



DEMOGRAPHIC RESEARCH

A peer-reviewed, open-access journal of population sciences

DEMOGRAPHIC RESEARCH

VOLUME 34, ARTICLE 15, PAGES 421–450

PUBLISHED 3 MARCH 2016

<http://www.demographic-research.org/Volumes/Vol34/15/>

DOI: 10.4054/DemRes.2016.34.15

Research Article

First union formation in urban Burkina Faso: Competing relationship transitions to marriage or cohabitation

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First union formation in urban Burkina Faso: Competing relationship transitions to marriage or cohabitation

Anne-Emmanuèle Calvès¹

Abstract

BACKGROUND

In several African cities the prevalence of unmarried cohabitation among youth has risen considerably. Because of its potentially negative implications for women and their children, in some countries cohabitation has even become a matter of heated public debate and policy concern. In contrast to industrialized countries, however, the choice between marriage and cohabitation in the region has attracted little attention.

OBJECTIVES

The purpose of the study is to explore the rising phenomenon of young, unmarried, cohabiting couples in Ouagadougou, the capital city of Burkina Faso, and to evaluate how characteristics of both partners involved in a dating relationship affect the choice between marriage and non-marital cohabitation when forming a first union.

METHODS

Based on life history data including unique relationship biographies, the study takes a competing risks approach to examine relationship transitions to a first marriage or unmarried cohabitation.

RESULTS

A long spell of unmarried cohabitation is common among youth in Ouagadougou today, and children's exposure to cohabitation is high. While occupation, especially male occupation, is a crucial determinant of entry into union – having a similar effect on marriage and cohabitation risks – partners' educational attainment, ethnic endogamy, and religion significantly affect the choice between marriage and cohabitation.

CONCLUSIONS

Ideational changes rather than economic ones motivate youth to choose cohabitation instead of marriage. Cohabitation in Ouagadougou has not become the “poor man's wedding”, as Oppenheimer's hypothesis would suggest, but rather the preferred choice of dating couples who are more willing and able to distance themselves from familial expectations and marital norms.

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1. Introduction

Although marriage remains almost universal in sub-Saharan Africa, there have been widespread and profound changes in the transition to marriage across the region over the last few decades (Lloyd 2005; Marcoux and Antoine 2014). Even in West Africa, where a large proportion of women still marry early, in most countries the median age of first marriage among women and, to a lesser extent, among men has consistently risen since the end of the 1970s, especially in urban areas (Hertrich 2007; Tabutin and Schoumaker 2004). Not only are first marriages postponed, but the process of union formation is also changing in many African cities, including Ouagadougou. One of the noticeable changes in the Burkinabè capital city is the rising prevalence of consensual unions among youth, who choose to cohabit with a partner without performing any marriage ceremony (Calvès, Kobiané, and Martel 2007; Legrand and Younoussi 2009). Today, unmarried cohabitation seems less stigmatized than in the past, and what used to be commonly regarded by Burkinabè city dwellers as a clear “transgression of the rules” is increasingly emerging as a tolerated form of “intermediary conjugal union” (Attané 2007).

Despite the growing popularity of unmarried cohabitation among youth in several African cities, and even though the rise of cohabitating unions has become a policy issue and the subject of heated public debate in some countries (Mokomane 2005a; Posel, Rudwick, and Casale 2011; Bocquier and Khasakhala 2009), cohabitation behavior is rarely studied in sub-Saharan Africa and the choice between marriage and cohabitation in the region still attracts little attention when compared to other parts of the world. In fact, unmarried cohabitation and marriage are still often treated as synonymous by Africanist demographers, who tend to group cohabiting and married women under the general label “women in union”. This lack of distinction is problematic, however, as the increasing prevalence of unmarried cohabitation, even as a prelude to formal marriage, may reflect not only larger social changes such as the emergence of new values and expectations among the young generation of African city dwellers with respect to partnership and family (Werner 2006; Cole and Thomas 2009) but may also have important implications for women and their children.

