdependence of women on men. On the one hand, work may positively influence family formation and individual attractiveness in the marriage market. On the other hand, it may make young employed adults economically independent which may influence the process of forming a union (Baizán et al., 2003; Dintwat, 2010; Mookodi, 2004). Respondents were asked to state whether they were employed before entering into their first union. The results are also summarized in Table 5.1. Nearly 71% of the women respondents said they were in employment while 29% were not. With regards to the sector of employment, about

53% said they were employed in the informal sector, 11% were in the formal employment, 25% were students and about 11% were housewives.

Table 5.1 Distribution of women respondents by background characteristics, Central Uganda 2013

Variable	N (1191)	Proportion of Women
Education		
None	64	5.4
Primary	409	34.3
Secondary	553	46.4
Post-secondary	165	13.9
Religion		
Catholic	434	36.4
Anglican	314	26.4
Muslim	220	18.5
Pentecostal	138	11.6
SDA	52	4.3
Others	33	2.8
Employment status before forming first union		
Yes	841	70.6
No	350	29.4
Type of place of childhood residence		
Rural	809	67.9
Semi-Rural	276	23.2
Urban	106	8.9
Expectation about Union stability		
Yes	612	51.4
No	579	48.6
Peer Influence		
Should never be done	537	45.1
Acceptable only as part of a transition	523	54.9
Paternal Education		
No Education	314	27.3
Primary	329	28.6
Secondary	318	27.7
Post-Secondary	188	16.4
Maternal Education		
No Education	395	34.5
Primary	438	38.2
Secondary	220	19.2
Post-Secondary	93	8.1
Parental union status		
Cohabiting	580	48.7
Married	531	44.6
Separated	26	2.2
Widowed	17	1.5
Single	37	3.1

Source: Survey data, 2013

5.3.6 Expectation about Union Stability

The relationship between cohabitation and union stability dates back to the 1970s when (Becker, Landes, & Michael, 1977) presented their theory on match-specific-quality, which is supposed to translate into union stability in the course of the union. However, some critics argue that this would be true if cohabitation is followed with engagement and marital plans (Kline et al., 2004). In the light of this inconclusive evidence, respondents were asked to state whether or not cohabitation is likely to result in stable marriage. The results are summarised in Table 5.1. About 51% of the women said cohabitation before marriage was more likely to result in stable marriage while 49% disagreed or thought otherwise.

5.3.7 Peer Influence

Evidence from developed countries attribute acceptance of cohabitation and its subsequent rise to the role of social context (Manning, Cohen, & Smock, 2010). Social context which works through factors such as peers is believed to influence the individual's decision to cohabit with the intention of forming a union (Wolfinger, 2001). In the course of development, children assimilate beliefs of their peers and are expected to model their behaviours basing on the way others in their social environment behave. This suggests that positive views towards cohabitation resulting from peer group adaptation or social network, may influence young people intending to form sexual union, to cohabit (Nazio & Blossfeld, 2003; Zito, 2013). Respondents were asked to state whether they would advise or not cohabitation is likely to result in stable marriage their peers to cohabit when entering first union. A summary of the results are presented in Table 5.1. Results show that nearly 55% of the women respondents said they would do so only as part of transition to marriage, about 45% responded that cohabitation should never be done at all.

5.3.8 Parental Education Attainment

Paternal education in this case is perceived differently from the economists' view as a proxy for human capital in the labour market. Instead, it is taken to represent the socioeconomic advantage young people may have in the family while growing up. It is assumed to have a casual effect on a woman's behaviour during her early stage of development (Barber & Axinn, 1998; Willoughby & Jones, 2012). Based on this

assumption, higher paternal education attainment may lead to a liberal lifestyle thus leading to the growth of non-marital cohabitation. Results on paternal education in Table 5.1 show that nearly 29% of the fathers to the women respondents had primary level education, 44% had above secondary level, while about 27% had no formal education.

Similarly, maternal education represents the mother's potential socio-economic status which is indicative of the children's social class and development while growing up. It may indirectly affect the child's choice of a partner, marriage type and practice, and the level of economic interdependence (Barber & Axinn, 1998; Willoughby & Jones, 2012). Data on maternal education presented in Table 5.1 show that about 38% and 8% of the women reported that their mothers had primary education and tertiary education respectively, and approximately 35% said that their mothers had no formal education.

5.3.9 Parental Union Status

According to the social learning theory, children model the behaviour of their parents in the course of growing-up (Manning et al., 2010). This theory implies that those who grow up with married parents would be unlikely to cohabit as they enter their first union. However, while the relationship between parental marital status and their children's sexual union has been debated in the recent past, it has had divergent views. Manning et al (2007) found potential links while no association was found by Willoughby & Carroll (2012). Based on this differing evidence, women were asked to state their parents' marital status as a time-varying variable. The results in Table 5.1 show that nearly half of the women respondents (49%) had their parents in a cohabiting relationship at the time they themselves went into cohabitation as their first union while about 45% said their parents were in a married state. Respondents, whose parents had separated, divorced or were not in union accounted for only 7%.

5.4 Differentials in cohabitation as a form of first union by Background Characteristics

After describing the characteristics of respondents using univariate analysis in Section 5.3, this section presents data on the differentials in cohabitation as a form of first union by

selected background characteristics. These characteristics are summarised in Table 5.2 and they include level of education, religious affiliation, employment status, childhood place of residence, peer influence, level of paternal and maternal education, parental union status, and expectation about union stability. Overall the proportion of women who started their first union through cohabiting was about 77% and varied by education. It was highest among those with secondary school education (44.6%) followed by women with primary (38.9%) and lowest for those with no education (4.9%). Differentials by religious affiliation showed that the percentage of women who cohabited as a form of first union was highest among Catholics (35.7%) followed by Anglican (28.6%), Muslim (17.3%), Pentecostal (10.3%), and lowest for the SDA (3.6%). Regarding peer influence and expectation about union stability, the percentage of women who cohabited as a form of first union was 65% and 35% for those who were in agreement to cohabit as part of transition and those who were against; 62% for women who were in agreement that cohabitation maintains union stability and 38% for those who were not in agreement at all.

Differentials by employment status and type of childhood place of residence however showed evidence of non-significant variation. The percentage of women who cohabited as a form of first union was highest for women who were working (76.4%) and 23.6% for those who were not; highest for women in rural areas (71.1%) compared to those in urban areas (8.5%).

Cohabiting women who reported their fathers had primary education were 31.1%; 29.3% reported that they had no education; 26.5% said that they had secondary education and those who reported post-secondary were 13.1%. Regarding maternal education, entering into a cohabitating relationship at first union by the daughter increases with increase in mother's level of education up to secondary and thereafter drops to low levels for women with tertiary education. The percentage of women cohabiting was 18.4% for secondary, 40.1% for primary, 36.1% for no education and 5.4% for tertiary education. Differences by parental union status indicated that the percentage of women who cohabited as a form of first union was highest for parents who were cohabiting (52.7%) followed by married (40.8), single (3.2%), and lowest for parents who were divorced (1.4%). These results showed significant variations (see Table 5.2) in the percentage of women cohabiting as a form of first union by background characteristics.

Table 5. 2 **Differentials in percent of women cohabiting as a form of first union by background characteristics**

Background characteristics				
Variable	N	Proportion Cohabiting	Proportion Married	Chi ² (X ²)
Education				
No education	50	4.9	8.9	18.32 (p=0.000)
Primary	330	38.9	35.6	
Secondary	367	44.6	35.2	
Post-secondary	118	11.7	20.3	
Religious affiliation				
Catholic	303	35.7	33.0	15.26 (p=0.009)
Anglican	233	28.6	21.6	
Muslim	165	17.3	25.1	
Pentecostal	96	10.7	12.3	
Seventh Day Adventist	36	3.6	6.2	
Other	31	4.1	1.7	
Employment status				
Yes	655	76.4	73.6	0.77
No	210	23.6	26.4	(p=0.381)
Childhood place of residence				
Rural	612	71.1	69.7	0.57 (p=0.754)
Semi-rural	176	20.4	20.2	
Urban	77	8.5	10.1	
Expectation about union stability				
Yes	477	62.0	32.2	62.95
No	388	38.0	67.8	(p=0.000)
Peer influence				
Should never be done	356	35.0	61.8	51.44
Acceptable only as part of transition	509	65.0	38.2	(p=0.000)
Paternal education level				
No education	245	28.5	27.8	12.87 (p=0.02)
Primary	247	30.2	22.9	
Secondary	220	25.8	24.2	
Post-secondary	127	12.7	21.2	
Maternal education level				
No education	307	35.0	37.0	16.45 (0.002)
Primary	323	38.9	32.1	
Secondary	147	17.8	14.1	
Post-secondary	58	5.3	11.5	
Parental union status				
Cohabiting	409	52.7	29.1	46.94 (p=0.000)
Married	402	40.8	65.6	
Separated	15	2.0	0.9	
Divorced	10	1.4	0.4	
Single	29	3.2	4.0	
ALL	865	77.1	22.9	

Source: Survey data, 2013

Earlier in this chapter (Section 5.3.1), we explained fractional polynomials as a method of analysing the relationship between the probability of cohabiting and age at first union. Figure 5.1 presents the relationship between the probability of cohabiting and the woman's age at first union. Women who cohabitated on entering into their first union were concentrated between age 15 and 28. The mean and median age at which women entered into their first cohabitation was found to be 18 years which compares well with the mean age at first marriage which was estimated in Chapter four at 19.6 years.



Figure 5. 1 Fractional Polynomial adjusted for covariates

5.4.1 Variables Considered in modelling as Potential Predictors

The final model, including background factors that are known to influence the decision to cohabit on entering first union, was built based on the identified predictors explained by the bivariate analysis. In essence, all significant independent variables at bivariate analysis were included in the final model, in which the dependent variable is cohabitation as a form of first union. These include education, religious affiliation, peer influence, paternal and

maternal education, parental union status and expectation about union stability. Employment status and childhood place of residence were not significant. However, studies conducted in elsewhere in Africa (Calvés, 1999) found childhood place of residence to be associated with the marriage process in Cameroonian mothers. Edin (2000) also found working never-married mothers in the United States reluctant to marry, giving reasons ranging from diminished respectability to domestic violence. Based on the above findings, employment status and type of childhood place of residence were also included in the final model.

5.5 Findings of the Unadjusted Analysis

Following the bivariate analysis and diagnostic tests in the previous sections, this section looks at unadjusted logistic regression. Table 5.3 shows the results of unadjusted logistic regression. Compared to marriage, the table shows that the odds of first cohabitation were significantly higher for women with secondary education (OR=1.48), affiliated to the Anglican Church (OR=1.45), those whose paternal (OR=1.44) and maternal (OR=1.30) education was primary; and those who were advised by peers to cohabit as part of transition (OR=2.22) or to do so for any other reasons (OR=2.51). The results tabulated further show that the odds were considerably lower for women who had post-secondary education (OR=0.52), affiliated to the Muslim faith (OR=0.62), those whose paternal (OR=0.53) and maternal (OR=0.42) education was post-secondary. The effect was highly significantly lower for women whose parents were married (OR=0.36) and those who were not in agreement that cohabitation maintains union stability (OR=0.29).

Table 5. 3 Multivariate logistic regression results linking first cohabitation and marriage for women, and individual characteristics: Central Uganda, 2013

Variable	Unadjusted		Adjusted	
	OR	95% CI	OR	95% CI
Women education level				
No education ®				
Primary	1.15	0.84-1.56	2.21*	1.09-4.49
Secondary	1.48*	1.09-2.01	2.75*	1.34-5.65
Tertiary	0.52*	0.35-0.77	1.14	0.48-2.68
Employment status				
Yes ®				
No	0.86	0.61-1.21	1.00	0.68-1.48
Religious affiliation				
Catholics ®				
Anglican	1.45*	1.02-2.07	1.26	0.80-1.98
Muslim	0.62*	0.44-0.89	0.66**	0.42-1.05
Pentecostal	0.86	0.54-1.35	0.96	0.54-1.72
SDA	0.56	0.29-1.08	0.43*	0.19-0.97
Orthodox Christians	2.44	0.85-6.98	2.23	0.71-7.06
Expectation about union stability				
Yes ®				
No	0.29***	0.21-0.40	0.36***	0.22-0.59
Childhood place of residence				
Rural ®				
Semi-rural	1.01	0.70-1.46	1.11	0.72-1.73
Urban	0.83	0.50-1.36	1.13	0.62-2.08
Peer influence				
Should never be done ®				
Acceptable as part of transition	2.98***	2.60-3.42	1.74***	1.42-2.15
Paternal education level				
No education ®				
Primary	1.44*	1.01-2.04	1.03	0.62-1.73
Secondary	1.07	0.76-1.51	0.79	0.46-1.35
Tertiary	0.53*	0.36-0.78	0.64	0.34-1.19
Maternal education level				
No education ®				
Primary	1.30**	0.95-1.79	1.18	0.74-1.87
Secondary	1.29	0.85-1.96	1.59	0.89-2.83
Tertiary	0.42*	0.25-0.70	0.84	0.39-1.84
Parental union status				
Cohabiting ®				
Married	0.36***	0.26-0.49	0.34***	0.23-0.48
Separated	2.26	0.51-9.94	3.63	0.44-29.67
Widowed	3.31	0.42-25.74	1.59	0.17-14.90
Single	0.79	0.36-1.72	0.33*	0.14-0.81
-2 log likelihood	533.0		423.9	
N			819	

Source: Survey Data, 2013; *p<0.05; **p<0.10; ***p<0.0001; ® Reference Category; OR-Odds Ratio; CI-Confidence Interval

5.6 Findings of the Adjusted Multivariate Analysis

Findings from the unadjusted analysis were further replicated at adjusted multivariate analysis. This was intended to determine precisely the net effect of individual characteristics on the woman's willingness to cohabit. The results are also contained in Table 5.3 which presents exponentials of regression coefficients (or odds ratios) and confidence intervals which are used to describe the influence of each predictor to the response variable. The odds that a woman in Central Uganda would cohabit on entering first union than marriage were significantly increased if she had primary education (OR=2.12); and increased from 1.48 in the unadjusted to 2.75 in the adjusted multivariate if she had secondary level compared to those without formal education.

With respect to religious affiliation, upon entering a first union, a Muslim woman was significantly less likely to cohabit than to marry. Table 5.3 further shows that the pattern of the covariate for women respondents was similar in the unadjusted and adjusted multivariate analysis. In the unadjusted model, the odds of first cohabiting for a Muslim woman was 0.62 times less than those of a Catholic woman. Despite an increase in odds from 0.62 in the unadjusted to 0.66 in the adjusted, the pattern still remained. Muslim women were 34% more likely to marry than to first cohabit if compared to their colleagues who are affiliated to the Catholics faith. Table 5.3 further shows that whereas the effect on Anglican women was significant at unadjusted ($p < 0.034$), where women were 45% (OR=1.45) more likely to cohabit than to marry, at adjusted multivariate level, the effect is not statistically significant (OR=1.26; $p < 0.314$). The results further show that SDA women were 57% (OR=0.43) less likely to first cohabit than to marry if compared to women affiliated to the Roman Catholic faith.

Considering the aspect that cohabitation maintains union stability, the results presented in Table 5.3 reveal that women who held a negative view about cohabitation were less likely to first cohabit than those who had a positive attitude. The odds are 0.29 in the unadjusted and 0.36 in the adjusted multivariate. This variable shows a highly significant effect on women's decision to cohabit. These findings are consistent with studies done in the United States (Willoughby & Carroll, 2012).

During the survey, women were asked whether they would advise their peers to first cohabit in the course of forming a union. The results show that compared to women who would advise peers never to cohabit, women who would advise friends to cohabit as part of a transition to marriage were more likely to cohabit. The odds of the two categories show significant results. In the unadjusted, the odds are 2.98 ($p < 0.000$) while odds are 1.74 ($p < 0.000$) in the adjusted multivariate.

The effect of paternal and maternal education on the women's likelihood to cohabit as they enter into their first union was also examined. As was discussed earlier in the unadjusted analysis, women born to fathers and mothers with primary education were more likely to first cohabit than marry directly if compared to those with no formal education. Similarly, women whose parents had tertiary education were less likely to first cohabit. While these effects were significant at unadjusted, they were not significant at adjusted multivariate level analysis.

The inclusion in the analysis of parental union status was based on the premise that it may influence sexual union attitude of their daughters (Willoughby & Carroll, 2012). The results in Table 5.3 further reveal that compared to women born to cohabiting parents, those whose parents were married were found to be less likely to cohabit as they enter into their first union. This effect is highly significant in the unadjusted model ($OR = 0.36$, $p < 0.000$) and in the adjusted multivariate model ($OR = 0.34$, $p < 0.000$). The results further show that despite being insignificant at unadjusted level, women borne to single parents were less likely ($OR = 0.33$) to cohabit upon entering first union than to marry if compared to women borne to cohabiting parents. The odds are significant at 5% level ($p < 0.016$).

5.7 Results of the Diagnostic Test for the Logistic Regression Model

Earlier in this chapter (Section 5.2.1), we described the link-test, classification analysis and Hosmer-Lemshow as methods used to diagnose the fitted model. The results of the diagnostic test are presented in Table 5.4. The table shows a significant hat-statistic ($_hat$ $p < 0.05$) and the hat-squared was not significant ($_hatsq > 0.05$). This test indicates that the log function was correctly specified (or the model did not suffer from under specification).

The classification analysis test indicates that, on average, the model explains nearly 80% of the cases. The overall predictive power of the model was evaluated using Hosmer-Lemeshow (H-L) goodness of fit. The results (see Table 5.4) show that the H-L statistic for the model is very low resulting in a non-significant *p-value* of 0.881 for the model. This suggests that there is no significant difference between the observed and expected values, which indicates that the model is excellent and describes the data well.

Table 5. 4 Results of Diagnostic Analysis

Statistic	Coefficient	Std. Err.	p>z
Hat statistic (_hat)	0.894	0.075	0.000
Hat statistic squared (_hatsq)	0.052	0.032	0.106
Classification analysis (% of cases explained)	79.9%		
Hosmer-Lemeshow χ^2 (8), number of groups (10)	3.72		
Hosmer-Lemeshow goodness of fit (H-L gof) $p>\chi^2$	0.881		

Source: Survey Data, 2013; Goodness of fit test for the logistic regression model presented in Table 5.3

5.8 Other factors Influencing first cohabitation (Qualitative Analysis)

In a bid to enrich the quantitative data, a qualitative study through in-depth interviews was undertaken to contribute to further explanations of why cohabiting is on the increase among the population under study in Uganda. In the course of in-depth interviews, women were asked to identify the important factors why they cohabited the first time they entered into a sexual union. The main factors mentioned were: peer pressure, financial problems, premarital pregnancy, saving for future development, and as a transition to marriage (which included learning and understanding each other before commitment).

Financial problems and transition to marriage emerged as key during in-depth interviews as factors influencing women to cohabit as they entered into their first union. Reflections about financial issues can be found in the following statements:

"By the time I got pregnant my husband was not in good financial position to arrange and introduce him to my parents as the Ganda culture demands. So, we started living together and make some preparations for the future", (In-depth Interview, Nkumba Central village and Luwero District).

".. I accepted to cohabit with my partner because of financial problems and yet I needed money for living because my parents had died", (In-depth Interview, Luwero District).

"...this kind of intimate relationship has helped us to save money other than spending it extravagantly in introduction and wedding parties because those who attend ceremonies come to eat and go. Our savings will be used in developing our family so that we can live comfortably", (In-depth Interview, Nkumba Central, Wakiso District).

Considering cohabitation as a transition to marriage, women who cohabited as they were entering into a sexual union emphasised that they needed to learn and understand each other through first living together. Here are some of the statements made by some respondents:

"It is good to first cohabit because you get to know the person and personality of the would be husband or wife before committing yourself; and this helps to strengthen the relationship as you plan for marriage in future. This relationship is good because it is like a school. Since the intention is to make a good family in future once you fail to agree you automatically try elsewhere", (In-depth Interview, Luwero and Nkumba Central village, Wakiso Districts).