In fact, despite its postponement, formal marriage still constitutes an essential source of social status for women in Burkina Faso and remains crucial to their securing access to money, housing, and land (Bardem and Gobatto 1995; Rossier 2007; Roth 2010). Unlike their married counterparts, unmarried cohabiting women also lack legal and social protection when the relationship ends. As for children born within unmarried relations, their social identity and access to wealth and inheritance depend on their biological father’s willingness to acknowledge paternity and support them. Scattered

evidence suggests that an increasing number of young fathers in Burkinabè cities fail to do so (Mazzocchetti 2007; Carle and Bonnet 2009).

In such a context, exploring the rising phenomenon of young unmarried cohabiting couples and factors affecting the choice between marriage and unmarried cohabitation among urban youth becomes all the more salient. Based on unique life history data, including biographies of relationships recently collected among young adults, the study takes a competing risks approach to examine relationship transitions to a first marriage or an unmarried cohabiting union in Ouagadougou, the capital city of Burkina Faso. The nature of the data allows us to go beyond the traditional one-sided analysis of union formation, focusing on either men or women, and evaluate how characteristics of both partners involved in a dating relationship affect the choice between marriage and non-marital cohabitation when forming a first union.

2. Background and hypotheses

2.1 Rising unmarried cohabitation in urban Africa

For a long time, marriage in sub-Saharan Africa occurred early and was universal, but since the end of 1970s most countries in the region have been moving into a new phase marked by a consistent rise in women's age at first marriage, especially in urban areas (Tabutin and Schoumaker 2004; Hertrich 2007). Even in West Africa, where in rural areas early marriage is still the norm, in cities rapid transformations have been observed from one generation to the next, with postponement of first marriage in some countries reaching up to seven years (Marcoux and Piché 1998; Antoine, Razafindrakoto, and Roubaud 2001; Calvès 2007). Not only do urban youth in sub-Saharan Africa marry later, they also initiate their first union differently. In fact, strong evidence exists across the continent that the prevalence of unmarried cohabitation – where urban youth choose to live together without performing any religious, traditional, or civil marital ceremonies – has risen considerably in recent decades (Posel, Rudwick, and Casale 2011; Bocquier and Khasakhala 2009; Mokomane 2005a, 2005b). In some countries the phenomenon has acquired such sizeable proportions that it has actually become a policy issue. In Kenya, for instance, the Marriage Bill of 2013 fueled intense debates, largely because it initially included a provision to legalize unmarried cohabitation, popularly referred to in the country as 'Come-we-stay' unions (Chigiti 2012; Mureithi 2013). In Cameroon, in a similar effort to fight the fast-rising numbers of 'Viens on reste' (the popular francophone appellation for 'Come-we-stay' unions) and their potentially negative consequences for women and children, since 2007 the Ministry for the Promotion of Women and the Family has established 'collective wedding

ceremonies' to encourage unmarried cohabitants to make their unions official (Tambenkongho 2010).

In Burkina Faso, while unmarried cohabitation has not yet become a matter of public debate, existing evidence suggests that a growing number of young urban men and women also commence living together as husband and wife without formalizing their union (Calvès, Kobiané, and Martel 2007; Legrand and Younoussi 2009). In Ouagadougou and Bobo-dioulasso, the two largest cities of the country, it has been reported that in 2000 more than a quarter (27%) of young women aged 15–24 initiated their first union by living with their partner without any marital ceremony, compared to less than 5% among those of the same age in 1980 (Calvès, Kobiané, and Martel 2007). Although childbearing remains strongly associated with marriage in Burkina Faso, a growing number of young urban men and women are also becoming parents within informal sexual unions (Calvès, Kobiané, and Martel 2007; Rossier, Sawadogo, and Soubeïga 2013). Recent anthropological evidence from urban Burkina Faso confirms that whereas in the past living informally with a partner was socially condemned and seen as a show of disrespect for elders, today such unions appear to be increasingly tolerated (Attané 2007). This greater tolerance vis-à-vis cohabiting sexual unions has to be understood within the larger context of the rising rate of premarital sexual activity among Burkinabè youth, resulting from a postponement of first marriage and a relatively stable age of sexual initiation, especially in urban areas (Mensch, Grant, and Blanc 2006). As in other African cities (Clark, Kabiru, and Mathur 2010; Longfield 2004; Luke 2003; Poulin 2007), unmarried youth in contemporary Ouagadougou are often engaged in a number of premarital sexual relationships, either sequentially or simultaneously, with various underlying logics (Rossier, Sawadogo, and Soubeïga 2013). These relationships can be casual or long-lasting, and vary in terms of stability.