Peer pressure and premarital pregnancy were the other factors which came up as predisposing women to cohabit as they entered into a first union:

"Many people cohabit as they enter in first union because of pressure from their friends; you can reach a stage and start seeing yourself as someone who is ageing (growing old) and yet your friends are married and having children. So, they start pressurizing you to enter a union. This induces one to join a cohabiting relationship in order to do away with your friends' pressure."

"I did not want to cohabit but because I conceived when dating my partner, I was forced to cohabit. Sometimes, the pressure comes from parents. According to the Ganda (Buganda) culture, it is uncommon to stay in the same house with your parents when you are pregnant. Thus, by virtue of your pregnancy status, you are forced to join the person responsible for the pregnancy" (In-depth interview, Kasangombe village Wakiso district).

The general observation which came-up in the course of the interviews was that most women would love to get married; however, it is because of the issues ranging from social (for example, financial hardship) to biological (for example, reproductive life span) which directly or indirectly influenced them to entering into cohabiting relationships as a form of first union.

5.9 Discussion

This chapter focused on identifying the factors which influence women in Central Uganda to cohabit on entry into first union. The results show that nearly 77% of the women cohabited with their partners the first time they entered into union. These results attest to the common practice which reveals that a large number of couples begin a relationship by cohabiting as they prepare to get married before they get committed to each other. In addition, these findings seem to support the notion that the probability of cohabiting is high among young women. There is evidence that cohabitation is more common among the young (Figure 5.1), an effect which may be attributed to modernization (Lesthaeghe & Surkyn, 1988; Otiso, 2006).

The results of the bivariate analysis have confirmed that education of the woman, religious affiliation, expectation that cohabitation guarantees union stability, peer influence, paternal education, maternal education and, parental union status were significantly associated with cohabitation as a form of first union. This analysis lends support to the studies done in the United States (Willoughby & Carroll, 2012) and in Kenya (Kabaria, 2012) among college students which linked several socio-economic factors of women to their attitude towards cohabitation as a form of first union. The results are however contrary to the study conducted in Brazil (Covre-Sussai & Matthijs, 2010) which found cohabitation relationship to be common among the less educated people. As the multivariate fractional polynomials show (Figure 5.1), these results seem to suggest that overtime, women who originally start their sexual union through cohabitation, subsequently get married, pointing to cohabitation as a form of first union, a transition phase to marriage. Further analyses were done using unadjusted and adjusted multivariate technique to determine the net effect of each factor on cohabitation as a form of first union.

The results of the unadjusted logistic regression have also confirmed that women with secondary education were more likely to cohabit as a form of first union compared to those without formal education. Also, the adjusted multivariate analysis show significant results for women with primary and secondary education to have an increased likelihood to cohabit as a form of first union than to marry directly if compared to women without education. The effect with regards to tertiary education was not significant. The finding for

women with primary and secondary education partially supports the economics view which associates an increase in cohabitation as a form of first union with an increase in education attainment (Becker, 1985). This could be because autonomy is associated with education. However, the effect of tertiary education on cohabitation as a form of first union seems to contrast Becker's (ibid) view that an increase in schooling raises a women's propensity to cohabit. Meanwhile, there was a change of direction at multivariate level in which the likelihood of women with tertiary education cohabiting would be increased by 14%. This change, is however, not significant and the results should be interpreted with caution. The reason could be that educated women usually delay the timing of marriage because of employment opportunities (Raymo, 2003).

Although religious affiliation does not necessarily denote religiosity, taken as a whole, religion seems to be a powerful factor that influence behaviour restriction among women affiliated to Islam and SDAs. Findings from the unadjusted logistic regression analysis indicate that women affiliated to the Anglican faith were more likely to have cohabited as a form of first union compared to Catholics. The effect however weakened and lost significance at multivariate level. Women affiliated to Islam were significantly ($p < 0.05$) less likely to enter into cohabitation relationships as a form of first union compared to their Roman Catholics counterparts. The odds of women affiliated to Islam remained significant at 10% in the adjusted multivariate analysis. Compared to Catholic women, SDA women were significantly less likely to have cohabited. These findings are similar to those found among the middle-income class college students in Midwest United States (Willoughby & Carroll, 2011).

Three arguments may be used to explain these results: Firstly, anecdotal information claims that, unlike Christians who may reluctantly follow the religious rules, in Islam marriage is obligatory and sex outside marriage is totally forbidden. Olsen (2009) argues that on the one side marriage in Islam is a covenant and on the other, as a contract which requires a joint assent of two partners. Secondly, marriage ceremonies among Muslims involve less cost and are usually simple compared with Christian groups. According to the teachings of Islam and the Islamic sharia, marriage is attained during introduction, after paying dowry (*mahr*). This is usually followed by the Imam reading the relevant sections of

the Holy Quran, overseeing the signing of a mutual contract agreed-on by the two parties and exchanging of vows (Otiso, 2006). Thirdly, while the Christian doctrine does not allow sex outside marriage (cohabitation inclusive), women affiliated to SDA Church seem to be more conservative than women affiliated to the Catholic Church. In addition, SDA women and men usually jointly participate in religious activities which promotes religiosity; and, as a result, marry partners of a similar faith thus limiting entry into cohabitation as a form of first union (Call & Heaton, 1997).

With respect to union stability following cohabitation as a form of first union, findings revealed that women who held a negative attitude towards cohabitation were found to be significantly less likely to cohabit compared to women who held liberal or positive views. These results are consistent with studies conducted among young adults in the United States (Cunningham & Thornton, 2006; Heuveline & Timberlake, 2004; Willoughby & Jones, 2012). According to this study, young adults who had a positive attitude towards marriage were unlikely to accept premarital cohabitation because it is associated with relative union instability that may hinder marital satisfaction and communication.

The analysis shows a strong effect of peer networks on cohabitation as a form of first union. The results demonstrate an increasing significant effect to cohabit among women who advise peers to cohabit as a transition to marriage compared to those who argue that they should never cohabit. The quotation below obtained from in-depth interviews best illustrates how peer pressure has positively influenced women to cohabit:

"Many people cohabit because of pressure from their friends; you can reach a stage and start seeing yourself as someone who is ageing and yet your friends are married and having children. So, they start pressurizing you, "when are you getting married?" This induces one to join a cohabiting relationship in order to do away with the friends' pressure (In-depth interview, Kasangombe village, Wakiso district)."

These results support the theory of match-specific-quality in which overtime cohabitation among suitable suitors would translate into union stability (Becker et al., 1977). The results also support the findings of a study conducted in Kenya among university students where the decision to cohabit was found to be a peer pressure phenomenon (Kabaria, 2012). Peers through social adaptation often model the behaviours of others and by implication would also want others to model their behaviours. This suggests that

cohabitation itself may not be the problem but rather one's behaviour in a relationship which may lead to negative outcomes among cohabiters.

Evidence from the unadjusted model reveals that women whose fathers had tertiary education had significantly diminished chances of entering into a cohabitation relationship as a form of first union. This effect was however not significant at adjusted multivariate level. A similar pattern was observed with maternal education. In the case of Uganda, these results are not unexpected given the patriarchal nature of the society where majority of men control resources including lineage. In such a society, family resources are necessary to improve the quality of children. Thus, highly educated parents are likely to educate their children to higher levels thereby postponing union until they have completed their education.

The effect of parental union status on cohabitation status is worth noting. Compared to daughters raised by parents in cohabiting sexual union, the likelihood of a woman to cohabit as a form of first union was significantly lower if she was raised by parents who were married. Although not significant at unadjusted level, similar significant results were found among women raised by single parents. Women born to divorced or separated and widowed parents had an increased probability to cohabit although the effects are not statistically significant. These findings are the reverse of other studies which found young adults born to widowed, never married, separated or divorced parents to have a diminished attitude towards cohabitation (Willoughby & Carroll, 2012). Nevertheless, the results are in line with Cunningham and Thornton's findings that the parent-child attitude similarity was strong for parents with a relatively positive relationship (Cunningham & Thornton, 2006).

5.10 Summary of findings

The analysis in this chapter reveals that the prevalence of cohabitation among women forming first union was high. This suggests that many women entered into a first union through cohabiting either as a transition to marriage or an alternative to marriage. With regard to the predictors, the study identified women's education, religion, expectation about union stability, peer influence, parental education level, parental union status, age, economic security, transition to marriage, and premarital pregnancy as the main factors

influencing first cohabitation. The results from this analysis concur with the economic theory that cohabitation among women is a function of schooling. Additionally, the findings support notion that the intensity of first cohabitation is age and peer influence driven. Young women who are apparently most affected by modernisation, have been observed to enter their first union through cohabitation more than the old. Modernisation is responsible for influencing and detraditionalisation of society.

Even though religious affiliation does not necessarily mirror religiosity, results from this analysis show that religion is a powerful mechanism for behaviour restriction. Women belonging to the Muslim faith were found to be less likely to cohabit than women from Christian groups. This study contributes to research on family demography in Central Uganda as it has modelled the effects of different socio-demographic factors on nuptiality behaviour. Based on this, we can argue that nuptiality behaviour is influenced by peer group influence, religion, women education level, marital stability expectation, parental education and union status.

5.11 Limitation

In Chapter one (Section 1.6), the importance of men in union and family formation was recognized. However, men's views were not included in this study because of the polygynous nature of the Uganda society where men repeatedly marry. Similarly, women are important, with regard to demographic research, where age of entry into union and stability of union are determinants of the time to first birth and fertility. Based on the above, the study acknowledges the limitation of using only women's views in investigating the predictors of cohabitation as a form of first union among women in the Central region of Uganda. This study suggests that future studies, where possible, should capture information from couples.

CHAPTER 6: COHABITATION AND MARITAL STABILITY

6.1 Introduction

The previous chapter investigated the factors which influenced individuals to enter into cohabitation as a form of first union. This chapter goes further to look at the relationship between cohabitation and union dissolution. It focuses on examining the effect of cohabitation on the time to union dissolution. Previous research on social and family demography have increasingly indicated changes in nuptiality patterns from direct marriage to marriage after cohabitation (Kennedy & Bumpass, 2008; Lichter & Qian, 2008). Alongside this change is the positive association between cohabitation and union dissolution (Stanley et al., 2006). For instance, studies have repeatedly noted that in the United States and Canada, marriages preceded by cohabitation are likely to experience marital dissolution compared to ones in which couples marry directly (Budinski & Trovato, 2005; Lichter & Qian, 2008; Phillips & Sweeney, 2005). The main reasons usually given include entering union while young, poor family background, experience of prior cohabitations, not being affiliated to the Catholic Church, having less number of living children, being employed, being more educated, women's relative income and parental union status (Becker, 1974; Kalmijn et al., 2007).

In Africa, where research on union dissolution is relatively new, past research on the relationship between cohabitation and union dissolution is limited. In addition, existing studies typically involve examining causes of union instability and not the effect of cohabitation on union dissolution. In Ghana, for instance, it was noted that by the 20th year after marriage, about a third of the women dissolve their marriages (Amoateng & Heaton, 1989; Oheneba-Sakyi, 1989). They attributed this to the young age at first marriage, women's educational level, employment status, place of residence, marriage cohort, birth cohort, kinship and, number of living children. However least studied is the association between birth cohort and marital dissolution and yet marital dissolution may vary across birth cohorts because of historical differences. In Uganda data from the UDHS (as discussed earlier in Chapter four) indicates that more women than men tend to dissolve their unions and the trend increases with age. Despite the growing interest in studies which examine the effect of cohabitation as a form of first union on union dissolution,

available studies have been based on women from developed countries, mainly the United States.

The aim of this chapter therefore is to assess the effect of cohabitation as a form of first union on marital stability in Central Uganda. The data was analysed at three stages: univariate analysis, bivariate analysis using the Kaplan Meier method and Cox's semi-parametric proportional hazard regression. Kaplan Meier survival analysis allows estimation of survival time for an event in the study population overtime until the study ends (Rich et al., 2010). It generates the Kaplan Meier survival curve and the mean estimated time while the Cox-PH regression is a statistical technique used to explore the relationship between the survival of an event and several explanatory variables.

The present chapter comprises of 8 sections. Following this introduction, the methods of analysis are presented in Section 6.2. This is followed by a description of the differentials in the mean-time-to-dissolution (Kaplan Meier estimates) by background characteristics in Section 6.3. The results of the diagnostic tests are discussed in Section 6.4. In Section 6.5, the risk factors of union dissolution are presented. In Section 6.6, the findings of the qualitative survey are presented. This is followed by the discussion and summary of findings in Section 6.7 and limitation in Section 6.8.

6.2 Methods of Analysis

Survival analysis was used because the outcome variable is the length of time women in their first union spent in union before it was dissolved. It follows from this discussion that the implied event of interest was union dissolution which may be either separation or divorce. Thus, cases for which the woman under investigation was still in union (marriage or cohabitation) by the time of the survey were right-censored. Data analysis was done in three stages including univariate, bivariate and multivariate analysis. Univariate analysis was used to summarise the time taken to union dissolution and also to compute the proportion of women who ever dissolved their first union. This form of analysis is important because it gives an indication of the average time taken by women of different backgrounds to dissolve their unions.

The product limit (PL) technique as described by Kaplan-Meier (1958) survival function as cited in Cleves et al. (2010) was used at the bivariate stage to estimate: (i) differentials in the length of time a woman spent in her first union before dissolution, (ii) the proportion surviving union dissolution, and (iii) to test for the hypothesis of no difference in the survival between women who married directly as a form of first union, women who married after cohabitation as a form of first union and, women who were still cohabiting as a form of first union. In addition, the Kaplan-Meier (KM) survival curves were used to provide partial answers as to whether the proportional hazard (PH) assumption was violated or not. The PL technique estimates the survivorship function $S(t_i)$ at time t_i , which is the probability of being in union until time t_i , as,

$$S(t_i - 1) = \prod_{j=1}^{j=t} p_j \quad (6.1)$$

Where:

p_j - is the proportion of women in union until *time j*.

Thus, the PL estimates the probability of being in union at any particular *time t_i*, as the product of the same estimate until the previous *time (t-1)* and the observed survival rate as for a particular *time t_i*, is then, given as in equation '6.2'.

$$\hat{S}(t_i) = \hat{S}(t_i - 1)P_i \quad (6.2)$$

According to Greenwood (1926) as cited in Cleves et al. (2010. p 96), the standard error of the PL estimate of the survival function $S(t)$ is given as:

$$Se(S(t)) = S(t) \sqrt{\sum_{i=1}^{i=t-1} \frac{q_i}{P_i R_i}} \quad (6.3)$$

Where:

$S(t)$ - is the survival function;

R_i - is the risk set;

q_i – is the probability of the event and;

P_i – is the survival probability (or probability of No event).

As described above, the standard error of the PL estimate is the basic element used to obtain the confidence interval for the survival function $S(t)$. As it is with the ordinary least squares regression where the line of best fit is obtained by minimising the squared residuals, the PL estimates are usually obtained using the maximum likelihood (ML). This is a statistical approach which through iterations, obtains the smallest deviance between the observed and predicted values so as to get the PL of best fit. Usually, once the statistical programme gets the smallest deviance or best fit, it gives a deviance statistic denoted “-2 log likelihood in STATA” which commonly mirrors a chi-square statistic (Hosmer & Lemeshow, 1989).

This study used the Log Rank χ^2 statistic, set at 5% ($p < 0.05$) level of significance (Cleves et al., 2010, p.123) and the KM survivorship function graphs to assess the differences in survival distributions of different levels of covariates for women marrying directly as a form of first union; women marrying after cohabitation as a form of first union; and women still at cohabiting stage as a form of first union. The Log Rank test is a function of a set of score which are assigned to the observations while scores are a function of the logarithm of survival function estimated at time (t_i). The Log-Rank χ^2 test statistic is given by equation 6.4.

$$\chi^2 \sim \frac{(O_2 - E_2)^2}{Var(O_2 - E_2)} \quad (6.4)$$

Where:

O - is observed data and;

E – is expected values

The Cox's proportional Hazard (PH) Model (as cited in Cleves et al., 2010) was used to estimate the probabilities of union dissolution for women who married after cohabiting compared to women who married directly and women who were still at cohabiting stage, with different backgrounds characteristics. This statistical approach was used to estimate the net effect of fixed and time-varying covariates to "time-to-dissolution due to divorce or separation" which, in this study, was the response or dependent variable. The PH model estimated the probability of union dissolution at time t , after controlling for a number of covariates. Because of the anticipated differences between women who married directly as a form of first union, women who married after cohabiting as a form of first union and women who were still at cohabiting stage, the PH approach is expected to reveal these differences in the PH function, $h(t, x)$; and constant relative risks over time. Thus, the risk of union dissolution for women who married directly and women who were still at cohabiting stage was computed relative to that of women who married after cohabiting as a form of first union. With this model, the effects are additive in a particular scale (Cox & Oakes, 1984). The Cox model takes the form described in equation 6.5.

$$h(t) = h_0(t)e^{b_1x_1+b_2x_2+\dots+b_kx_k} \quad (6.5)$$

Where:

$h(t)$ is the probability of union dissolution (separation or divorce);

$h_0(t)$ - is the hazard rate when all variables are zero (usually termed as the baseline);

$b_1 \dots b_k$ - are the regression coefficients of the explanatory variables (these may be time-constant or time-varying variables);

$x_1 \dots x_k$ - are the covariates (independent variables which may be time-constant or time-varying variables).

The study used a retrospective approach and no woman respondent was lost during the study period. Therefore, as described earlier, the only censored cases are those for which the failure event (marital or union breakdown) had not taken place by the survey date which is between August and September 2013. This resulted in 781 subjects, 7636 time at risk from 865 women in union.

6.2.1 Diagnostic tests

Because the model has a time-varying variable, the Cox-Snell residual method was used to check the predictive power of the model and the link-test described in Section 5.3.1 was used to assess whether or not the covariates were specified correctly. The scaled Schoenfeld residuals approach was applied to ensure that proportional hazard (PH) assumption was not violated (Cleves et al., 2010, p.221). The Cox-Snell residual technique diagnosed the predictive accuracy of the overall fitted Cox PH model using the Kaplan Meier (KM) survival function which estimated the cumulative hazard function "H" as $H = -\ln(km)$. When "H" is plotted against the Cox-Snell residuals (the new failure time variable), the plotted graph should have straight line with a slope inclined at a 45 degree line.

The PH model assumes that the hazard function for the different levels of a covariate which determines union dissolution for women who entered union for the first time in the study area are proportional for all values of time for which the subject is being observed. To evaluate this assumption, data was tested using the scaled Schoenfeld residuals approach which is used to examine whether or not the gradient of the regression of time on residuals was zero (or flat). This approach uses the STATA programme post estimation command-*estat phtest, detail*, to produce specific tests for each covariate before generating the global index. To confirm that the PH assumption was not violated, a particular covariate or the global index should not be significantly different from zero ($p > 0.05$). Significance of any covariate implies that the correlation between scaled Schoenfeld residuals for that covariate and the rank of survival time for the covariate is significantly different from zero ($p < 0.05$), which confirms violation of the PH assumption.

6.2.2 Variables Considered in the Analysis

The dependent variable measured as the number of years taken by the woman from first union to separation or divorce. It should be noted that women who married after cohabitation, had cohabited for sometime. Although, there was change of event from cohabitation to marriage, for modeling purposes, this was taken to be a single union. Therefore, the time to union dissolution was measured from the start of cohabitation rather

than marriage. Women respondents were asked to state the date when they entered into first or subsequent unions. For women who had ended their first or subsequent union, they were further asked to indicate the date when the event happened. This was then used to estimate the time to dissolution as the difference between the year of entry into first union and when dissolution took place.

Nine independent variables known to affect marital stability were used to build the single model. These include woman's union status, woman's education, religious affiliation, work status, number of children, marriage type, parental union status, age at first union, and birth cohort. The *reshape command* in STATA/LC version 12 (StataCorp, 2011) was used to transform data from person-oriented data to person-period data because parental union status was modelled as a time-varying variable. Person-oriented data is where an individual has one record while in person-period data an individual has as many records as the observation before an event occurs (Allison, 1982). Women union status was included in the model because it was hypothesised that marriage after cohabitation increases the risk of divorce (Stanley et al., 2006). It was coded as married directly, married after cohabitation, and women still cohabiting. Worthy noting is that women were still at the cohabiting stage were included in this study because by the nature of their relationship, they may be more likely to breakup; and this may explain noticeable differences in the likelihood of dissolution.

Education and religious affiliation were captured as no education, primary, and secondary education or higher; religious affiliation categorised into four groups as Catholics, Anglican, Pentecostals, Muslim, SDAs, Orthodox and others respectively. Education was included because it may provide alternatives to marriage thus affecting union stability (Becker, 1974; Takyi, 2001). While modeling, education was collapsed into two categories as up to primary and secondary education or higher. Religious affiliation as a proxy for religiosity was categorised as Catholics, Anglican and Pentecostals (as Anglican), Muslim, and SDA and Orthodox. They were collapsed because in survival analysis, as events were being observed, the effect of prior failures and censoring resulted in a smaller effective sample size.

Number of living children was captured as a continuous variable and was included in the model because of social importance attached to children. It was modelled as having at most two children and, three or more children. Employment was included because a woman's economic independence may motivate her to breakup the marriage when there are disagreements. It was captured as a dichotomous variable, working and not working. Number of co-wives modelled as a woman respondent living in monogamous union or living in a polygynous union. It was captured because it could affect union stability (Takyi, 2001). Regarding expectation about union stability, respondents were asked whether cohabiting before marriage would maintain union stability and respondents could answer 'yes or no'. Parental union status modelled as cohabiting, married and others (separated, divorced, widowed and single) was included in the model because previous studies maintained that it could affect children's union stability (Budinski & Trovato, 2005; Wolfinger, 2001). Age at first union has always been singled out as a significant factor in affecting union stability with an increase in the risk for young women (Oheneba-Sakyi, 1989; UBOS & Macro International Inc, 2007). It was coded as being less than 20 years or being 20 years old and above. The birth cohort variable was included in the model to capture changes in dissolution overtime (Teachman, 2002). It was coded as 1970 to 1979, 1980 to 1989 and 1990 to 2000.

6.3 Results

Section 6.3.1 shows differentials in the proportion of women ever dissolved first union, mean time to dissolution (KM estimates), Log Rank chi² by background characteristics in central Uganda. The background variables considered were women's union status, education, religious affiliation, employment status, expectation about union stability, number of living children, whether the woman is in polygynous or monogamous marriage, parental union status, age at first union and birth cohort.

6.3.1 Differentials in Mean Time-to-Dissolution of Union for Women by Background Characteristics

Descriptive analyses, using the KM mean estimate and survival curves, and chi-square techniques, were used to measure significant differences between time to union dissolution and key independent variables. The results of the study show that 18.8% of the 865

women in the study sample have ever dissolved their first union. The mean time to first union dissolution was found to be about 7.1 years (Table 6.1). The data reveals that, in Central Uganda, by the end of the seventh year following first union, women would, on average, have dissolved their first union. The background variables analysed include woman's union status, education, religious affiliation, employment status, expectation that cohabitation maintains union stability, number of children born in union, marriage arrangement, parental sexual union status, age at first union and birth cohort.

6.3.2 Woman's Union Status

It was hypothesised that marrying after cohabitation significantly influences a woman's likelihood of dissolving her sexual union (Stanley et al., 2006). The data presented in Table 6.1 shows the association between a woman's union status and the time to union dissolution. The results reveal that about 14% of the women who married directly, nearly 2% of the women who married after cohabitation and about 84% of those who were still at cohabiting stage as a form of union dissolved their union. Looking at union in general, Table 6.1 and Figure 6.1 show that women who married directly stayed longer in a union than those who cohabited prior to marriage and women who dropped out at the cohabiting stage.

The KM estimates for the mean time to dissolution indicate that women who married directly dissolved their first marriage 9 years after first marriage; women who cohabited prior to first marriage dissolved their first marriage after 6 years; while women who dropped out at cohabiting stage, lasted about 7 years in union. The observed differentials are significant ($\chi^2=6.999$, $p<0.030$). The reason for the observed pattern may be attributed to the fact that compared to cohabitation or women who married after cohabitation, marrying directly is associated with higher marital quality (happiness or satisfaction) and commitment.

Table 6. 1 Descriptive Statistics, proportion ever dissolved first union, mean time to first union dissolution (Kaplan Meier estimates) and Log Rank χ^2 , Central Uganda

Covariates	N	Percentage ever dissolved after first union	Mean time to dissolution (Kaplan Meier estimate)	Log Rank χ^2 (χ^2), p
Woman's union status				
Married after cohabitation	61	3.0	6.0	
Married directly	203	14.2	9.5	6.999
Still at cohabiting stage	603	84.0	6.7	(p=0.030)
Education				
Up to Primary	376	54.7	7.8	5.097
Secondary and higher	489	45.3	6.1	(p=0.024)
Religious affiliation				
Catholic	315	42.9	6.5	
Anglican	326	34.4	7.4	4.927
Muslim	156	16.6	6.3	(p=0.177)
SDA and orthodox	68	6.1	10.6	
Employment Status				
Working	656	85.9	7.5	13.982
Not working	209	14.1	4.4	(p=0.000)
Expectation about union stability				
Cohabitation first lead to stability	475	55.8	7.0	0.004
Cohabitation does not lead to stability	390	44.2	7.1	(p=0.947)
Number of children				
Up to 2 children	356	30.6	4.7	20.744
Three children and higher	509	69.4	8.1	(p=0.000)
Marriage type				
Monogamous union	465	34.2	6.3	2.381
Polygynous union	400	65.8	7.5	(p=0.123)
Parental union status				
Cohabiting	526	53.9	6.4	
Married	386	41.0	7.8	3.442
Others	53	5.1	8.0	(p=0.179)
Age at first union				
<20 years	500	71.8	7.6	5.747
20+ years	365	28.2	5.7	(p=0.017)
Birth Cohort				
1970 to 1979	259	45.5	9.6	58.433
1980 to 1989	447	45.4	5.3	(p=0.000)
1990 to 2000	159	9.1	3.1	
ALL	865	18.8	7.1	

Source: Survey Data, 2013

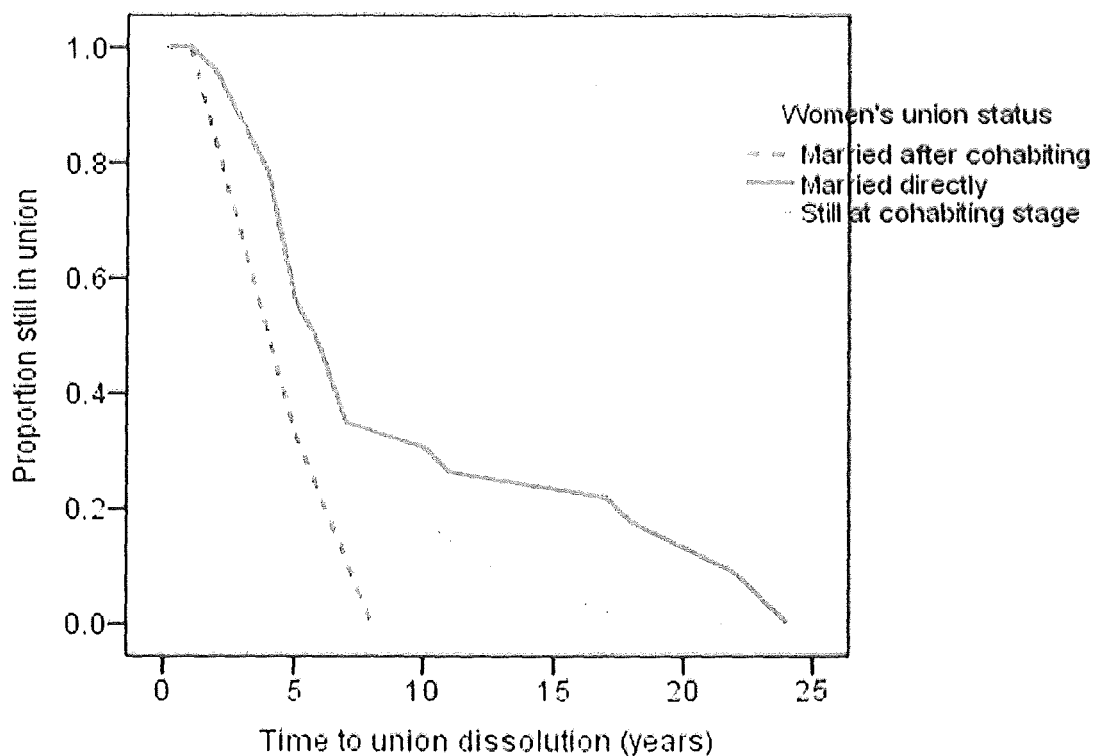


Figure 6. 1 Survival distribution of union dissolution by women's union status

6.3.3 Education of Woman

Education of the woman was taken as a complementary characteristic essential to different unions. Becker (1974) pointed out that gains in marriage are lower for educated women compared to the less or uneducated. Other explanation for the association between higher education attainment for women and marital dissolution are based on the notion that education may provide alternatives to marriage (Takyi, 2001). In the Ugandan education system, it is not common for a woman to continue with her education after marriage (UBOS & ORC Macro, 2001). The association between a woman's education and the time to union dissolution union was investigated. The results presented in Table 6.1 shows that nearly 55% of the women who had attained primary level education and 45% of those with secondary education or higher have ever dissolved their unions. The survival estimates in Table 6.1 and Figure 6.2 further show that, at every duration, union stability is most likely among women with primary levels of schooling and least among those with secondary levels or higher. The average mean number of years taken to dissolve a union for a woman with primary education was nearly 8 years compared to 6 years for those with

secondary or higher education. However, the mean estimate seems to be affected by skewness as it is always the case with means. This variation is statistically significant ($\chi^2=5.097$, $p=0.024$).

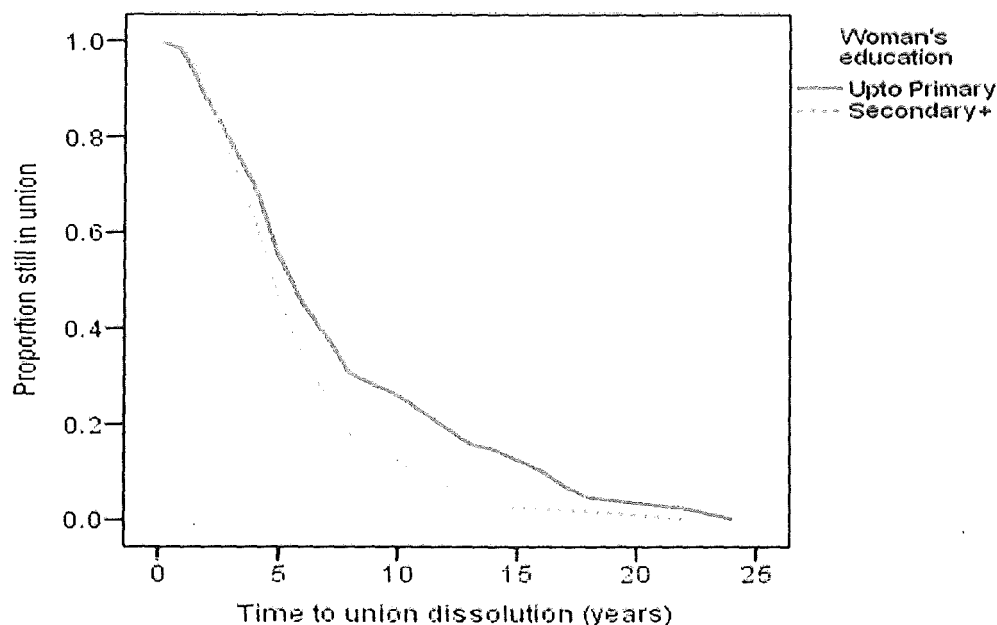


Figure 6. 2 Survival distribution of union dissolution by women's education

The observed pattern in Table 6.1 and Figure 6.2 conform to the general expectation of the economic theory of marriage developed by Becker (1974). This theory suggests that less educated women are trapped in marriage because of the benefits they expect from their husband's earnings while the educated ones are less interested in marriage because their personal skills could be maximised elsewhere in the job market.

6.3.4 Religious Affiliation

Religion used as a proxy for religiosity is often associated with union stability (Maciver & Dimkpa, 2012). Explanations for the association assert that individual attachment to marriage is influenced by ideological and theological attitudes of the religious group they are affiliated to (Takyi, 2001). Because religion is family-oriented, being affiliated to a certain group, is likely to increase or decrease the cost of marital or union instability. This suggests that individuals affiliated to religious groups which can accommodate dissolution, are likely to have an increased risk of marital breakdown.

In view of the above, if people's beliefs towards marriage or sexual union and dissolution are shaped by their religious beliefs, Catholics who do not tolerate union dissolution would be associated with lower risks of marital breakdown compared to Anglicans, Muslims and other small religious groupings. In this analysis, Catholics were taken as a special group because the Catholic doctrine does not allow dissolution especially in the context of direct marriage. This implies that individuals subscribing to this doctrine would be less likely to dissolve or would take longer compared to women subscribing to other religious groupings. The relationship between religious affiliation and time to dissolution has thus been examined and the results are presented in Table 6.1 and Figure 6.3. The table shows that nearly 43% of the Catholics, 34% of Anglicans, 17% of Muslims and, 6% of other small religious groupings (SDA and Orthodox Christians) who had entered into a first union had dissolved their union.

Table 6.1 and the KM curve (Figure 6.3) show the mean time to dissolution and the survival distribution curve. Compared to women from other religions, women affiliated to other small religious groupings (SDA and Orthodox) stay longer in sexual unions. These are followed by women subscribing to the Anglican Church, followed by Catholic and lastly, the Muslim. The KM estimate for the mean time to dissolution for small religious groupings (SDA and Orthodox) was 10.6 years, 7.4 years for Anglican, 6.5 years for Catholic and 6.3 years for Muslim. Contrary to expectation, the Kaplan Meier curve demonstrated that SDA and Orthodox were likely to stay longer in a union, followed by Anglican women, then Catholics and then Muslims. Figure 6.3 further shows that the risks of dissolving a first union among Muslim women was relatively higher compared to Catholic women up to about 7 years into first union and sharply declined thereafter. The variation between religious affiliation and time to dissolve sexual union is, however, not statistically significant ($\chi^2=4.927$, $p=0.177$) and this is further explained by Figure 6.3.

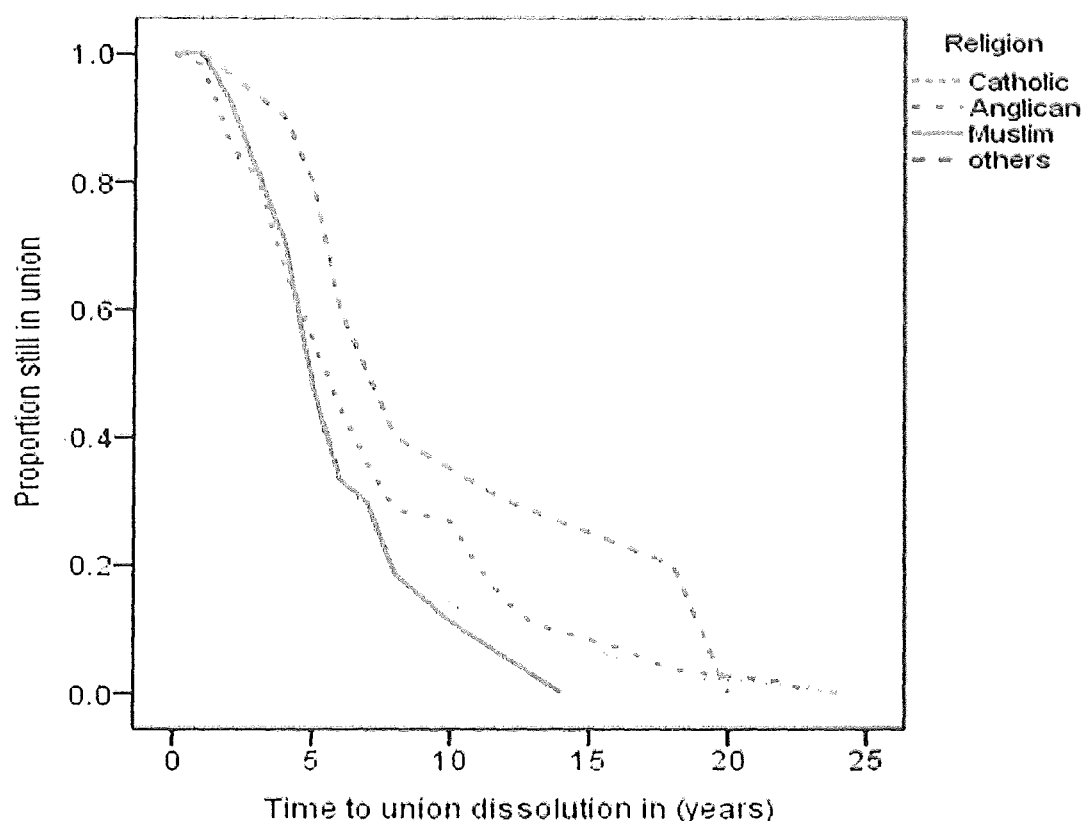


Figure 6. 3 Survival distribution of union dissolution by religious affiliation

6.3.5 Employment Status

Women's economic independence as measured by an increase in women labour force participation has also been associated with increase in union separation or divorce (Poortman & Kalmijn, 2002; Sander, 1985). Using the exchange theory in sociology and bargaining theory in economics, these authors argue that if a woman is economically independent, she is always in a better position to exchange or bargain for her needs whenever there are disagreements in marriage or union; and, in this case, she would have better marital or union satisfaction. They however argue that if bargaining fails, resources from her employment would motivate her to breakup her marriage or union because she would have the ability to look after herself and the children. However, Sayer and Bianchi (2000) found weak association between women's economic independence and dissolution on the grounds that what influences marital dissolution is commitment, respect and satisfaction rather than economic independence..

Inspired by the above, women in the study sample were asked whether they were working or not at the time they were in their first union. Table 6.1 shows that on the one hand, 85.9% of the women who said they were working by the time they were in their first unions dissolved their unions. On the other hand, those who said they were not working and dissolved their first marriage or union were only 14.1%. Looking at the results in Table 6.1 together with the KM curve in Figure 6.4, it is evident that women who were working were most likely to stay longer in their first union before dissolution. The KM mean time to dissolution estimate for working women was 7.5 years compared to 4.4 years for those who were not working. The KM survival curve shows that over 70% of women who were not working had dissolved their first union by the fifth year. During the same time, only about 45% of the working women had had their first union dissolved and this variation was highly significant ($\chi^2=13.982$, $p=0.000$). The pattern observed suggests that working actually decreases the risk of union dissolution, which is rather surprising. Takyi (2001) had found the opposite and the explanation given was that women working outside the home environment would be expected to have weak marital ties and poor family relations resulting from an increase in spatial mobility, which would increase the risk of union dissolution. Our finding may however suggest that working women probably have better communication skills which help them maintain union stability. Also, it implies that working makes households economically stable which reduces the risk of union dissolution.