Despite its increasing popularity in the capital city, the position of unmarried cohabitation within this large relationship spectrum remains unclear. In particular, it is still difficult to assess whether the rise of unmarried cohabitation in Ouagadougou is part of marital postponement or is an emerging alternative form of coupling. Anthropological evidence suggests, however, that unmarried cohabitation among the youth is understood and tolerated by families as an “intermediary conjugal union”, with the general expectation that a marriage will eventually follow (Attané 2007). Unmarried female cohabiters are likely to share this expectation since marriage remains today a “social necessity” and a primary objective for young women in Ouagadougou, even highly educated ones (Lewis and Calvès 2011; Mazzocchetti 2010). In fact, the status of the wife remains an immanent feature of a woman’s social identity in the capital city and a means of acquiring respect and social recognition. Until her union has been formalized by a marital ceremony and bridewealth has been exchanged, a female cohabiter remains a ‘stranger’ to her partner’s family and a single woman in the eyes of

her own family (Lewis and Calvès 2011). The social pressure to marry increases with age and for young women, even those who are educated and live in the capital city, singlehood after the age of 30 is a source of shame and disrespect (Mazochetti 2010; Traoré 2005). Besides social recognition, a woman's economic security in Burkina Faso is still very much dependent on her being formally married. As in other patriarchal West African countries, Burkinabè women are highly dependent on marriage for access to land, capital, housing, and income, and even women who have their own source of income cannot forgo marriage without experiencing significant material losses (Cooper 2012; Attané 2007). Unlike women living in cohabitation, married women can also rely on traditional familial mediation and support mechanisms during conjugal conflicts, such as failure on the part of the husband to fulfil his financial obligations during marriage or after separation or widowhood. Contrary to their cohabitating counterparts, women who are legally married can also turn to state services or legal justice in exercising their rights (Cavin 1999; Bertho 2012). In addition, children born within cohabitating unions are at risk of social and economic marginalization. In Burkina Faso, customary marriage and bridewealth payments determine the affiliation of children who, as in all patrilineal societies, belong to the lineage of the husband even if he is not the biological father (Badini 1994; Lallemand 1977). The lineage affiliation of children born to cohabiting women, on the other hand, very much depends on the willingness of the woman's partner to acknowledge paternity. Scattered evidence suggests, however, that some young men in Burkinabè cities fail to recognize some of their biological children, and/or do not always assume the financial and social responsibilities associated with fatherhood (Mazzocchetti 2007; Carle and Bonnet 2009). Since paternal recognition remains crucial in establishing children's economic status, their access to wealth and inheritance, and their social identity, the lack of paternal recognition and support (even temporary) is likely to have long-term and detrimental socio-economic consequences for unrecognized children. Unsurprisingly, in such a context the number of conflicts surrounding the establishment of the paternity of children born outside customary or legal marriages is believed to be increasing in African cities (Cavin 1999; Bertho 2012).