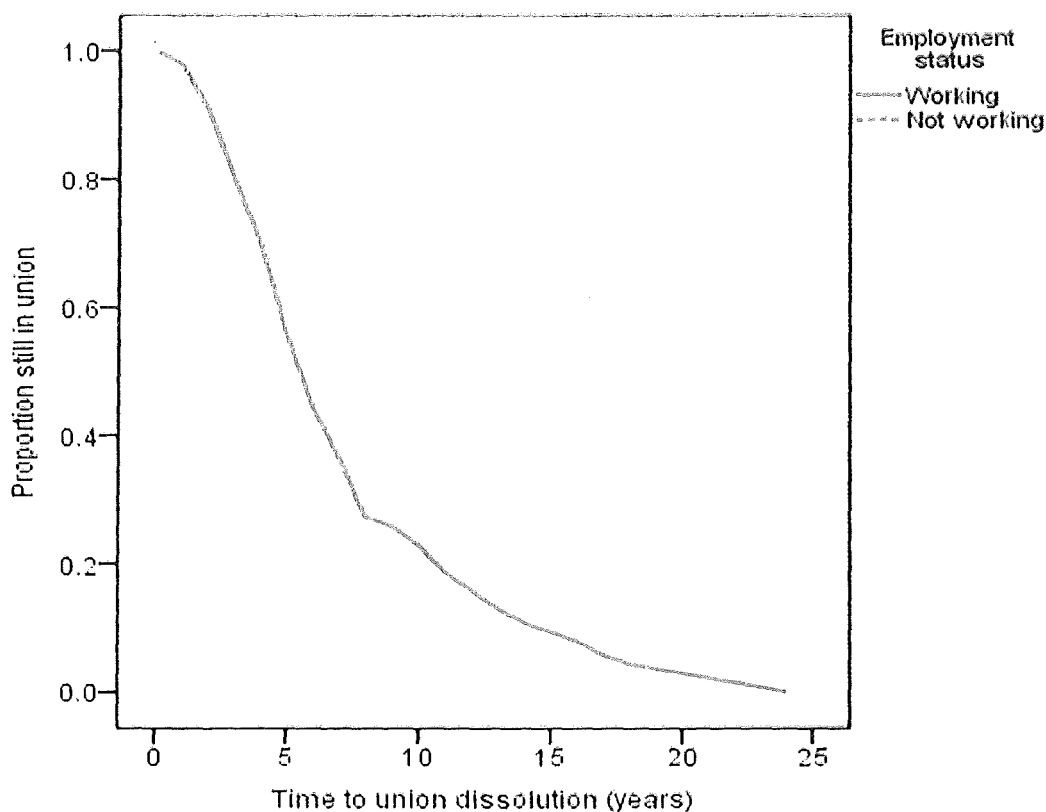


Figure 6. 4 Survival distribution of union dissolution by employment status

6.3.6 Expectation About Union Stability

According to the trail marriage theory, cohabitation is associated with union stability because it filters incompatible partners (Brudel et al., 1999). However, Kline et al. (2004) argues that this is possible only when it is accompanied by engagement. In view of this indecisive substantiation, the relationship between the view that cohabitation first before marriage maintains union stability and time to dissolution was investigated. The results in Table 6.1 show that 55.8% of women who maintained that cohabitation ensured union stability had dissolved their first union while 44.2% of those who were not in agreement had had their first union dissolved. The average time to dissolution as determined by the KM estimate shows that women who were in conformity and those who were not, were found to take almost the same time (about 7 years). Figure 6.5 shows that the probability of dissolving a first union for women who maintained that cohabitation should never be done was lower compared to women who reported that women should cohabit as part of transition until about 6 years into union; and increased slightly thereafter. However, there

seems to be no convincing evidence that cohabiting first before marriage maintains union stability ($\chi^2=0.004$, $p=0.947$).

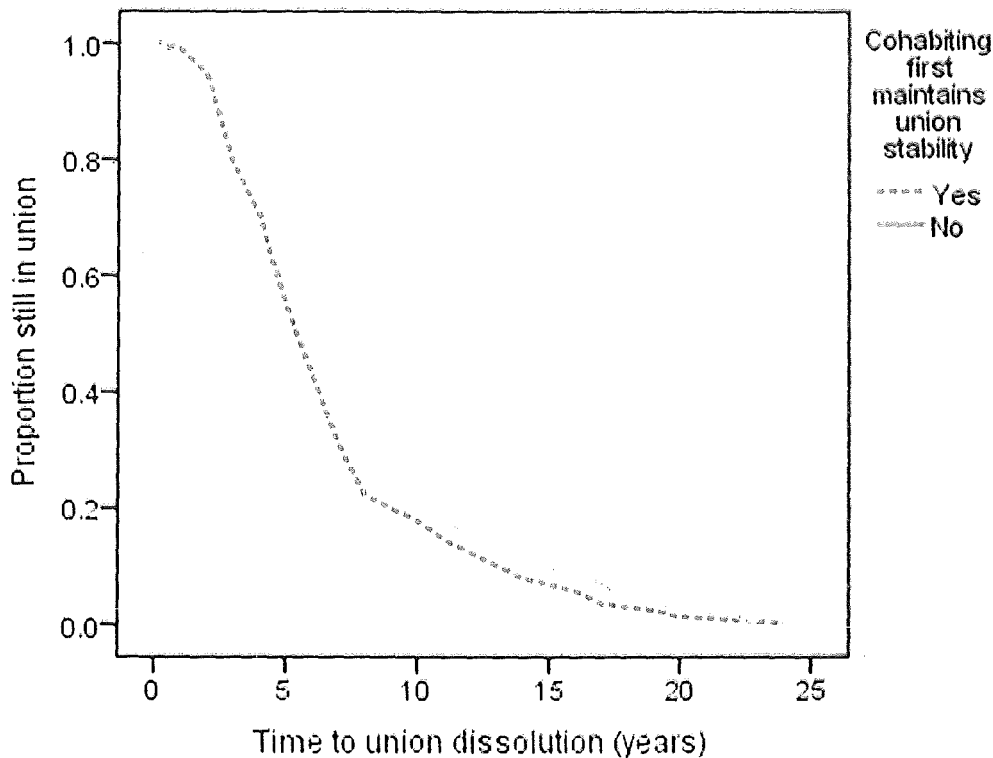


Figure 6. 5 Survival distribution of union dissolution by the aspect that cohabitation maintains union stability

6.3.7 Number of Children

Several African societies value childbearing because of what they expect in future, in-terms of wealth, continued lineage, and status (Caldwell & Caldwell, 1987; Shapiro & Gebreselassie, 2008). A childless marriage or union therefore has no value in an African culuture; and Uganda is no exception. A woman who fails to give birth to a child is valued differently from the one who does (Kalule-Sabiti, 1983; Ntozi & Kabera, 1988). Given the social importance attached to children, a woman's reproductive capacity is expected to affect the stability of a sexual union. Anecdotal information often links the number of children a woman has with her partner or husband to the risk of union breakdown. Because children are expected to deter union dissolution, the likely pattern is that the more number of children a woman has, the lower the risk of union dissolution. The relationship between the number of children and the time taken for a union to breakdown was

investigated and the results are also presented in Table 6.1. Approximately 30.6% of the women who had up to two children had dissolved their first union compared to nearly 69.4% of women who had three children or more. Table 6.1 further show a highly significant association between the number of children and the time taken to union dissolution ($\chi^2=20.744$, $p=0.000$).

The results tend to confirm the expected, that a woman with many children in a union is more likely to stay longer in union compared to the one with two or less. The estimated mean survival time to dissolution is about 8 years for a woman with three or more children compared to approximately 5 years for the one with two or less number of children. This finding is illustrated further by the KM survival curve presented in Figure 6.6. The figure suggests that the higher the number of children, the lower the risk of marital or union dissolution. The figure further reveals that by the 5th year after entering into first union, nearly 80% of the women who had up to two children had dissolved their first union. An equal proportion of women with 3 or more children would dissolve their first marriage or union in about 12 years.

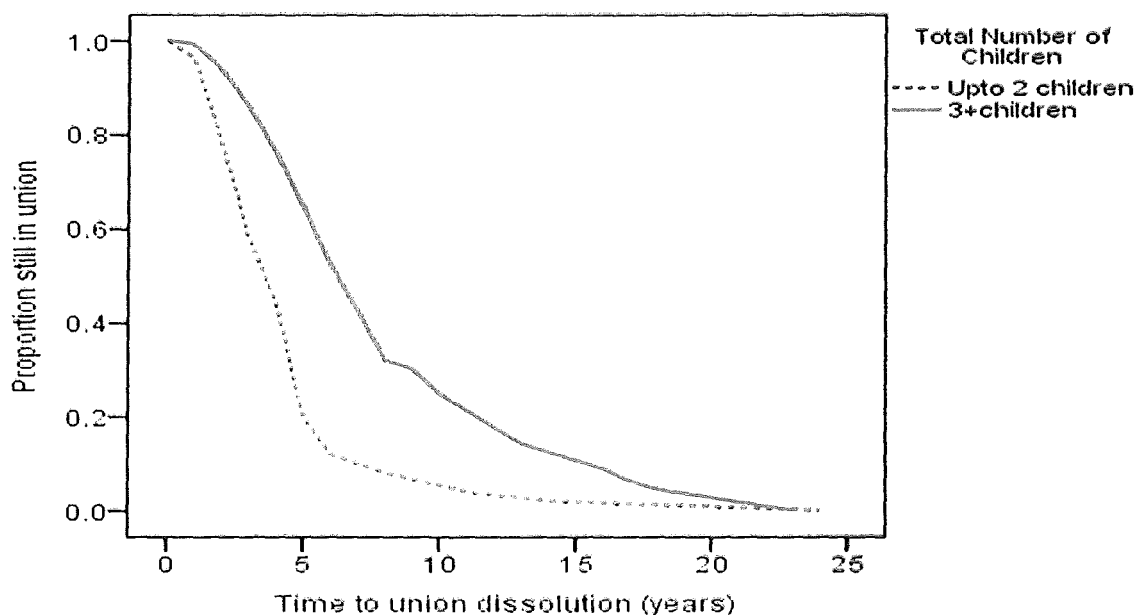


Figure 6. 6 Survival distribution of union dissolution by number of children

6.3.8 Marriage Type

Polygyny has been reported to be associated with union instability (Bledsoe, 1990; Takyi, 2001). Bledsoe (1990) noted that this may happen through several ways: when a man selects a principal wife and marginalise others, which may in the end lead to family conflict, tension and stress; the threat of sharing a husband's love with other women; the practice is associated with a wide age gap between the husband and the wives (especially the most recent ones), which hinders the communication subsequently leading to marital breakdown; and it strengthens patriarchal power which may have a positive effect on union dissolution. The relationship between marriage type and the time taken to dissolve a union was investigated. The results are presented in Table 6.1 and Figure 6.7. According to Table 6.1, about 66% of the women living in polygynous unions were found to have dissolved their first union compared to 34% of those living in a monogamous arrangement. Table 6.1 further shows that having a co-wife reduces the risk of first marital or union dissolution. The average time to dissolution for women living in a polygynous union was found to be 7.5 years while the time for women living in a monogamous union was 6.3 years. This variation is further illustrated by Figure 6.7 which confirms that women living in a polygynous union during their first union tend to stay longer in the union before it is dissolved. However, there is no evidence to suggest that living in a polygynous union reduces the risk of marital or union dissolution: the survival time to dissolution for women in a living polygynous set up was not statistically different from that of women in a monogamous union ($\chi^2=2.381$, $p=0.123$). What this analysis probably suggests is that the alleged effects which accrue due to polygyny have no effect on first union dissolution in this part of Uganda.

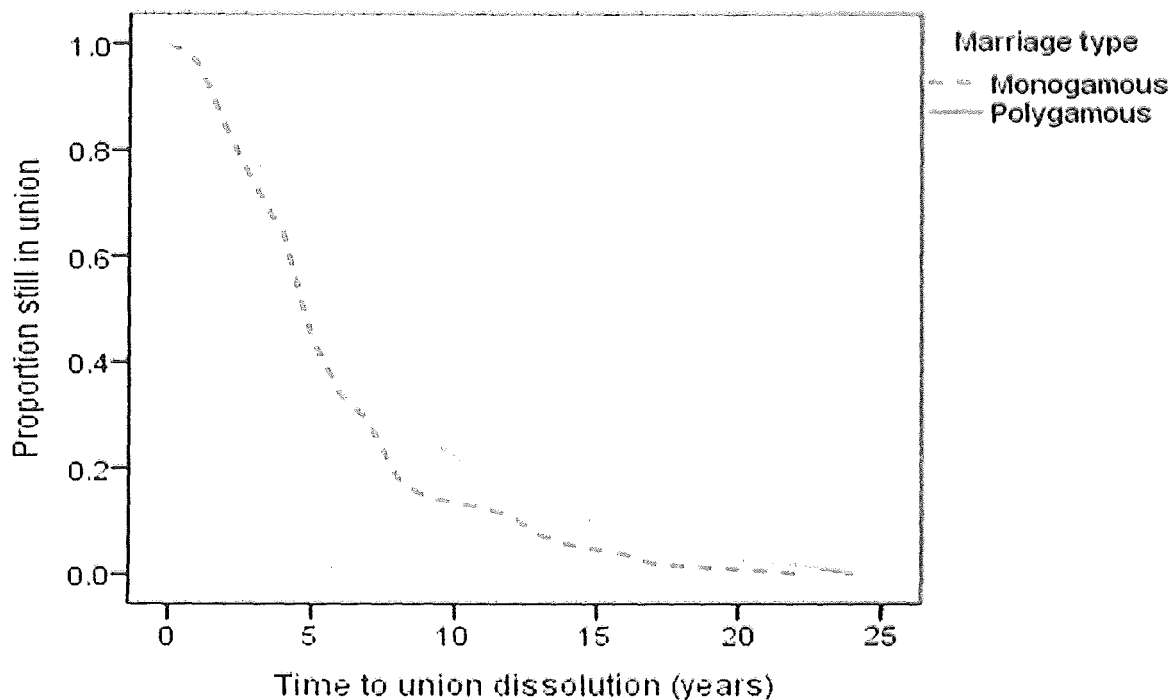


Figure 6. 7 Survival distribution of union dissolution by sexual union type

6.3.9 Parental Union Status

Some studies have suggested that parental marital stability status may influence the stability of their children's sexual union (Budinski & Trovato, 2005; Wolfinger, 2001). These studies argue that this is especially true when the age of a woman at union has not been controlled. This is probably because of the belief that being born and raised in an environment where parents are divorced or separated raises the risk of the offspring's tendency to easily end a first union. If this proposition is correct, a woman whose parents have ever ended a sexual union or lived single, would be expected to be more likely to end her sexual union, when she forms one. This relationship was examined and the results are presented in Table 6.1 and Figure 6.8.

About 54% of the women in the sample reported that they were brought-up, their parents were in a cohabiting relationship; this is followed by 41% of the women who reported that their parents were married and 5% of those who reported that their parents had either dissolved their union, widowed, or lived single. The results may suggest that women who reported their parents as having dissolved their union or were single or widowed, were more likely to stay longer in a union with an estimated mean survival time of 8 years. This

was rather surprising but it could be attributed to the small sample size. This is followed by a mean time of 7.8 years for women who reported that their parents were married, and 6.4 years for women who were reported to be cohabiting. These findings are further confirmed in Figure 6.8. In the figure women who grew up seeing their parents dissolving a union, when their parents were single or widowed also had an increased risk of dissolving their sexual union. The data however, describes a non-significant association between the two variables ($\chi^2=3.442$, $p=0.179$). The conclusion gleaned from the data partly confirm what was reported earlier that parental marital or union stability status may influence the stability of the daughter's sexual union (Budinski & Trovato, 2005; Wolfinger, 2001).

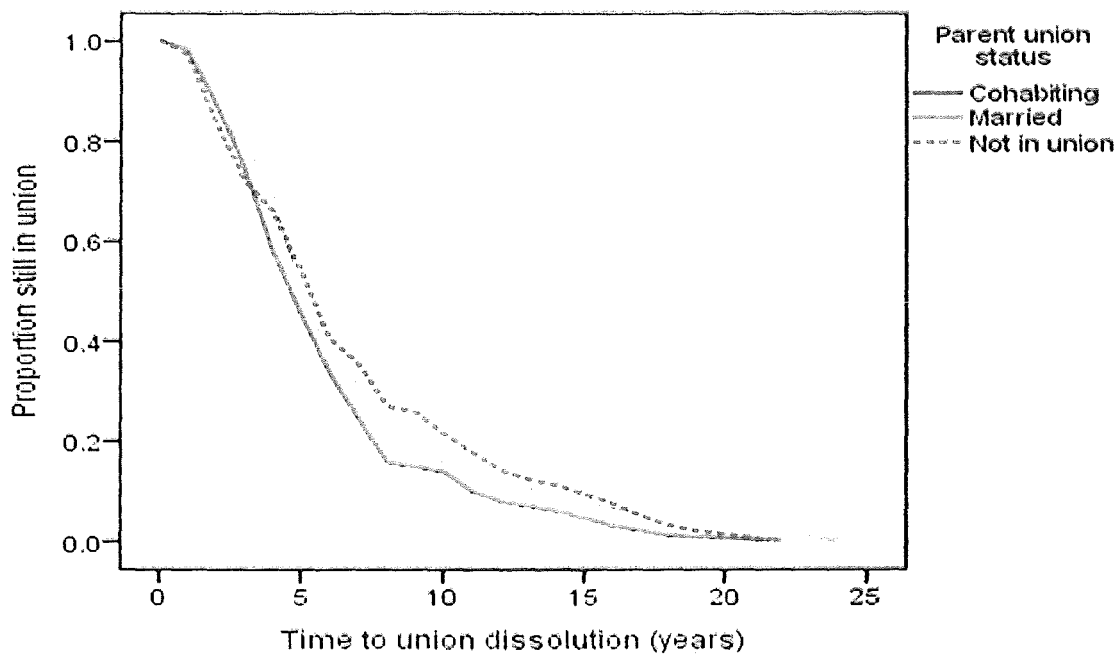


Figure 6.8 Survival distribution of union dissolution by parental union status

6.3.10 Age at First Union

Researchers have frequently singled out age at first union as a key factor in influencing marital or union stability, with a decrease in the risk as age increases (Booth & Edwards, 1985; Budinski & Trovato, 2005; DeMaris & Rao, 1992; Oheneba-Sakyi, 1989). They argue that women who marry young usually miss the normative life course experience associated with the transition to marriage or union. They are, for example, less prepared for marriage and lack psychological maturity required in a union. The association between age at first union and time to union dissolution was investigated and the results are

presented in Table 6.1 and Figure 6.9. The results show that nearly 72% of the women aged less than 20 years had ever dissolved their first union compared to about 28% for women aged 20 years and over. The table also shows the results of the KM mean time to first union dissolution. They indicate that the mean time to dissolution for women who entered into first union when they were aged less than 20 years was 7.6 years compared to 5.7 years for women who entered first union when they were aged 20 years or over. The data shows evidence of a significant difference ($\chi^2=5.747$, $p=0.017$).

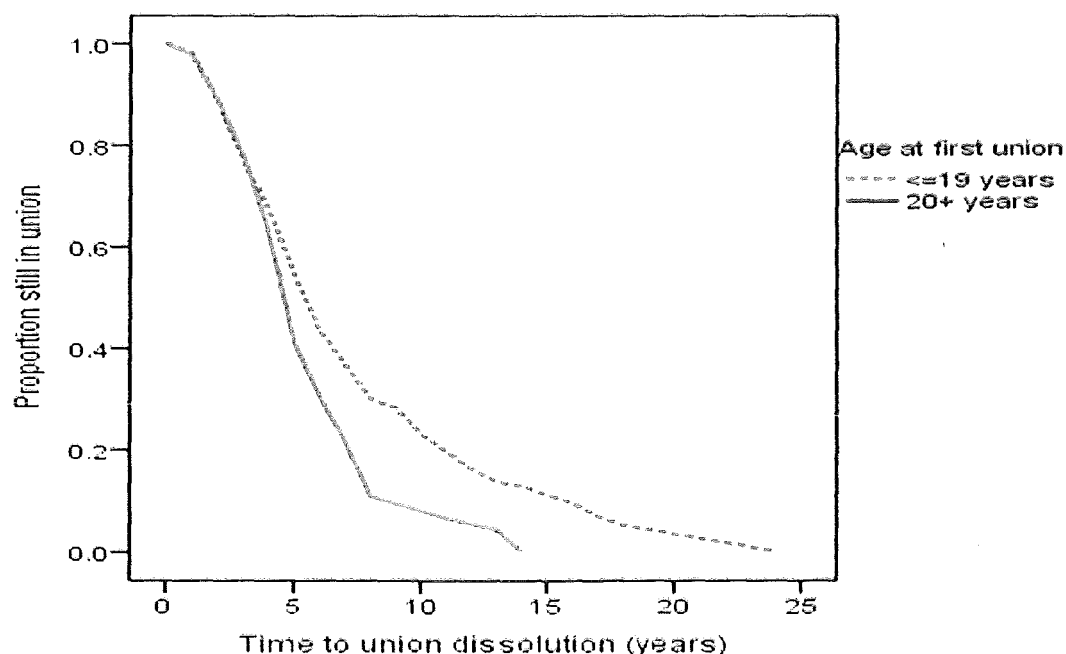


Figure 6.9 Survival distribution of union dissolution by age at first union

6.3.11 Birth Cohort

This section looks at the relationship between the woman's birth cohort and the time taken to dissolve her first union. In the face of the changing forms of sexual union, the benefits of marriage or union as described by Becker (1974) to be the exchange of expressive and instrumental goods and services, are bound to change overtime; and therefore, are the causes of marital dissolution (Teachman, 2002). Thus, birth cohort analysis was done to capture variation in the risk of dissolution overtime in the study population. Table 6.1 shows the results of the association between birth cohort and the time taken before the first union is dissolved. The percentage of women who had ever dissolved their first union was about 46% for women born between 1970 to 1979, followed by nearly 45% for women born

between 1980 to 1989 and about 9% for women born between 1990 and 2000. The results show a highly significant difference between birth cohort and the time taken before the first union was dissolved ($\chi^2=58.433$, $p=0.000$). In comparison, the KM mean time to dissolution was about 10 years for the period from 1970 to 1979 birth cohort, followed by nearly 5 years for the 1980 to 1989 birth cohort and approximately 3 year for those women born between 1990 and 2000. This is indicative of the variation in time to dissolution following a first union for women born at different times (see Figure 6.10). These results partially suggest that changes over time could have diminished the the perceived gains from a union that constituted an increased risk for marital or union breakdown; with higher risk among the most recent birth cohort (1990-2000), followed by the 1980-1989 birth cohort, and a lower risk for the 1970 to1979 birth cohort.

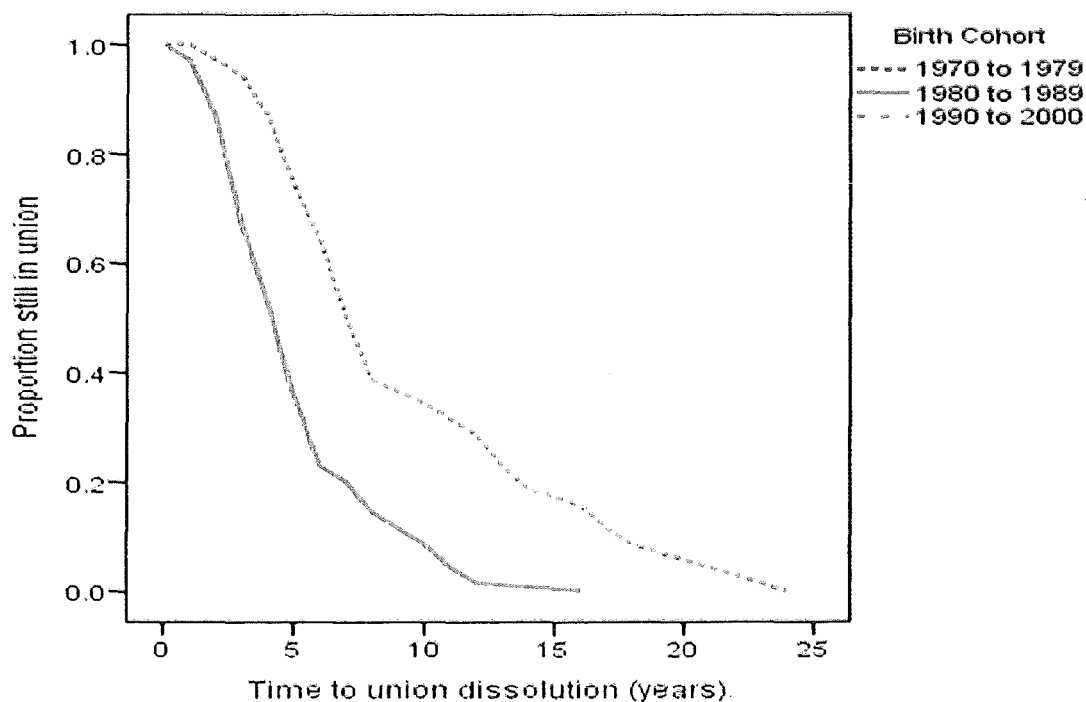


Figure 6.10 Survival distribution of union dissolution by birth cohort

6.4 Risk Factors of Union Dissolution

The results of the bivariate analysis in the previous section were further simulated at a multivariate level to isolate the net effect of independent variables on the survival time to union dissolution. The covariates included in the final model were based on statistical

significance at bivariate level. They include the woman's union status, education, employment status, number of children, age at first union and birth cohort. However, other covariates such as religion, marriage type, and parental union status found in the United States to have an influence on marital or union stability were also included (Wolfinger, 2001).

Table 6.4 presents the results of the Cox proportional hazard model. The results in the table show that the woman's union status, belonging to the SDA and Orthodox faith, having three or more children, parental union status, and birth cohort have significant effect on the probability of increasing or decreasing the length of time from first union to its dissolution in Central Uganda. The model further shows that women who were still at the cohabiting stage had an extremely higher risk of dissolving their first union. Cohabiting women were about 13 times more likely to dissolve their first union compared to those who had married after cohabitation. This could be attributed to several reasons, among them: (a) lower level of commitment between the two partners included in a cohabiting relationship; (b) cohabiting women are unlikely to have long term happiness, respect and satisfaction compared to those who marry directly (Thomson & Colella, 1992); and (c) although in Uganda like in many other parts of sub-Saharan Africa, kin networks are important in stabilizing the marriage institution, such networks do not work in the case of a cohabiting relationship because such unions lack parental or clan members' approval.

Contrary to expectation, there is convincing evidence in the model that women who married directly were about 5 times more likely to dissolve their marriages compared to those who first cohabitated and then married. This probably suggests that although marrying directly is associated with commitment, respect and long-term happiness, women who marry directly also have marital expectations. When such expectations are not realised, they may wait for some time because of the commitment and respect. However, failure to realise their dreams may constitute a risk factor for marital dissolution (Becker et al., 1977). However, in section 6.3.2, the meantime to dissolution was higher among women who married directly which seem to contract the above finding. This contradiction with the Kaplan Meier estimates could be due to outliers among women who married

directly. These outliers were not removed from this kind of analysis because they show reality in society.

Table 6. 2 Results of Cox Proportional Hazards Regression Showing the Relative Risk of Time to First Union Dissolution by Background Characteristics, Central Uganda 2013

Covariates	Hazard Ratio (HR)	95% Confidence Interval (CI)	
Woman's union status			
Married after cohabitation®			
Married directly	4.87*	1.395	17.026
Cohabiting	13.36**	4.112	43.422
Education			
Up to Primary®			
Secondary and higher	1.08	0.731	1.603
Religious affiliation			
Catholic®			
Anglican	0.97	0.628	1.495
Muslim	0.75	0.444	1.273
SDA and orthodox	0.47***	0.212	1.060
Employment Status			
Working®			
Not working	0.63	0.348	1.139
Number of living children			
Up to 2 children®			
Three children and higher	0.51**	0.322	0.811
Marriage type			
Polygynous union®			
Monogamous union	1.28	0.852	1.929
Parental union status			
Cohabiting®			
Married	2.55**	1.263	5.159
Not in union	22.47**	12.147	41.559
Age at first union			
<20 years®			
20+ years	0.85	0.531	1.355
Birth Cohort			
1970-1979®			
1980-1989	1.67*	1.023	2.732
1990-2000	2.39*	1.032	5.522
-Log likelihood			541.1
Number of subjects			781
Total time at risk			7636

Source: Survey Data, 2013; * p<0.05; ** p<0.0001; *** p<0.1; ® Reference category

Women with secondary education or higher had a slightly increased risk of ending their first union compared to women with primary education. The probability of dissolving a first union was slightly higher by about 8%. The difference was however not statistically

significant (Table 6.4). The direction and effect of the effect could be attributed to two reasons: firstly, women with primary education are likely to be more influenced by cultural values and tradition and hence kin networks. These, kin networks in Uganda are known to have inbuilt mechanisms such as material counselling on marital (sexual union) performance and expectations and, financial support to counterbalance marital or union conflicts (Ntozi & Kabera, 1988; Otiso, 2006). Secondly, women with secondary education and higher, constituted 57% of the sampled women in a union. The observed trend could be that the majority of women with secondary and higher level of education are probably alienated from traditional and old-fashioned ways of doing things within a union; and, at the same time, the secondary and higher level of education could not adequately impart them with communication skills necessary to maintain a stable union, thus increasing risk factors for union dissolution.

The evidence from this study shows that although religious affiliation does not necessarily measure religiosity, being affiliated to the SDA and Orthodox Churches significantly decreases the risk of dissolving a marital or sexual union compared to being affiliated to the Catholic Church. Similarly, being an Anglican or a Muslim compared to being a Catholic was associated with lower risks of union dissolution although the effects were not statistically significant. These results are unexpected especially for women affiliated to the Catholic Church because of the ideological and theological stance on divorce. The reason for the observed trend could be, as stated earlier, that women affiliated to SDA and Orthodox Churches, compared to women who subscribe to the Catholic Church, are more conservative with their faith. In addition, in Uganda, SDA and Orthodox women usually insist on marrying men of the same faith and they jointly participate in the Church activities. This could have an effect of lowering union dissolution.

With regard to work status, the results in Table 6.4 show that working generally increases the hazards of union dissolution although the effect is not significant. Women who were not working were 37% less likely to dissolve their union compared to those who were working. On the one hand, it could be attributed to weak marital or union ties resulting from spatial mobility for women who were working thus increasing the probability of union breakdown (Takyi, 2001). On the other, there could be lack of economic opportunities

outside the home for women not working which might explain why they have a lower risk of marital or union breakdown. Therefore, despite the challenges that they may face, women who are not working might have decided to stay in a union to depend on their husbands for survival.

Having many children in a relationship significantly reduces the risk of dissolving a union. There was a remarkable decrease in the risk of dissolving a marriage or a union for women who had three or more children. Women having three children or more were significantly 49% less likely to dissolve their marriage or union than women who had no, one or two children. Giving birth to three or more children implies that partners have stayed longer in a marriage or a union and have therefore acquired many assets including many children as marital specific capital. This might explain why, such women with many children, would find it costly to dissolve their union.

Contrary to what was expected, living in a polygynous union somewhat decreases the risk of marital or union dissolution. One would have expected women who share the affection of their husband to feel threatened, thus increasing friction among them (Bove & Bledsoe, 2009; Takyi, 2001). However, the results presented in Table 6.4 suggest that women in monogamous unions were 28% more likely to dissolve their first union than their counterparts in polygynous unions although the effect is not significant. It may be that women entered polygynous unions well prepared for the challenges associated with such arrangements.

The effect of parental union status on women's likelihood to dissolve her marriage or sexual union was also investigated. Although being raised by parents who are married is expected to have a negative effect on dissolving the woman's first union because of the benefits associated with marriage which children observe while growing up, evidence from this study shows the opposite. Table 6.4 shows that the risk of dissolving a marriage was significantly increased by nearly 2.6 times for women who reported that their parents were married compared to women who reported that their parents were cohabiting which is rather surprising. The increase in the risk, however, was higher for women whose parents were not in union. These results suggest that, in the context of Central Uganda, marriage

or union seems to be a random process. Worthy mentioning is that the analysis shows differentials with some inflated estimates and wide confidence intervals. This is because of a small sample size for these categories which result in a small number of events observed (see Table 6.1). The effect of the small numbers is the large standard errors and thus wide confidence interval. Therefore, further investigation using a bigger sample would be required to come-up with a definite conclusion.

With respect to age at first union, the risk of dissolution decreases with increase with age. Women who entered into a first union at age 20 and above tended to have lower risks of union dissolution compared to women who married or entered first union when they were aged 19 or younger. There is a 15% decrease in the risk for women who formed a first union when they were aged 20 or more compared to those who were aged 19 or before. The difference however is not statistically significant. It is reported that the increase in age at first union is associated with the increase in education attainment (Oheneba-Sakyi, 1989). Therefore, on the one hand, the observed trend may be understood in the context of the importance of education attainment in the socioeconomic life of most women in Central Uganda. On the other hand, being mature and having adequate role performance skills required in a union and associated with adulthood could be used to explain the observed trend.

Birth cohort is another factor which effects on first union dissolution (Table 6.4). Young women have increased risk of dissolving their first union compared to the older women. For instance, women born during the 1980 to 1989 birth cohorts were 67% more likely to dissolve their first union compared to women born during the 1970 to 1979 birth cohorts. The risk is significantly higher for women who were born during the 1990 to 2000 birth cohorts, with a 2.39 times increased risks in factors of dissolving the first union than women born between 1970 and 1979. The observed significant variation in the risk of union dissolution overtime, for the study population, could be that women born during the recent cohorts might have been influenced by modern values. These could have had profound changes in socioeconomic and cultural changes and, in distinct gender roles which could have led to significant increases in the risk factors for marital or union dissolution (Otiso, 2006). This trend is consistent with the increase in dissolution rates

observed in the recent past and is being observed in the contemporary world (Oheneba-Sakyi, 1989; Otiso, 2006).

6.5 Results of the Diagnostic Test

Following the multivariate analysis in the previous section, this section intends to evaluate the goodness of fit of the model using the link-test and Cox-Snell residuals described earlier in section 6.2.1; and also tests for the validity of the proportionality assumption of the PH model. Table 6.2 presents the results of the diagnostic test for the Cox-Proportional hazard (PH) model presented in Table 6.4. The table shows a significant *hat-statistics* ($_hat$ $p=0.006$) and a non-significant *hat-squared* ($_hatsq$, $p=0.776$). These results, on the one hand, confirm that meaningful predictors were considered for analysis. On the other hand, because the *hat-squared* is not significant, it demonstrates that the model was correctly specified with no specification errors (no under specification of the variables).

Table 6.3 Specification Errors of the Link Function

Statistic	Coefficient	Std. Err.	p>z
Hat statistic ($_hat$)	1.1124	0.4014	0.006
Hat statistic squared ($_hatsq$)	-0.0135	0.0475	0.776

Source: Survey Data, 2013; Specification Errors for the Cox model presented in Table 6.4

The overall fit of the PH-model was examined using the Cox-Snell residuals technique (Cleves et al., 2010). Figure 6.11 shows that the fitted line is closer to the 45 degree line which suggests that the model fits the data well. The poor fit shown by the kink on the right hand side is likely be due to the small number of cases resulting from a drop in the effective sample usually caused by prior failures and censoring (Cleves et al., 2010).

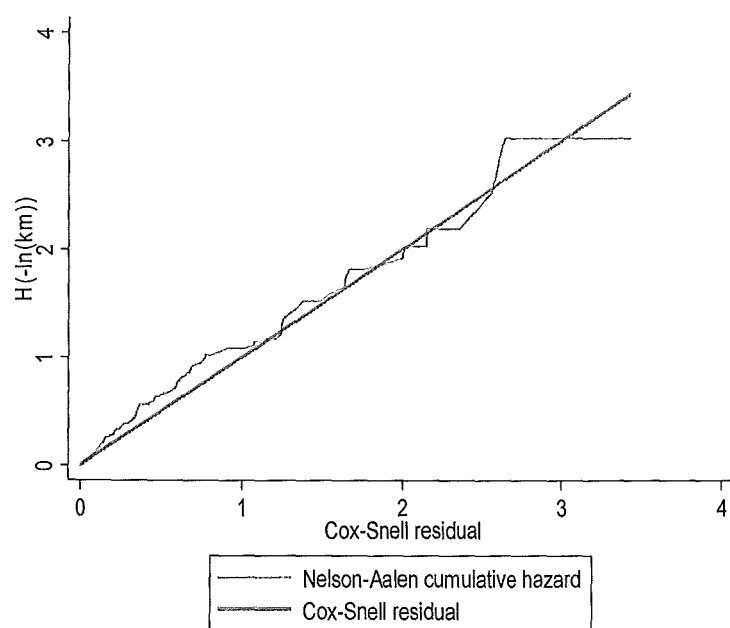


Figure 6.11 Cox-Snell Residuals Graph

6.5.1 Checking and Testing for the PH Assumption

The PH model assumes that the hazard function for the different levels of a covariate which determines union dissolution for women in their first union in the study population is proportional for all the values of time for which the subject are being observed. Table 6.3 presents the results of the covariate specific and global index test.

Table 6.4 Test of Proportional-Hazard Assumption

Covariate	Rho	chi2(χ^2)	Prob>chi2
Woman married directly	-0.13461	2.140	0.1437
Woman still cohabiting	-0.06978	0.600	0.4396
Secondary education+	-0.03219	0.120	0.7316
Anglican	-0.02078	0.050	0.8171
Muslim	-0.00703	0.010	0.9369
Other	0.15870	2.870	0.0901
Not working	-0.09223	1.160	0.2816
Three children and higher	0.02049	0.050	0.8254
Polygynous union	-0.05468	0.380	0.5353
Parents married	0.05109	0.300	0.5821
Parents- not in union	0.06103	0.450	0.5002
Age 20+ years	0.04084	0.200	0.6576
1980-1989	-0.05753	0.370	0.5438
1990-2000	-0.04800	0.270	0.6064
Global Index Test		9.95	0.7660

Source: Survey Data, 2013; rho – is the correlation coefficient; Reference category are omitted; df=14

The results show that neither the covariate specific nor the global index value is significant ($p < 0.05$), suggesting that the PH model assumption was not violated either at covariate or global level. It therefore implies that the data is adequate to be used for the Cox-PH model.

6.6 Dynamics of Union Instability (Qualitative Analysis)

This section presents the qualitative analysis of the data collected using in-depth interviews. The data was used to explore several explanations which could be used to supplement union dissolution issues among the study population. During the interview process, women were asked how cohabitation prior to marriage influences marital or union dissolution. As expected, responses varied and the results are presented under the following key themes: it decreases dissolution because partners study each other before marrying; financial issues matter more than legal marriage or cohabitation; and increases dissolution because of lack of commitment and no parental involvement. The aspect of learning and understanding each other before marriage was mentioned as a common factor leading to decreasing dissolution for women who start by cohabiting. Reflections that were echoed can be found in some of the statements as:

"...in most cases, individuals have high expectations before marriage and when they are not met, the marriage does not last long. Unlike in the past where couples would marry directly and stay in the marriage for a long time, these days, it is ideal to first live together so as to understand each other well. Such a transition helps the intending couples to make better decisions about their future family, thus decreasing the likelihood of dissolving a union." (Married woman, Nkumba Central village, Wakiso district)

Some respondents indicated that whether someone marries directly, marry after cohabiting or cohabit, what matters these days is financial stability in the household. Women will always dissolve their union whenever they find that the man does not have money.

"...she added that most of the ladies or women want to live together with men who have a stable source of income whether married or cohabiting as long as they can provide essential items." (Married woman, Kiwogozi village, Luwero district; married woman, Nkumba Central village, Wakiso district).

"In some cases, premarital cohabitation may increase the chances of dissolving a union; this is because some young girls are persuaded by men using money and they cohabit at a young age. Such young ladies are never stable in their union because of the high expectation they had before the union; this increases the chances of separation with their partners or husbands." (Cohabiting woman, Nkumba Central village, Wakiso district).

Lack of commitment, respect and failure of parental involvement were mentioned as being associated with the increase in marital or union dissolution. In so doing, participants said:

"...when a woman cohabits with a man, the union is not recognised by parents. Therefore, in most cases, the partner will never respect you in the home. As a result, there will always be physical violence which increases conflict. This increases the chances of union breakdown." (Cohabiting woman, Nkumba Central village, Wakiso district).

With regard to how the presence of children influences union stability, women were asked to compare a woman who has a few or no children with a woman who has many children with regard to the likelihood of dissolving marriage or union. Overall, the respondents' views concurred with the results from the quantitative analysis presented earlier that the presence of many children makes it costly to dissolve a union. Some of the respondents' thoughts were:

"When I have no child with the man, I can easily dissolve the union because there is nothing that can prevent me from leaving especially once I discover that a man does not have the qualities I have been looking for. Even with few children like two or three, once I am fed-up, I dissolve the union. You know, some men mistreat women by not giving them enough care and love, and above all, money. These three are important for the stability of the union." (Cohabiting woman, Kasangombe village, Wakiso district).