2.2 Factors affecting the choice between marriage and unmarried cohabitation

In contrast to industrialized countries (Manting 1996; Oppenheimer 2003; Manning, Longmore, and Giordano 2007; Thomson and Bernhard 2010; Agadjanian and Dommaraju 2011; Kalmijn 2011; Pereiro, Pace, and Didonna 2014), the choice between marriage and cohabitation among youth in sub-Saharan Africa and the factors affecting this choice have attracted little attention. Overall, however, two main general

hypotheses emerge implicitly from the existing literature. The first views the recent rise of unmarried cohabitation as essentially a result of deteriorating economic conditions and the urban employment crisis that characterized most African cities from the end of the 1980s until recently. This perspective is in line with Oppenheimer's hypothesis (Oppenheimer 2003), which has been verified in the United States and in Europe (Clarkberg 1999; Kravdal 1999; Kalmijn 2011). According to Oppenheimer's theory on marriage timing, young men's unemployment and unstable and low status jobs impede assortative mating and therefore delay union formation (Oppenheimer 1988, 2000). The negative effect of men's poor economic conditions on marriage is especially pronounced in countries where the man is the primary breadwinner and where gender roles are less symmetrical (Kalmijn 2011). However, while men's unemployment and low earnings may negatively affect the formation of both cohabiting and marital union, Oppenheimer's further argues that one would not expect the same magnitude of effects on the two types of union. According to her, cohabitation should be less sensitive to men's economic position than marriage, as uncertainty about a young man's economic prospect is more tolerable during the less stable, short-term cohabitating stage than it is in a long-term commitment to marriage. In fact, because marriage requires a "stronger economic underpinning" (Kravdal 1999) and more occupational stability from the male, unmarried cohabitation may be viewed as an attractive alternative family-formation strategy by some disadvantaged groups who lack the necessary economic well-being in time of economic uncertainty (Clarkberg 1999), and may become "the poor man's marriage" (Kalmijn 2011: 288).

While Oppenheimer's hypothesis has not been formally tested in the African context, quantitative data from Botswana, where cohabitation rates are among the highest on the continent, reveal that cohabitation is actually significantly higher among the less educated and the unemployed fringe of the male population (Mokomane 2005a). Qualitative data collected among unmarried cohabitants further confirm the centrality of economic or financial considerations in their decision to start living together. The high cost of living in cities and unemployment were the most frequently mentioned reasons for cohabitation among young urban women, and the prohibitive costs of bridewealth and wedding expenditures were cited by male cohabitants (especially uneducated and unemployed ones) as primary motives for cohabitation (Mokomane 2005b). The inability of young urban men to bear the rising costs of marriage is also presented in popular discourse and the media in Kenya and Cameroon as the driving force behind 'Come-we-stay' relationships (Chigiti 2012; Mureithi 2013; Tambenkongho 2010). In the two countries, policy initiatives to incite cohabitating partners to marry, such as collective weddings or attempts to outlaw bridewealth payments, indicate that government officials also share this popular belief. In West Africa, while existing research has shown that the deteriorating labor market conditions

have significantly delayed young men's transition to first marriage in several cities such as Ouagadougou (Calvès 2007), Dakar (Antoine, Djiré, and Laplante 1995), and Bamako (Marcoux and Piché 1998), whether a man's economic position has a weaker effect on cohabitation than on marriage, as Oppenheimer's hypothesis would suggest, remains an empirical question to be addressed.