"....a woman who has few or no children is more likely to dissolve her marriage because they are easy to look after with regards to basic necessities or can be accommodated so easily by the new partner compared to the one who has many children ..."(Married woman, Kiwogozi village, Luwero district).

"... a woman with few children may be accommodated by relatives when her union fails which is not the case with a woman who has many children. Besides, such a woman is still young, attractive and, can easily get another man and remarry." (Married woman, Nkumba, Wakiso district).

Living in a monogamous or polygynous union was the other factor considered to influence union stability. Women respondents were asked for their views on whether sharing a husband with another woman would, in one way increase or decrease the chances of a

woman to dissolve her sexual union. Views varied from one respondent to the other but the general conclusion was contrary to what was expected; that living in a polygynous union would increase the chances of a woman to dissolve her marriage or union. In doing so, respondents pointed out that living in a monogamous arrangement positively influences union breakdown. Some of the statements were:

"A woman who shares a husband with many other wives usually competes with co-wives; therefore, she is unlikely to dissolve her marriage or sexual union. This is because a man would not be hurt; instead, he would turn to the other co-wives for comfort and would never come for you wherever you are. This makes it hard for her to dissolve the marriage if compared with one who does not share the husband with anybody. In this case, a man will find it hard to cope and will, strive to bring her back." (Cohabiting woman, Bukalasa village, Luwero district).

"Women in a monogamous union are usually proud and arrogant, not used to competition and fighting back, so whenever they disagree with the husband she would think of leaving the marriage so that she can hurt him. In addition, she thinks that it would be hard for the man to cope, when he is alone and that he would definitely go for her, which makes her more vulnerable to dissolve the union." (Cohabiting women, Nkumba and Kasangombe villages, Wakiso district)

"In many cases, women enter a polygynous union knowing what they would find in such relationships. Therefore, they are always ready to confront challenges therein compared to the one living in a monogamous union. This makes them less likely to think of dissolving a union compared to one who is living in a monogamous union." (Cohabiting women, Nkumba Central villag, Wakiso district)

As reflected in the above, and based on the overall observation during the course of the interviews, most women thought that living in a monogamous union decreases union stability.

6.7 Discussion

Studies undertaken in the developed world have repeatedly indicated that cohabiting before marriage increases the risk of union dissolution compared to direct marriage (Budinski & Trovato, 2005; Phillips & Sweeney, 2005). Little is known about this association between women who cohabit prior to marriage; those who cohabit without marrying (lifetime cohabiters); those who marry directly; and union stability in the developing world, particularly, in sub-Sahara Africa which has a different social setting. The focus of this chapter was to investigate the relationship between premarital cohabitation, direct marriage, cohabiting and union dissolution for women who enter into first union. The

study was also interested in examining the factors which influence union dissolution among women entering into first union in Central Uganda. We asked: Can similar results about the effect of cohabitation on union stability in the developed world be reported in developing countries, especially in sub-Saharan Africa which has a different social setting? What other factors may influence union dissolution?

The results from this analysis show that women's union status, education, employment, presence of children in marriage or sexual union, age at first union and birth cohort were significantly associated with union dissolution at bivariate level. However, at multivariate level, women's union status, presence of children in a sexual union, parental union status, being affiliated to the SDA and Orthodox Church, number of children and birth cohort were significantly associated with union stability. Women who married directly and those who were still cohabiting had an increased risk of dissolving their marital or union compared to women who married after cohabitation. The risk was remarkably higher for women who were still cohabiting indicating that lifetime cohabitation is inherently unstable. These results are consistent with the findings of Manning & Cohen (2012) in the United States in which they found premarital cohabitation not to be associated with marital instability. However, these results are contrary to the hypothesis of the study and Stanley's findings which linked premarital cohabitation to marital instability (Stanley et al., 2006). These results further support the notion that premarital cohabitation provides a way through which those who intend to marry, get to know each other and incompatible partners are weeded out before marriage (Oppenheimer, 1988). This could be the reason why cohabiting first before marriage was found to be associated with a reduced risk of marital instability compared to those who married directly (Reinhold, 2010).

Another explanation for the observed results could be that women who marry directly as a form of first union usually have high expectations before marriage and failure to realise those expectations, increases the risk factors of dissolving a union. Besides, these are usually young women and lack knowledge about each other. In addition, women who were still at the cohabiting stage had a sharper increase in the risk of dissolving their first union, something which is not surprising. The reason for this dissimilarity could be explained by four reasons: First, cohabiting relationships are inherently unstable because they lack commitment and respect, and although they are tolerated by society, they are not protected

by the law; second, women who cohabit without formerly marrying are unlikely to have long term happiness and satisfaction than married women (Thomson & Colella, 1992); third, although in central Uganda cohabiters appear to perform similar conjugal obligations, they usually see themselves as individuals rather than couples; and fourth, whereas kin networks are important in stabilising struggling or problematic relationships in Uganda, these networks do not work for cohabiting unions because they lack parental approval and a similar reflection was reported in the qualitative study. These results are consistent with the argument behind the trial marriage theory in which cohabitation filters incompatible partners (Brudel et al., 1999).

Women affiliated to the SDA and Orthodox Church compared to women subscribing to the Catholic Church had a decreased risk of dissolving a marital or sexual union. This finding is contrary to what the literature says about the Catholic ideological and theological stance, in which the Catholic Church strongly opposes marital dissolution compared to other religious groups. Nevertheless, one explanation for this finding could be that, while the Catholic Church opposes marital breakdown on ideological and theological grounds, women affiliated to SDA and Orthodox Churches seem to have a conservative stance with regard to observing the doctrine of their Churches. Another point implied by this result is that women affiliated to SDA and Orthodox churches usually marry partners of a similar faith and jointly participate in religious activities (Call & Heaton, 1997). These characteristics, promote family understanding and limit family conflicts which would otherwise lead to increased risk of marital dissolution (Call & Heaton, 1997).

In line with studies done in other countries, for instance Ghana and Canada (Budinski & Trovato, 2005; Takyi, 2001), one of the interesting substantive finding of this study is that having children in a marriage or union increases the cost of marital or union dissolution. A study done by Takyi, using the 1993/94 Ghana Demographic and Health Survey (GDHS-93), indicates that the propensity for dissolution declined with the increase in the number of children (Takyi, 2001). The Central Ugandan data used in this study suggests that as the number of children increases, the risk of marital or union dissolution decreases. Two separate arguments may be used to explain this finding: First, staying longer in a relationship implies that partners are likely to have many children as well as other assets. Children in a relationship are considered as marital specific capital (Josef Brüderl, 2001).

Therefore, the accumulation of marital specific capital and other assets increases the cost of dissolving a marital or union thereby stabilising unstable unions; second, in terms of demography, this finding has implications for researchers in fertility as it may be used to explain why fertility and birth rates remain high or stalled in Uganda, at the time when fertility in other countries is falling. One can conclude that, as explained earlier in chapters four and five, a woman's failure to produce children partly causes union dissolution in several African societies; thus, to avert this, women end-up giving birth to many children.

Another interesting finding in conformity with results from other studies is the significant association between parental union status and the time taken by the daughter to dissolve her marital or union (Budinski & Trovato, 2005). Compared to women whose parents were cohabiting by the time they were growing-up, women whose parents were married had increased risks of marital or union breakdown. In part, the finding is contrary to what was expected of women whose parents were married. On the one hand, this sample from central Uganda partly shows that reproductive pairing of individuals seems to be a random process. This suggests that the situation described by the social learning theory that children model the behaviour of their parents (Manning et al., 2010) may not be representative of women in central Uganda. On the other hand, having parents not in a union had remarkable increased risk of union breakdown for the daughter. Also, it suggests that women who experienced turbulent upbringing are affected by intergenerational transmission of marital or union dissolution (Amato, 1996; Wolfinger, 2001). However, caution should be taken when generalising this effect because the estimate seems to be inflated with wide confidence intervals. The inflated estimate is due to a small effective sample, resulting from prior failures and censoring. Thus, further investigation using a bigger effective sample size would be required in order to generalise the findings of this effect.

Women of recent birth cohorts had significantly increased risk of dissolving a marital or union compared to women born in earlier cohorts. The reason for this variation may lie in the changes of the population attitude over historical time. Over time, the study population might have been influenced by socioeconomic and cultural changes, and in distinct gender roles (Kuperberg, 2014; Otiso, 2006). These changes could have had significant changes

in the risk factors for union dissolution, which is consistent with marriage failure trends (Oheneba-Sakyi, 1989).

With regard to other background variables, although not significant, some notable trends are observed. Women's employment was found not to be related to the time taken to dissolve a union, implying that what was described by Sander (1985), and Poortman and Kalmijn (2002) may not represent working women in central Uganda. It is, however, important to be cautious when interpreting this finding. This is because a woman's work status, especially when most women are working in the informal sector, may not necessarily imply that they are autonomous. When it comes to education attainment, the results were significant at bivariate level, but not significant at multivariate level. However, the study reaffirms the argument behind the economic theory of marriage that educated women are more likely to maximise their preferences elsewhere in the market than being bonded in marriage (Becker, 1974).

Although the practice of polygyny was described by Bledsoe (1990) as one which could be prone to conflict, tension and stress in marital relations, this study found the opposite. Women in monogamous unions had increased risk in dissolving their first union compared to those in polygynous unions. Qualitative data attributed this to lack of competition, arrogance and pride among women in monogamous unions. Another point is that women in polygynous unions join such an arrangement knowing fully well that there are going to be challenges and are always ready to confront them. The effect of age at first marriage or first union, although not significant, indicated that women who entered into a union aged 20 and above had a decreasing effect in the risk factors of union dissolution. This effect could be attributed to maturity and adequate role performance skills necessary in union that are associated with age.

6.8 Summary of findings

Previous studies particularly from the developed world indicated that premarital cohabitation is associated with marital or union dissolution; and that a woman who cohabited before marriage would breakdown her union earlier than the one who married directly as a form of first union. The Central Uganda sample used in this chapter to

investigate this claim has shown no evidence of this association. In fact, women who married directly as a form of first union were more likely to dissolve their union compared to those who married after cohabitation. The findings further support the notion that cohabitation prior to marriage provides a way through which those who intend to marry get to know and understand each other which later makes marriage more stable. Other factors found to significantly influence union stability are the presence of children in a union, parental union status, birth cohort and, being affiliated to SDA and Orthodox Church.

6.9 Limitation

In evaluating the effect of some factors on union dissolution, it is important to highlight the limitations encountered in this chapter. The small effective sample resulting from prior failures and censoring, resulted in inflated estimates (on parental union status) and wide confidence interval. This has an effect on generalising the effect of parents who were not in union on the daughters' decision to dissolve her first union.

CHAPTER 7: COHABITATION AND FIRST BIRTH

7.1 Introduction

The previous chapter assessed the effect of cohabitation on union stability. This chapter shifts emphasis to look at how cohabitation prior to first union affects the time to first birth. Previous research has shown that the importance of the coming of the first child is an important event in family formation (Davis, 2008; Leridon, 1990; Davis, 1986 as cited in Manning, 1995). From the economic theory perspective, marriage is considered to be the ideal situation in which childbearing takes place (Becker, 1981). This is because children are a union specific social capital for couples who are committed to each other for a long-time. As a result, having children before marriage may not only have no economic benefit but also affects the woman's attractiveness in the marriage market (Baizán et al., 2004). The concept of union specific social capital refers to the social networks which links a couple in a union. In addition, social pressure and expectation especially from the husband's parents and other relatives might positively influence married women's decision to have a first child soon after marriage (Baizán et al., 2003; Barber & Axinn, 1998; Leridon, 1990). These findings illustrate differences among married and cohabiting women with regards to childbearing.

According to Davis (2008), in some traditional societies where a husband is the sole breadwinner and the wife, a mother, having the first birth comes earlier; however, in a society where sharing of economics and domestic work is common, the first birth may be delayed. Clarkberg, Stolzenberg & Waite (1995) argued that there are differentials in the start of childbearing between cohabiting and married couples. They argued that cohabiting women tend to have the first birth early, possibly because they are more educated, freer and may not take marriage as the only ideal environment for having babies. Evidence from Europe suggests that entering into cohabitation is taken to be a gateway to marriage mainly when couples desire to have a child (Manning, 1995), while in the United States, entering cohabitation is associated with socioeconomic status (Copen et al., 2013).

In Africa, research on the relationship between cohabitation and the time to a first birth is limited. Existing research involves examining the socio-demographic determinants of the age at first birth (DeRose & Kravdal, 2007; Garenne, 2004), and not the effect cohabitation

as a form of first union has on the time to first birth. Despite its importance in family demography, little is known about the topic in question in Uganda. The aim of this chapter therefore is to examine the effect of cohabitation as a form of first union on the timing of a first birth. The objective was achieved through the analysis of retrospective data using survival analysis (life table approach).

The chapter consists of 7 sections. The introduction is presented in Section 7.1, followed by methods of analysis in Section 7.2. The background characteristics are presented in Section 7.3. In Section 7.4, the effect of cohabitation on the timing of first birth is presented. In Section 7.5, a qualitative analysis is presented. This is followed by the discussion of the results in Section 7.6 and limitations and analysis in Section 7.7.

7.2 Methods of Analysis

Earlier in Chapter three (Section 3.3), we described the data from which the sample used for this chapter was extracted. The sample included only women respondents who were in union. Women who married after cohabitation were considered to have a different effect on the time to a first birth compared to women who married directly or women who were still cohabiting (Baizán, Aassve & Billari, 2003b; Baizán et al., 2004; Manning, 1995). In this chapter, the time to first birth following first union was computed in years from two questions: When did you enter first union? And when did you give birth to your first child? Based on each woman's response, time to first birth was computed by subtracting the year of first entry into union from the year of birth of first birth. Using years was intended to minimize errors because majority of the women could easily remember the year of birth of their children and year of entry into union. A woman respondent was right censored if, by the time of the survey, she had not given birth to her first child. Data analysis was done in two stages, namely, univariate and life table analyses. Univariate analysis was used to summarise the variables used in survival analysis while life-table estimates were used to show the transition to motherhood for women who married after cohabitation, women who married directly and those who were still at cohabiting stage as a form of first union.

The life table approach was used to estimate the proportion of women in union without a first birth at the end of each interval. Censoring occurred when a woman had not gotten a first birth by the date of interview or separated before getting a first birth. Specifically, the

life-tables were used to estimate the cumulative proportion of women in first union who became mothers at the end of each year of observation as a complement of those who had not had a first birth (Preston, Heuveline & Guillot, 2001). This statistical approach uses the number of women in first union exposed to the risk of giving birth to a first birth to estimate the probability of women without a first birth. The computed probability of women without a first birth is then used to estimate the cumulative proportion of women lacking a first birth at the end of each year of observation. The probability of women in first union without a first birth is given as in equation 7.1.

$$p_x = l_{n+x} / l_x \quad (7.1)$$

Where:

l_x - is the number of women exposed to the risk of giving birth to a first birth at the end of each interval of time;

p is the probability of women in union without a first birth and;

n is the interval.

The cumulative proportion (p^{cp}) of women without a first birth at the end of each year of observation takes the form described in equation 7.2.

$$p^{cp} = p_x * p_{x+n} \quad (7.2)$$

The implied proportion of women in union (q^{cp}) who had given birth to a first birth by the end of the interval is given as in equation 7.3.

$$q^{cp} = 1 - p^{cp} = 1 - p_x * p_{x+n} \quad (7.3)$$

Differences between women who married after cohabiting as a form of first union, women who married directly as a form of first union and those who were still at cohabiting stage

with regard to the timing of a first birth are expected to be revealed by the cumulative proportions of women without a first birth at the end of each year since union. Also, typical differences are expected for other background characteristics known to influence the time to a first birth. Significant differences between survival functions of different groups were tested using a generalised Wilcoxon test, a nonparametric statistical test. This test was deemed appropriate because some variables were not normally distributed.

7.2.2 Variables Considered in the Analysis

The dependent variable in the analysis is the time to a first birth following a first union. When studying the effect of cohabitation on the timing of a first birth, accurate results of the risk would be obtained after accounting for the effect of premarital pregnancy because a union may be as a result of conception. To account for this causation, several cleaning procedures were carried out: (i) women who had had a first birth before entering first union were excluded from the analysis (left censored cases) and these constituted nearly 36% of the women in first union, (ii) the dependent variable was considered to be the time taken by the individual woman to have a first birth minus 8 months (0.67 of a year). By subtracting 8 months (0.67 of a year), conception was perceived to be resulting from a union (direct marriage or cohabitation) (Baizán et al., 2003). Although a pregnancy takes 9 months, a woman is unlikely to know her pregnancy status in the first month of gestation until she misses her menstrual period. This is the reason why 8 months (0.67 of a year) instead of 9 months were subtracted, and (iii) of the 865 women respondents who were in union only 555 (64%) were considered for analysis because they met the criterion described above.

Seven independent variables known to influence the time to first birth were used to estimate the cumulative proportions of women without a first birth at the end of each year since first union. These variables include a woman's union status, education, religious affiliation, employment status, age at first union, birth cohort and mother's education. Because the aim of this chapter was to examine the effect of cohabitation on the timing of the first birth, women's union status was the main independent variable. It was included in the analysis because it is hypothesized that women who cohabit and then marry have a higher risk of becoming mothers earlier compared to women who do not (Baizán et al., 2003b;

Raymo et al., 2009). It was coded as married after cohabitation, married directly, and still at cohabiting stage.

Women's education is usually known to delay union especially marriage (Jenkins, 2011; UBOS & Macro International Inc, 2007). Delay of entry into union by educated women may be inspired by the desire to delay childbearing particularly in a society where it is normative to give birth to children quickly following marriage (Jones, 2007). During the survey, education was captured as no education, primary, and secondary education or higher. While modelling, education was grouped into two groups as up to primary and secondary education or higher. Religious affiliation, a proxy for religiosity, and the time to first birth is problematic and require clear understanding of family formation. Teachman and Schollaert (1991) using data from the US found that when age is controlled for, Catholics are more likely than other religious groups to delay the timing of a first birth because they usually spend more time in schools; and enter sexual union later. However, once in union, the duration between marriage and first birth, is shorter for Catholics than other religious groups (Teachman & Schollaert, 1991). Religious affiliation was categorised as Catholics, Anglican and Pentecostals (as Anglican), Muslim, and SDA and Orthodox.

Employment has been hypothesised to compete with entry into motherhood and this leads to the postponement of having a first birth (Edwards, 2002; Nath, Singh, Land, & Talukdar, 1993; Sullivan, 2005). This association is based on the argument that women who are working are typically educated which delays entry into first union (UBOS & Macro International Inc, 2007). Inspired by the above, the association between employment status for women and the time to a first birth was investigated. During the survey women were asked to state whether they were working at the time when they entered into a first union or not working. Research in family demography shows an inverse relationship between age at first union and the time to a first birth (Feng & Quanhe, 1996; Oheneba-Sakyi, 1989). It was captured as a continuous variable. However, during the analysis it was categorised as a dichotomous variable, 'aged less than 20' and 'aged 20 and over'.

Birth cohort was measured by whether a woman was born during 1970-1979, 1980-1989 or 1990-2000. This variable was intended to capture changes in factors which accelerate

giving birth to a first birth over historical time. In particular, it sets to find out whether there exists differences between birth cohorts (England, Wu, & Fitzgibbons Shafer, 2012; Nath et al., 1993). Maternal education has been hypothesised to influence fertility preferences of their Children (Barber & Axinn, 1998; Willoughby & Jones, 2012). It was captured and coded as, 'no education', 'primary', 'secondary and tertiary'.