The second implicit hypothesis found in the literature regarding the choice between marriage and cohabitation might be labeled the 'individualization' hypothesis. In line with the arguments developed by several demographers to explain the diffusion of cohabitation in Western societies (Lesthaeghe and Meekers 1986; Van de Kaa 1987; Thornton, Axinn, and Hill 1992), the rise of unmarried cohabitation in African cities has been associated with an ideational shift towards greater individual autonomy, triggered by young city dwellers' adoption of new cultural values and norms as well as new opportunities to distance themselves from generational control over their lives. In Burkina Faso, as in most African countries, customary marriage is traditionally regarded as an alliance between two kinship groups rather than as a union between two individuals (Capron and Kohler 1978; Badini 1994). For example, among the Mossi, the predominant ethnic group in Burkina Faso, the head of the 'budu' (lineage), the *budu kasma* or someone representing him, has historically been responsible for choosing the future spouses of young girls under his authority (Lallemand 1977). As in other parts of sub-Saharan Africa, mate selection followed a complex set of explicit and implicit rules often "reflecting the political and economic agendas of the elders" (Bledsoe and Cohen 1993: 39; Laurent 2013). Union formation was seen as a way of creating links between kinship groups and was generally characterized by clan exogamy and ethnic endogamy (Vinel 2005). This generational control over youth's transition to marriage has declined over time, especially in Burkinabè cities, and several studies have documented increasing agency among youth, notably in the selection of their future spouses (Calvès and Gnoumou Thiombiano 2014; Attané 2007). In fact, with the rise in schooling and increased exposure to Western media and a globalized culture that places great emphasis on romantic love (Werner 2006), most young people in Burkinabè cities today say they want to marry for love, with a mate of their choice (Rossier, Sawadogo, and Soubeïga 2013). In several African cities, stable unmarried relationships and cohabitating unions constitute for many young city dwellers a way to find a 'soul mate' and test a relationship before they settle down in a formal marriage (Rossier 2007; Attané 2007). Like elopement in the past, it is believed that cohabitation in sub-Saharan Africa is used by youth as a strategy to impose on families a spouse of whom they do not approve, perhaps because of ethnic or religious affiliation, by confronting them with a *fait accompli* (Meekers 1995; Mokomane 2005b). In Burkina Faso, despite increasing prevalence of inter-ethnic unions, especially in urban areas, marital norms regarding ethnic endogamy persist and a very large majority of marriages still involve spouses

from the same ethnic groups (Maïga and Baya 2014). In such a context, dating partners who do make socially acceptable 'ethnic matches' may have less chance of receiving familial approval to get married and may perceive cohabitation as an attractive alternative to marriage (Attané 2007; Maïga and Baya 2014). Existing quantitative evidence actually confirms that inter-cultural couples are significantly less likely to have formalized their union by a marital ceremony and are more likely to live in unmarried cohabitation instead (Maïga and Baya 2014).

According to the individualization hypothesis, cohabitation should be more prevalent not only among young urban couples who are less likely to get parental consent for marriage, such as inter-ethnic couples, but among the more urbanized and educated fringe of the young population who are more eager or able to break with normative prescriptions concerning union formation. Existing evidence from Ivory Coast (Gage-Brandon 1993; Meekers 1992), Cameroon (Calvès and Meekers 1999), Togo (Thiriart 1999) and Burkina Faso (Legrand and Younoussi 2009) confirms that women living in cohabiting unions are better educated and more urbanized than their married counterparts. Young women's economic independence is also believed to enhance their ability to distance themselves from familial expectations and marital norms and choose unconventional living arrangements that their parents would not approve (Spronk 2005). Besides autonomy from parents, working women also gain economic independence from men and have less incentive to get married and more reason to favor less binding and more egalitarian cohabitational unions instead (Clarkberg 1999; Schröder 2006). Studies in western countries have reported a lower prevalence of marriage and higher rate of cohabitation among employed women compared to unemployed women, especially in countries with strong family ties and traditional gender division of labor within the family (Le Bourdais, Mongeau, and Neill 2001; Nazio and Blossfeld 2003; Schröder 2006). In urban Burkina Faso, as in many other African cities, despite historically high involvement of women in independent market activities, few studies have examined the effect of women's employment on union formation, and those that did report no significant impact (Antoine, Djiré, and Laplante 1995; Bocquier and Khasakhala 2009). In fact, although many women in African cities do not specialize in domestic activities but rather perform both domestic and market work, female workers remain largely engaged in unpaid, vulnerable, or less profitable types of informal work and are therefore still economically dependent on men, who are predominantly considered to be the main providers for the family (Kolev and Sirven 2010; Herrera and Torelli 2013). Recent evidence suggests, however, that the prolonged economic crisis, together with a decreasing educational gender gap, has affected the dynamic and perception of female labor force participation and its potential impact on union formation. Increasing living costs, male unemployment, and a decrease in the real incomes of urban household heads have forced wives and daughters to

extend their economic activities in the informal sector and, for many urban girls and young women, unpaid familial activities also seem to have increasingly turned into paid employment (Dijkman and Van Dijk 1993; Jacquemin 2009). The growing contribution of women to household incomes often moves far beyond the supplementing of small daily expenditures (Adjamagbo et al. 2006; Antoine and Dial 2005) and today female employment is perceived by city dwellers, especially younger generations, as a necessity (Kobiané, Kaboré, and Gnoumou Thombiano 2012). In fact, more and more young working women seem reluctant, at least in the short-term, to abandon their economic activity to get married (Adjamagbo et al. 2006; Isiugo-Abanihe, Ebigbola, and Adewuyi 1993).

In the literature other important factors likely to affect the choice between marriage and cohabitation have been identified besides those related to the Oppenheimer and individualization hypotheses. In previous studies, including those on Burkina Faso, religion has also been found to affect union formation behavior. Consistent with the emphasis of Christian ideology on conjugal bonds, and alongside the importance of premarital chastity among Muslims, Christian women have been reported as being more likely than their Muslim counterparts to escape from the traditional early and arranged marriages and more likely to live in a non-marital consensual union (Calvès and Meekers 1999; Gage-Brandon 1993; Legrand and Younoussi 2009). The existing evidence from Western countries also suggests that unmarried conception and the birth of a child is an important factor in the analysis of the choice between marriage and cohabitation. Previous research shows that pregnancy and childbearing precipitate both marriage and cohabitation and that the effect is more pronounced in the transition to marriage, especially in countries or among social groups where the pressure to give birth within marriage is strong (Brien, Lillard, and Waite 1999; Gabrielli and Hoem 2010; Hoem and Kostova 2008; Agadjanian and Dommaraju 2011; Pereiro, Pace, and Didonna 2014). In Burkina Faso, although conception and birth outside formal unions are on the rise in urban areas, childbearing remains strongly associated with marriage plans (Calvès and Gnoumou Thiombiano 2014). Thus one might expect premarital pregnancy and births to accelerate the transition to marriage and, to a lesser extent, to cohabitation.

3. Data and analytical approach

The study uses data from a unique retrospective survey entitled *Becoming Parents in Ouagadougou (BPO)*, conducted in the capital city of Burkina Faso between November 2009 and February 2010 among a representative sample of 2,036 young adults, in collaboration with the Institut Supérieur des Sciences de la Population (ISSP) of the