7.3 Background characteristics

Table 7.1 describes women respondents in union by background characteristics. The results tabulated shows that the majority of women in the study sample were still at cohabiting stage (64.2%) followed by those who had married directly (about 27%) and women who married after cohabitation accounted for only 9%. Distribution by education shows that nearly 54% of the women had secondary education or higher. About 38%, 37%, 18% and 7% of the women in union were affiliated to the Anglican, Catholic, Muslim and other minority religious groups respectively. The majority of women in union (nearly 77%) were doing some work and about 66% were aged less than 20 years. Distribution by birth cohort shows that slightly over half of the women were born during the 1980 to 1989, about 31% were born during 1970 to 1979 and 18.4% were born during the 1990 to 2000 birth cohorts. Regarding mother's education, nearly 41% had no education, 38% attained primary, 15.3% secondary and only 6% had tertiary education.

Table 7. 1: Distribution of women respondents by background characteristics, Central Uganda 2013

Variable	N (555)	Proportion of women
Women union status		
Married after cohabitation	50	9.1
Married directly	148	26.7
Still cohabiting	357	64.2
Education		
Up to primary	256	46.1
Secondary+	299	53.9
Religious affiliation		
Catholic	203	36.6
Anglican	211	38.0
Muslim	101	18.2
Others	40	7.2
Employment status		
Working	427	76.9
Not working	128	23.1
Age at first union		
Less than 20 years	366	65.9
20 years and above	189	34.1
Birth cohort		
1970-1979	169	30.5
1980-1989	284	51.1
1990-2000	102	18.4
Mother's education		
No education	227	40.9
Primary	209	37.7
Secondary	85	15.3
Tertiary	34	6.1

Source: Survey Data, 2013

7.4 Results

The results of the life table estimates are presented in Table 7.2 and Section 7.4.1. The results show the proportion of women who had no first birth six years since first union. These proportions were computed using life table techniques and were used to reveal the effect of cohabitation and other background characteristics on the timing of a first birth for women in the study population.

7.4.1 Effect of Cohabitation on the Timing of a First Birth

Table 7.2 shows that irrespective of the type of union, the pace of getting a first birth within one year following the first on was nearly the same for women who married after cohabitation, women who married directly and those who were still at cohabiting stage. The general trend is that over 80% of the women in the study population had a first birth by the end of the second year. What the life table estimates also show is that 56% of the

women who married after cohabitation, 59% of those who married directly and 60% of the women who were still at cohabiting stage had had a first birth within one year. The analysis also indicates that overall marrying directly slightly accelerates the risk of getting a first child compared to marrying after cohabitation. While about 92% of the women who married directly had had a first birth by the end of the third year following first union, all had had a first birth by the end of the sixth year. The table further shows that by the end of the third year 87% of the women who married after cohabitation and 90% of those who were still at cohabiting stage had given birth to the first child. The corresponding figures by the end of the sixth year are 2.0% and 3.0% respectively. The slight increase in the risk of having a first birth for women who married directly reinforces the view that these women were associated with a short duration of waiting time to a first birth compared to women who marry after cohabitation (Baizán et al., 2003). This trend could be attributed to the normative expectations from relatives and friends (Barber & Axinn, 1998; Leridon, 1990). The slight increase in the risk of giving birth to a first birth among women still at cohabiting stage may be related to children as union specific social capital. The observed differences were however not significant (Wilcoxon-Gehan=0.412, $p=0.814$).

Regarding the effect of education, Table 7.2 reveals that more women with secondary education or higher had a first birth by the end of the first year compared to those with less than secondary education. The corresponding figures are 62% and 58% respectively. By the sixth year, 97% of the women with primary education had a first birth while it was 98% for women who had attained secondary education or higher. By the end of the second year, the difference in the timing of a first birth by education was insignificant. As it is with Asian countries, this data suggests that, for the Uganda sample, education may not have influenced a shift from traditional to individual oriented values thus having little influence on the timing of a first birth (Caldwell, 2005). Much as we observed differences in the proportions of women giving birth to a first birth since union by education attainment, these differences were not significant (Wilcoxon-Gehan=1.352, $p=0.245$).

Table 7. 2 Decrement Life Table Estimates showing the proportion of women in union without first birth by background characteristics, Central Uganda 2013

	Years since first union					
	1	2	3	4	5	6
Women union status						
Married after cohabitation	0.44	0.20	0.13	0.09	0.07	0.02
Married directly	0.41	0.15	0.08	0.05	0.02	0.00
Still cohabiting	0.40	0.18	0.10	0.07	0.05	0.03
Education						
Up to primary	0.42	0.20	0.10	0.07	0.04	0.03
Secondary+	0.38	0.15	0.09	0.05	0.04	0.02
Religious affiliation						
Catholic	0.36	0.13	0.05	0.04	0.04	0.02
Anglican	0.41	0.18	0.12	0.09	0.04	0.03
Muslim	0.44	0.25	0.15	0.07	0.03	0.02
Employment status						
Working	0.42	0.18	0.11	0.07	0.04	0.03
Not working	0.34	0.15	0.05	0.05	0.03	0.01
Age at first union						
Less than 20 years	0.45	0.21	0.11	0.07	0.05	0.03
20 years and above	0.30	0.11	0.06	0.05	0.03	0.02
Birth cohort						
1970-1979	0.39	0.15	0.09	0.07	0.04	0.02
1980-1989	0.42	0.19	0.09	0.06	0.05	0.03
1990-2000	0.34	0.12	0.08	0.06	0.02	0.01
Mother's education						
Primary	0.39	0.19	0.09	0.06	0.04	0.03
Secondary	0.34	0.16	0.08	0.04	0.02	0.01
Tertiary	0.44	0.15	0.12	0.09	0.06	0.06

Source: Survey Data, 2013

An examination of religious affiliation, as a proxy for religiosity, shows that by the end of the first year after a union, a low proportion of Anglican and Muslim women had had a first birth compared to Catholic women. The proportions are 59%, 56% and 64% respectively. By the end of the third year, 95% of the Catholics compared to 88% of the Anglicans and 85% of the Muslims had gotten a first birth. One reason that may be used to explain this trend is that, although Catholic women are known to delay entry into union because they stay longer in school, once in union, they tend to have children quickly (Teachman & Schollaert, 1991). Nonetheless, religious affiliation does not show any significant effect on a woman's timing to a first birth (Wilcoxon-Gehan=3.755, p=0.153).

Paid-up employment for women has been hypothesised to compete with entry into motherhood and this leads to the postponement of having the first birth (Edwards, 2002; Sullivan, 2005). This association is based on the argument that working women are usually educated and work has a tendency of competing with motherhood (UBOS & Macro

International Inc, 2007). After the first year, 66% of women in union who were not working compared to 58% of those who were working had given birth to a first birth. By the end of the third year following the first union, only five of the women not working had not become mothers compared to 11% of the women who were working. The observed difference could be explained by two possible reasons: (i) work and childbearing are competing risks which might probably explain the delay in giving birth to a first birth and (ii) working women could have been using family planning services thus postponing the prospect of giving birth to a first birth (Edwards, 2002; Sullivan, 2005). Although, the effect of woman's work presented significant results elsewhere (Nath et al., 1993), the findings from this study did not present significant results (Wilcoxon-Gehan=2.380, $p=0.123$).

Research in family demography shows an inverse relationship between age at first union and the time to a first birth (Feng & Quanhe, 1996; Oheneba-Sakyi, 1989). Examination of the relationship between age at first union and timing of a first birth revealed that in general entering a first union at age 20 or older significantly accelerates the risk of getting a first birth (Wilcoxon-Gehan=12.827, $p=0.000$). By the end of first year, Table 7.2 indicates that 70% of women aged 20 or older had a first birth by the end of the first year compared to 55% for those who were aged less than 20. By the end of the third year, the corresponding proportions were 94 and 89 respectively. This could be attributed to the reproductive life limit. The woman's reproductive span ranges from 15 to 44 years in most populations, therefore women who enter a first union aged 20 or older were likely to have the first child soonest.

The relationship between the woman's birth cohort and the timing of a first birth was also examined. Birth cohort analysis was done because it could reflect differences in sexual activity in the study population (England et al., 2012). The results are also presented in Table 7.2. The results in the table show that 66% of the women born during the 1999 and 2000 cohorts had, by the end of the first year, given birth to a first child. Matching figures for the 1980 to 1989 and 1970 to 1979 birth cohorts are 58% and 61%. Overall, the transition to motherhood after first union was more accelerated for the recent cohort of women (1990 to 2000) than it was for earlier cohorts. This finding suggests that young women were likely to practice less conservative behaviour than older women. It should

nevertheless be noted that differences in birth cohorts on the variation in the timing of a first birth were not statistically significant (Wilcoxon-Gehan=2.097, $p=0.351$).

As shown by Barber & Axinn (1998), a mother's education may influence her daughters' fertility preferences. This is also the case for this study. The proportion of women who gave birth to a first birth after the first year in union was lower for women whose mothers had tertiary education compared to those whose mothers had attained secondary or primary education. The proportions are 66% and 61% respectively. However, differences in mother's educational attainment on the variation on the timing of a first birth for her daughter after the first union were not statistically significant (Wilcoxon-Gehan=0.949, $p=0.622$).

7.5 Timing of the first birth (Qualitative Analysis)

In the previous section (Section 7.4), we applied survival analysis (using the life table approach) to quantitative data to examine the effect of cohabitation and other background factors on the timing of a first birth following a first union. This section presents the results of a survey undertaken using in-depth interviews. The aim of the qualitative survey was to solicit for reasons that may be used to enrich the statistical findings that would inform the circumstances surrounding the study population. A total of twenty four women who accepted to be interviewed were contacted. During the interview, they were asked how marriage after cohabitation, direct marriage or being still in a cohabiting stage would influence the time to a first birth once union has been formed. As would be expected, the responses varied from one respondent to the other. Children as marital specific social capital, normative expectations and social pressure from relatives and friends were frequently raised as explanations for how the different forms of union which occur for the first time may influence the timing of a first birth following the first union.

"Women who cohabit with a commitment to marriage are likely to delay first child birth than those who marry directly or women who cohabit without a commitment because the process leading to marriage usually takes some time", (Married woman, Nkumba Central, Wakiso district).

"Women who marry directly will give birth to the first child much more quickly because such women are usually under pressure from the husband, in-laws, friends, and the wider community. As a way of thanking the husband for paying dowry to the parents, a married

woman has to show that she is fertile by conceiving immediately and quickly giving birth to a child. If you take long to conceive, people will begin to say that you came to exploit the man or you are a go-getter”, (Cohabiting woman, Kasangombe, Wakiso district).

“Women, who cohabit without commitment to marriage, may give birth to the first child quickly compared to women who marry directly if the man she is living with either has property like land or is rich. This is because children constitute union specific capital. Also children may be used to secure a long-term relationship and if separation takes place, using the child as evidence, the woman may be entitled to share part of the household wealth”, (Cohabiting woman, Nkumba Central village Married woman –Kasangombe village, Wakiso and Bukalasa village, Luwero district).

It emerged from in-depth interviews that cohabiting with commitment to marriage influences fertility by delaying to have a first birth compared to direct marriage or cohabiting without commitment. Women who directly marry have no reason to delay getting a first birth. This is because they are influenced by pressure from friends, relatives and the community. Although cohabiting without commitment is associated with the high risk of union dissolution, women in this relationship may get a first birth sooner than those who cohabit and then marry. This is because children are used as marital specific capital and also as security towards realising a long term relationship.

7.6 Discussion

The main objective of this chapter was to investigate the effect of cohabitation as a form of first union on the time to a first birth. The results show no evidence that cohabiting prior to marriage influenced the timing of a first birth in Central Uganda. Irrespective of the type of marriage (married directly, married after cohabitation or still at cohabiting stage), over 80% of the women in the study population had a first birth by the end of the second year.

The findings also show that marrying directly as a form of first union accelerates the time to a first birth compared to marrying after cohabitation. Nonetheless, there are considerable differences in the effect produced by the marriage type. The direct effect of forming first union implies an increase in the hazard of having a first birth among women who married directly compared to women who first cohabit. Women who were still cohabiting also had an increased risk but not as high as that of women who married directly. Although these differences as shown by the proportion appeared not to be significant, the effect and the

direction of the risk inform the situation among the study population. First, the results reaffirm Baizán et al.'s (2004) argument that because marriage has some level of commitment, it is the ideal environment for childbearing and rearing. Second, as demonstrated by the qualitative data, normative expectations from relatives and friends and societal pressure associated with procreation may be relatively higher for women who marry directly than for those who cohabit first prior to marriage or those still at cohabiting stage. A similar conclusion was arrived at by Barber & Axinn (1998) while analysing the 23- year seven-wave panel data in the United States..

The results of this study show that the effect of secondary education or higher on the time to a first birth was low compared to women with primary or no education. One may assume that the possible reasons for this trend are: (i) in Uganda, education has not had a significant influence on changing people's traditional beliefs to individual oriented values thus having little influence on the timing of a first union (Caldwell, 2005); (ii) just like in other developing countries, childbearing in Uganda does not only occur among women soon after first marriage but also to women soon after entering cohabiting unions as a form of first union; and (iii) also, it may be an effect of age which requires giving birth to a first child soonest.

The results of religious affiliation show that being a Catholic increases the risk of having a first birth than being a non-Catholic. The direction of these results further supports the notion that whereas Catholics marry later than non-Catholics, once married they quickly get their first child. Significant differences between Catholics and non-Catholics persisted up to the end of the first three years following first union and thereafter the trend was similar. Although by using the NSFG data, Teachman & Schollaert (1991) found the effect of being a Catholic or non-Catholic with regard to the timing of the first birth significant, a similar trend observed after the third year could be attributed to a measurement effect. Teachman & Schollaert (ibid) measured the time to first birth from first marriage, but this study estimated the time to first birth from a first union. This implies that Catholic women could have entered union earlier just like non-Catholic women thus leading to a non-significant difference.

The risk of giving birth to a first child after first a union was slightly increased for women who were not working than those who were working. Gutiérrez-Domènech (2003) reported a significant negative relationship between employment and the time to a first birth for Belgium, Italy and Spain and a positive association in Sweden. Depending on the type of work, three arguments may be used to explain the direction and effect of the results, especially by the end of first year: (i) women working in the formal sector spend more time in school acquiring skills necessary in the job market thus entering first union late, (ii) the low work opportunities for women which reduces the opportunity cost to childcare for the infant, and (iii) inadequate facilitation of a combination of employment and childcare friendly policies.

With regard to the age of a woman at first union, the results show an inverse relationship with the timing of a first birth. The effect of difference in age at first union on the time to a first birth showed evidence of a significant difference for the years since union following union formation for women aged 20 or over and those aged less than 20. Feng & Quanhe (1996) and Nath, Singh, Land, & Talukdar (1993) reported a similar association between age at marriage and first birth intervals in China and India respectively. Although Feng and Quanhe (ibid) attributed it to increased sexual activity and social change, in the case of central Uganda, this trend may be due to late entry into first union (about 21 years as described in Chapter four). Women who join a first union late are likely to quicken the pace of giving birth to a first child in order to compensate for the late start and also to ensure that they get the desired number of children. In addition, women who enter the first union late are usually more fecund than those who entered the union earlier. Furthermore, these women suffer from enormous pressure to prove that they are fecund which usually increases the risk of getting a first birth earlier than those who enter union while aged less than 20 (Gyimah, 2002).

Consistent with the literature in the United States that suggests that recent birth cohort shows an increased risk of having a first birth upon joining a first union than previous birth cohorts; and the effect was significant (England et al., 2012), the results from the Ugandan sample did not appear to show major differences specially after the first year. However, the observed difference in the risk of having a first child following a first union could be

attributed to an increase in the prevalence of cohabiting unions common among recent cohorts which deserves further investigation. Also, recent cohorts of young women practice less conservative behaviours than old women of previous cohorts.

The results for education of the mother show a negative relationship for a mother with tertiary education and the daughter's timing of a first birth only in the first year following a first union. Whereas Barber (2001) reported a significant effect of maternal education on the time to a first birth for the daughter in the United States, this study does not show significant differences particularly after the first year. The direction of these results, could however, be attributed to the ability of the mother to impose social control over the daughter. This is consistent with the social control perspective in which both, the mother and children's opportunities and constraints are shaped by similar social forces (Bengtson, 1975).

7.7 Summary of findings

The objective of this chapter was to investigate the effect of cohabitation as a form of first union on the timing of a first birth. The results have shown no evidence that cohabitation as a form of first union influences the time to a first birth following first union. Instead, the results have demonstrated that marrying directly accelerated the risk of giving birth to a first birth. The findings have also revealed that age at first union influences the timing of a first birth especially during the first year following a first union. The results have confirmed several factors found to have a positive effect on the time to a first birth elsewhere do not seem to influence the timing of a first birth in Central Uganda. For this reason, by and large, the results are limited to the study population. Thus, we are hesitant to generalize the findings of this study. Therefore, to close this gap, there is need for considerably more research involving bigger representative samples to examine the effect of cohabitation as a form of first union on the time to a first birth. Also, the study utilised data collected using the Event History method which suggests that it is possible to use this method in a developing country like Uganda.

7.8 Limitation

The results for this chapter are limited to Central Uganda, more specifically to women who conceived after a first union. The results may be affected by two problems. First, the survey did not collect data on coital frequency which may have had an impact on the time to a first birth. Second, proximate determinants and use of contraception were not considered by the study as factors which may influence the timing of the first birth. The results further suggest the need for further investigation with a bigger sample to examine the effect of cohabitation on the time to a first birth. Such a study should also consider collecting data on coital frequency and other proximate determinants, as well as the use of contraception; taken together or separately, these may also have an effect on the timing of the first birth. Furthermore, although the use of lifetables and the generalized Wilcoxon test is unique, the statistical significance of estimates within categories of the same variable could not be determined.

CHAPTER 8: SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

8.1 Introduction

Previous chapters examined nuptiality trends, patterns and differentials; predictors of cohabitation; cohabitation and union dissolution; and cohabitation and first birth. This chapter presents a summary of the main findings of the study and suggests recommendations for policy and programme action, and aspects for further research. The first section of this chapter presents and discusses the major findings. The subsequent sections present implications of the findings, policy recommendation and future areas for research.

8.2 Summary of findings and discussion

This study has examined cohabitation and its implication on marital stability and the timing to a first birth. Specifically, the study investigated nuptiality patterns and differentials in Uganda, patterns and predictors of cohabitation in Central Uganda, effect of premarital cohabitation on union stability and on the time to first birth in Central Uganda.

The results have consistently pointed to the falling trend in marriage in Uganda and a rising trend in cohabitation which seems to becoming increasingly common. Therefore, if the future trend is to depend on the recent past, there is a possibility that marriage will continue to decline and cohabitation to rise. The emerging trend appears to support the notion that overtime marriage as a social institution could be weakening. The existing pattern could be attributed to the fact that as the society in Uganda continue to be influenced by modernization forces, the factors which favoured the marriage institution in general weaken and disappear through the development of factors of change, such as education for example.

The results also suggest that a higher proportion of women in Central Uganda began their first union by cohabiting. Several background factors found to influence women's decision to cohabit as they entered a first union elsewhere were also found by this study to be significantly associated with cohabitation. Women who married directly and those who were still cohabiting as a form of first union were found to have had an increased risk of union dissolution compared to women who married after cohabitation. The results have

shown no evidence that cohabiting prior to marriage influenced the timing of a first birth in the Central Uganda. Irrespective of the type of marriage (married directly, married after cohabitation or still at cohabiting stage), over 80% of the women in the study population had a first birth by the end of the second year. However, overtime, marrying directly as a form of first union accelerated the time to a first birth compared to marrying after cohabitation. Specific findings are presented in Sections 8.2.1 through 8.2.4.

8.2.1 Nuptiality patterns and differentials

Analysis of the UDHS data revealed that despite the increase in the SMAFM from about 20 years in 1988 to nearly 21 years in 2011 for females and from 23 years from 1995 to 25 years in 2011 for males. The existing pattern in the timing of family formation described by the SMAM estimates has sociodemographic implications. For example, a small difference of four years between females and males might imply better communication between the two spouses leading to a stable relationship. In addition, the young age at first union could indicate women's long exposure to the risk of pregnancy; and, with a low modern contraceptive prevalence now standing at just 26%, it probably explains why fertility (TFR=6.2 children), Infant Mortality (54 per 1000 live births) and Maternal Mortality Ratio (438 per 100000 women) are still high in Uganda (UBOS & ICF International Inc, 2012).

Some background factors found in previous studies to vary with SMAM were also confirmed by this study. For instance, Westoff (2003) found the age at marriage to be influenced by urban residence and level of education. This study found SMAFM to vary by education, place of residence and region of residence. SMAM was found to be lower in the Eastern region of Uganda and higher in the Central region, positively associated with education, and higher in urban than rural areas. This variation could be attributed to differences in socioeconomic changes related to education, place of residence and region of residence. Low SMAM in Eastern Uganda could be attributed to the high level of poor people per square kilometer (poverty density) and income inequality (UBOS, 2007). The high level of poverty explains why eastern Uganda has weak family structures which limit education opportunities for children especially girls thus subjecting them to early marriages (Lubaale, 2013).

With respect to union instability, there was generally a declining trend in Uganda with more women than men having dissolved their unions over the past years. This suggests that over time improvement in women status could have increased their free choice in marriage, which is associated with decline in union dissolution (Heaton, Cammack & Young, 2001). With respect to widowhood, more women than men lost their partners. This finding probably suggests that men could have remarried and perhaps married women younger than themselves. In addition, more women than men usually have a higher life expectancy (Ntozi & Kabera, 1988; UBOS & ICF International Inc, 2012). In the era of HIV/AIDS, widow inheritance that would have reduced the number of widows was discouraged. Thus, the number of widows was expected to be higher than that of widowers.

Although the proportion of women living in a polygynous union in Uganda stands at 25%, the pattern shown by this study indicated a declining trend among women and slight increase among men. A similar finding was arrived at by Westoff (2003). The findings revealed that polygyny varies with age, place of residence and education. Older cohorts compared to the young ones and individuals in rural areas compared to those in urban areas exhibited higher rates of polygyny. Therefore, either older cohorts were more likely to embrace old-fashioned practices, for instance, the need for continued lineage which put emphasis on the importance of culture; or older women were likely to experience polygynous unions as they grow older. Nevertheless, lower rates among young cohorts could be as a result of the need for better economic conditions, better education and better health (Ekane, 2013). Overtime changes in socioeconomic conditions could have led to some changes in men's control thus loosening the patriarchal traditions, more especially in urban areas as compared to the rural areas. Also, changes in socioeconomic conditions could have led to differences in material possession between rural and urban areas which might have made the economic utility of polygyny in urban areas lower than in rural areas (Jacoby, 1995).

There was an increase in the proportion never-married for individuals who were eligible for marriage and this pattern has been rising over time reaching an all-time high in 2011 of about 26% among women and 40% among men. Postponement of union could be attributed to the high cost of living and marriage, and the effect of education which shape

individual behavior. The observed pattern may suggest a decline in fertility because the available time for a woman to bear children is reduced. However, fertility in the Central region reduced marginally from a TFR of about 7.2 children in 1988 to nearly 5.7 children in 2011, which is slightly lower than the national average of 6.2 children. The observed pattern, nevertheless, suggests that as soon as women get married, culture, social pressure and normative expectation particularly from the husband's relatives oblige them to immediately begin giving birth to children.

8.2.2 Correlates of Cohabitation

Event history data were further used to investigate the predictors of cohabitation as a form of first union. Results from the bivariate analysis showed significant associations between religious affiliation, education, expectation that cohabitation guarantee union stability, peer influence, paternal education, maternal education, parental union status and, cohabitation. Multivariate analysis consistently confirmed that primary and secondary education; being affiliated to Islam and SDA; maintaining that cohabiting first before marriage ensures union stability; peer influence; and parental marital status to significantly influence women to cohabit as they enter first union in Central Uganda.

One interesting finding was that women affiliated to Islam and SDA Church, were less likely to cohabit than those affiliated to the Catholic Church. This finding reaffirm anecdotal information that individuals affiliated to Islam and SDA are more conservative than women affiliated to other religious groups. In Islam, marriage is obligatory and sex outside marriage is totally forbidden (Olsen, 2009). Also, SDA women and men usually jointly participate in religious activities which promote religiosity; and as a result they marry partners of a similar faith thus limiting entry into cohabitation (Call & Heaton, 1997). These results therefore indicate how religiosity seems to be a powerful mechanism for restricting behavior.

Women with primary and secondary education exhibited a higher probability of cohabiting compared to those with no education. This partly supports the economics view which associates an increase in cohabitation with an inverse relationship that exists between education and marriage (Becker, 1985). However, having no evidence of a significantly

higher probability of cohabiting among women with tertiary education could be related to the delay in the timing of a first union as they search for employment opportunities (Raymo, 2003). The finding that daughters raised by parents who were married had a lower likelihood of entering a cohabiting union compared to those raised by parents who were cohabiting could be an indication that marriage provides marital satisfaction compared to other types of union formation. Also, while marriage showed a declining trend (as described by Chapter four), this finding may imply that women's experience of their parents' marriage seems to shape their ideas about their preferred type of marriage.

8.2.3 Cohabitation and Union Dissolution

Analysis of data on cohabitation and union dissolution revealed that 19% of women in the sample had ever dissolved their first union. The estimated Kaplan Meier mean time to dissolution was about seven years. Women who married directly had an increased risk of union dissolution compared to those who married after cohabitation. The increase, however, was much higher for women who were still at cohabiting stage. Women who married directly could have had high expectation before marriage. However, when they failed to realize their expectations, they may have resorted to union dissolution. It may also imply that reproductive paring of individuals for the study population appears to have been a random process. The results further suggest that cohabitation without commitment is inherently unstable which might explain the sharp increase in the risk of union dissolution among women still at cohabiting stage. In addition, although kin networks are still important in stabilizing relationships in Uganda, such networks do not work for unions still at a cohabiting stage because they were formed without parental involvement.

With regard to other background variables, some remarkable trends were observed. The results show that women's union status, education, employment, presence of children in union, age at first union and birth cohort were significantly associated with union dissolution at bivariate level. The results of the multivariate analysis revealed that within categories of the covariates, significant determinants were: women married directly and still at cohabiting stage, being affiliated to the SDA and Orthodox Churches, having three or more children, having parents who were married or not in union, and having been born between 1980-1989 and 1990-2000.

One interesting finding is that having three or more children decreases the risk of union dissolution. This finding supports the argument that children constitute part of union specific social capital (Josef Brüderl, 2001). In addition, by the time couples get three or more children, a woman could have spent longer in a relationship. Thus, in addition to having children, the couple could have accumulated assets which further increase the cost of dissolution for a woman or overtime they could have understood each other, subsequently stabilizing a struggling union. In terms of demography, the implication is that women may avert union dissolution by having at least three children. This might, in addition to other factors, be used to explain why fertility in Uganda (TFR=6.2) has remained high or stalled despite declining rates in other sub-Saharan countries.

The effect of having a more stable union for women in SDA and Orthodox Churches compared to Catholic is contrary to the Catholic philosophy and doctrine which are against union dissolution (Lehmkuhl, 1909). This could be explained by variation in the level of religiosity. Anecdotal information has it that women affiliated to SDA and Orthodox Churches compared to those affiliated to the Catholic Church, are known to be more conservative when it comes to observing the theological stance of their faith. They usually marry partners of the same faith and jointly participate in Church activities. This promotes family understanding and limits conflict thus leading to decreased risks of union dissolution.

Women born to parents who married directly compared to those whose parents married after cohabitation had a surprisingly increased risk of marital or union breakdown. In some way, this finding is contrary to what was expected of women whose parents were married. On the one hand, the results imply that reproductive pairing of individuals for the study population appears to have been a random process. This is because these women do not seem to be shaped by the marital life of their parents. This implies that the situation described by the social learning theory that children model the behaviour of their parents may not be representative of women in the Central Uganda (Manning et al., 2010). On the other hand, having a parent not in union increased the risk of marital or union breakdown for the daughters; and this is not surprising. It simply suggests that family structure affect children's marital life. As can be seen from this study, women who experience instability

when growing up are likely to be affected by intergenerational transmission of union dissolution (Amato, 1996; Wolfinger, 2001).

The greater increase in risk factors of union dissolution for recent cohorts of women compared to older cohorts might explain the changes in the attitude of the population overtime. This finding is in line with the trend of marriage failures (Oheneba-Sakyi, 1989). Recent cohorts could have been influenced by sociocultural changes in distinct gender roles resulting from the increasing Western influence. Therefore, these changes might have increased risk factors of union dissolution (Otiso, 2006).

8.2.4 Cohabitation and the Time to a First Birth

Survey data were further used to investigate the effect of cohabitation on the time to a first birth. The results generated using decrement life-tables indicated that irrespective of the type of union, the pace of having a first birth within one year following first union is nearly similar for women who married after cohabitation, women who married directly and those who were still at cohabiting stage. However, marrying directly accelerated in the pace of having a first child which partly reaffirms that the ideal environment for childbearing and rearing is within marriage (Baizán et al., 2004). It also implies the effect of normative expectation from relatives and friends associated with procreation for women who marry directly compared to those who marry after cohabitation or women still at cohabiting stage (Barber & Axinn, 1998).

Further analysis found that nearly 70% of the women who entered into first union when they were aged 20 or older compared to about 55% who entered first union at an age younger than 20, had the first child in the first year. Women who entered the first union late could have wanted to compensate for the late start in order to get the desired number of children. Such women are also usually under pressure to prove that they are fecund which increases the risk of having a first birth earlier compared to women who entered union early (Gyimah, 2002).

8.3 Theoretical Implications

The research for this study focused partly on the Economic Theory of Marriage and on the Trial Marriage Theory. The argument behind the former is that individuals marry in order to tap the economic benefits expected from marriage. This is done by maximizing their own wellbeing and production (Becker, 1974). By implication, the uneducated and less educated women marry because of the benefits they expect to get from their husband's earnings while educated women who have personal skills which can be maximized in the job market are less likely to marry. It is noted from this study that cohabitation as a form of a first union increased with educational attainment upto secondary and decreased with tertiary education. Education may therefore have an inverse relationship with direct marriage, but with mixed evidence for cohabiting union which is contrary to what was described by Becker (1985). Thus, women from this study do not seem to support the economic theory of marriage.

The argument behind the Trial Marriage Theory is that an individual cohabits in order to test the compatibility of the relationship. Cohabiting partners who find that they are compatible might consider marrying while those who find that they are not, would be weeded-out (Brudel et al., 1999). This implies, according to the theory, that premarital cohabitation reduces the risk of marital dissolution. With regards to a first union and its effect on marital stability, evidence from this study indicates that women who married after cohabitation compared to those who married directly had a decreased risk of marital separation thus providing support for the Trial Marriage Theory. The results from this study are consistent with those presented by Manning & Cohen (2012) and Reinhold (2010). These authors found premarital cohabitation among women in the United States not to be associated with marital instability. For the study population, premarital cohabitation therefore suggests that women's views coincided with the theoretical perspective (Oppenheimer, 1988). However, these results contradicted those of Stanley et al. (2006), and Budinski & Trovato (2005) who associated cohabitation with union dissolution. The possible reason for the contradiction might be that women who married directly had expectations prior to marriage which were not met, thus increasing the risk factors of marital dissolution.

8.4 Conclusion and recommendations

The findings of this study have revealed a declining trend in marriage in Uganda and a rising trend in cohabitation. These trends indicate that as modernization takes place, there is a tendency for the factors which favoured marriage as an institution to weaken and eventually disappear. Examples of such factors are education, and increase in the number of women in paid employment. This may explain why a higher proportion of women in Central Uganda seem to enter into first union by cohabiting as revealed by the data. With regard to the predictors, the study identified women's education, religion, expectation about union stability, peer influence, and parental union status as factors influencing first cohabitation. The analysis of the relationship between cohabitation and union dissolution showed no evidence that marriage following cohabitation increased the risk of marital dissolution. Instead, the study found women who married directly to have had an increased risk of union dissolution and those who were still at cohabiting stage were found to be inherently unstable. The findings of the study suggest that future interventions aimed at reversing the trend in marriage may be enhanced by having marriage promotion programmes which encourage the factors that favoured marriage to change with the development of factors of change. In addition, cohabiting without commitment should be discouraged and couples should be counselled so as to avoid high expectation in marriage. The effect of cohabitation on the timing of a first birth was not substantial. Regardless of the type of marriage (married directly, married after cohabitation or still at cohabiting stage), over three-quarters of the women had a first birth by the end of the second year following union.

There is a growing concern in the world about the rising trend in cohabitation in the developing and developed world; and is said to be influencing nuptiality patterns (Kiernan, 1991, 2001; Mokomane, 2005a, 2013; Posel & Rudwick, 2013). It has been observed in this study that cohabitation in Uganda is increasing and marriage declining. This is similar to Mokomane's findings in Botswana, where it was found that the proportion of cohabiting unions relative to all unions in Botswana was increasing (Mokomane, 2005a). This is in contrast to the widely held belief that marriage in sub-Sahara Africa is universal (van de Walle, 1968). In the central region of Uganda, results have shown that cohabiting unions are inherently unstable. Therefore, from the findings of the study, important decisions and policies can be drawn for government action.

From the study, it was observed that cohabiting unions are on the rise and that the prevalence of cohabiting among women forming first union is high while seems to be declining. As a result, there is need for institutional arrangements to strengthen the marriage institution in a dynamically modernizing and changing world. These may be in form of differential incentives for marriage as opposed to cohabitation.

The 'marriage and divorce bill of 2009' is the theoretical base for this current study which aims at consolidating the law concerning marriage, separation and divorce and, providing marital rights and duties in Uganda. In addition, the bill intends to grant certain rights to cohabiting couples (Ministry of Justice and Constitutional Affairs, Uganda, 2009). However, findings from this study have shown that cohabiting unions are inherently unstable. In a bid to reduce the risk of union dissolution for women who enter into a first union, there is need to protect women in cohabiting union so as to match discriminatory provisions.

The analysis concerning the effect of cohabitation on the time to first birth showed that women who cohabit just like those who marry directly showed more-less an equal effect during the first two years after first union; implying that although cohabitation is not legal, for this population, it looks similar to marriage when it comes to fulfilling conjugal obligations. Therefore, it is worth noting that government programmes that discourage the development of cohabitation as a form of first union, may contribute to declines in fertility.

Tertiary education was observed not to influence women to cohabit as they enter into first union compared to primary and secondary education. Therefore, government should encourage parents to send their daughters to post-secondary institutions. Strong education campaigns should be mounted to sensitize the population to educate their daughters beyond secondary level education. Government should devise means of subsidizing female education at tertiary level with a view of making it universal.

Some religious beliefs were observed to play a role in discouraging cohabitation as a form of first union and union dissolution. This is true for Muslims, Seventh - day Adventist and Orthodox Christians. This means that involving these religious leaders in government

programmes and policy development aimed at discouraging cohabitation and union dissolution is likely to have schematic chances of success.

8.5 Implications for research

Much as cohabitation and its implications on marital stability and first birth in Central Uganda have been investigated in this study, a very important consideration for future research is the need to use a bigger sample size and the event history method to examine the effect of cohabitation on marital stability and the time to first birth. This is because the effective sample size in survival time related studies is affected by prior failures and censoring as was exhibited in Chapters six and seven. The findings from such a study would provide information for the population policy running in the country. In addition, future research should examine time spent before eventually marrying for women that first cohabited and then subsequently married.

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APPENDICES

Appendix 1 Event History Calendar

Name of District =
Name of Village =

182

Questionnaire No=
HHD No=
WOMAN ID=

3	Children	M	F
	CLH		
	CLEW		
	Dead		
	TOTAL		

183

Appendix 2 Individual In-depth Interview Guide

NORTH-WEST UNIVERSITY (MAFIKENG CAMPUS) COHABITATION SURVEY IN CENTRAL UGANDA, 2013

INDIVIDUAL INDEPTH INTERVIEW GUIDE INDIVIDUAL WOMAN Questionnaire (15-49 years)

Name _____ of _____ interviewer	Date/...../2013
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Introduction and background:

Interviewer say: Hello, my name is _____. I am working for North-West University (Mafikeng Campus), South Africa who are currently undertaking a survey on Marriage. The survey is intended to find out about the things that happen when two partners decide to begin living together as married couples; and also, learn why individuals cohabit before marrying while others marry direct. I will be writing down and recording what you tell me to enable me recall what we have been discussing however, information gathered will be kept confidential. I will not put your name on the questionnaire and none of your friends or any other person will know what you tell me. If at any point you feel uncomfortable to continue you can stop.

May I continue the interview? 1=Yes

2=No (Thank you)

a. Cohabiting Woman

1. What is your perception and attitude towards cohabitation (unmarried couples living together in an intimate relationship)?
2. Why did you decide to cohabit?
 - a. Probe for
 - Cohabitation as a transition stage
 - Economic motive for cohabitation
 - Cohabitation as a means for securing a relationship
 - Cohabitation as a means of legitimizing premarital pregnancy and childbearing
3. Considering an intimate relationship, do cohabiting and married people differ? If yes, how and if no, why not?
4. Comparing the married and cohabiting individuals? Who is more likely to give birth to the child first? And why do you think so?

5. How does cohabiting affect marriage and first birth?
6. In your own view, why do people first cohabit before they marry?
7. Does premarital cohabitation increase or decrease the chance of marital dissolution? Give reasons to support your answer.
8. Comparing a woman who has few or no children with a woman who has many children, who is more likely to dissolve her marriage? Explain why.- ***We need a lengthy explanation***
9. Why is it that a wife who shares the husband with other wives is less likely to dissolve her marriage than a woman who shares the husband alone? - ***We need a lengthy explanation***

b. Married Woman

1. What is your perception and attitude towards marriage?
2. Why did you decide to get married directly without first cohabiting?
3. Considering an intimate relationship, do cohabiting and married people differ? If yes, how and if no, why not?
4. Comparing the married and cohabiting individuals? Who is more likely to give birth to the child first? And why do you think so?
5. In your own view, why do some people first cohabit before they marry?
6. Does premarital cohabitation increase or decrease the chance of marital dissolution? Give reasons to support your answer.
7. Comparing a woman who has few or no children with a woman who has many children, who is more likely to dissolve her marriage? Explain why.- ***We need a lengthy explanation***
8. Why is it that a wife who shares the husband with other wives is less likely to dissolve her marriage than a woman who shares the husband alone? - ***We need a lengthy explanation***

Thank you for participating in this study.

Appendix 3 Uganda National Council of Science and Technology (UNCST) approval



Uganda National Council for Science and Technology (Established by Act of Parliament of the Republic of Uganda)

27/08/2013

Our Ref: SS 3205

Mr. Charles Lwanga
School of Statics and Planning, Makerere University
Kampala

Re: Research Approval;

Patterns of Cohabitation and its Implications on marital stability and first birth: A case study of Central Region of Uganda

I am pleased to inform you that on 04/07/2013, the Uganda National Council for Science and Technology (UNCST) approved the above referenced research project. The Approval of the research project is for the period of 04/07/2013 to 04/07/2014.

Your research registration number with the UNCST is SS 3205. Please, cite this number in all your future correspondences with UNCST in respect of the above research project.

As Principal Investigator of the research project, you are responsible for fulfilling the following requirements of approval:

1. All co-investigators must be kept informed of the status of the research.
2. Changes, amendments, and addenda to the research protocol or the consent form (where applicable) must be submitted to the designated local Institutional Review Committee (IRC) or Lead Agency for re-review and approval prior to the activation of the changes. UNCST must be notified of the approved changes within five working days.
3. For clinical trials, all serious adverse events must be reported promptly to the designated local IRC for review with copies to the National Drug Authority.
4. Unanticipated problems involving risks to research subjects/participants or other must be reported promptly to the UNCST. New information that becomes available which could change the risk/benefit ratio must be submitted promptly for UNCST review.
5. Only approved study procedures are to be implemented. The UNCST may conduct impromptu audits of all study records.
6. A progress report must be submitted electronically to UNCST within four weeks after every 12 months. Failure to do so may result in termination of the research project.

Below is a list of documents approved with this application:

	Document Title	Language	Version	Version Date
1	Research proposal	English	N/A	N/A
2	Data Collection questionnaires	English	N/A	N/A

Yours sincerely,

Leah Nawogulo
for: Executive Secretary
UGANDA NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY

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