University of Ouagadougou, a well-established demographic research institute with long-standing experience of conducting survey research. As its name indicates, the primary purpose of the survey was to study the transition to first parenthood in contemporary urban Burkina Faso. To account for gender differentials in age at first childbirth (estimated in the capital city around 21.4 among women and 30.6 among men by the 2010 DHS data), the survey targeted young men aged 25 to 34 and young women aged 20 to 29. The sample is a two-stage stratified random sample, representative of the city of Ouagadougou. The first stage consisted of randomly selecting census enumeration areas (EAs) in each of the five administrative strata (arrondissements) of the city. For each arrondissement ten EAs were selected from the 2006 census database using probability proportional to size (PPS) sampling technique. In a second stage, based on the census database, 46 households were randomly selected in each of the selected EAs. The main criterion of eligibility was age and in each selected household one eligible young man aged 25–34 or one young woman aged 20–29 was interviewed. In cases where there was more than one eligible respondent, the respondent who had celebrated her/his birthday last was selected to be interviewed. Among the 2,036 respondents, 927 were young men and 1,109 were young women, which closely reflects the sex ratio of our target group living in Ouagadougou at the time of the 2006 census (53.4% female and 46.6% male). Among the 2,300 households selected, 2,036 individuals were successfully interviewed, a household response rate of 88%. While this high response rate is not unusual for a survey conducted in the African context, in the case of the DPO survey several strategies were implemented in order to ensure a good response rate. First, we sought the support of the city administration at various levels before the data collection started. Authorities were informed about the data-collection plan (e.g., survey objectives, target population, and the timetable for data collection) and were introduced to the members of the research team who were going to work in their district. Having the official support of administrative representatives in each ‘arrondissement’ and ‘secteur’ greatly enhanced the interviewers’ legitimacy among the target population and facilitated participation in the survey. Second, the data-collection team, composed of five female and four male interviewers and two field supervisors, was highly trained. All interviewers had previous fieldwork experience conducting surveys and therefore convincing potentially reluctant individuals to participate. Male respondents were interviewed by male interviewers while the young women were interviewed by female interviewers. Finally, recognizing that young adults in Ouagadougou are often busy and hard to reach, interviewers were instructed to visit households after working hours and to make appointments to meet with the selected young adults at a more convenient time in cases where they could not conduct the interview during their first visit. Thus, interviewers often visited the selected households at least twice (or perhaps even more).

Because it focuses on first parenthood, the survey is well suited to the study of the transition from an unmarried relationship to a first marriage or first cohabitation. In fact, in order to place the reproductive behavior of youth within the context in which it occurs, the survey collected (besides complete birth histories) a detailed history of each respondent's sexual relationships. While several life history calendar surveys have taken into account the complexity and diversity of matrimonial unions in Africa, life history calendars capturing the dynamic processes of unmarried youth's romantic and sexual life histories have rarely been collected (Calvès 2002; Clark, Kabiru, and Mathur 2010). The fourth section of our questionnaire goes beyond a typical matrimonial calendar (recording dates of traditional, religious, and civil matrimonial ceremonies) to collect information on all 'significant' relationships, meaning relationships lasting longer than six months. For each relationship, respondents were asked the date the relationship had started, whether it had led to a traditional, religious, and/or civil marriage or unmarried cohabitation, and whether it had ended. The dates of each of these events were collected. In total, information was collected on 2,945 significant relationships, of which 588 had led directly to a marriage and 472 to an unmarried cohabitation.

To account for time-varying variables, we constructed a survival-time data file where each observation records a span of time (in months) over which the relationship was observed. Since all relationships considered lasted at least six months, time at risk begins six months after the onset of the unmarried relationship and ends at the first marriage or first unmarried cohabitation or at time of censoring (at the date of the survey or relationship rupture), whichever occurs first. Because time-varying covariates that may change in value over the course of the observation period are included in the data set, there are often multiple records per relationship (5,197 records for 2,945 relationships).

Two competing or concurrent union formation paths are considered: direct marriage (marked by a traditional, religious, or civil matrimonial celebration), and unmarried cohabitation (living together without any prior marital celebration). Respondent who married within three months after living together while unmarried were classified in the 'direct marriage' category. Since we wanted to consider marriage and unmarried cohabitation as competing, we mobilized competing risks or proportional subhazards models, also referred to as the Fine and Gray (1999) models. More specifically, two separate semiparametric competing risks models (Models I and II) are estimated: Model I estimates the risk of marriage with cohabitation as a competing risk, while Model II evaluates the risk of cohabitation with marriage as an alternative event. These models are an adaptation of the Cox proportional hazards model (Cox 1972), estimating cumulative incidence functions (CIF) instead of survival functions to account for the possibility of situations of competing risks. In our study the

transition cumulative incidence is defined as the cumulative probability that one type of union formation occurs over time in the presence of the other competing union choice. The Fine and Gray method models subdistribution hazards (subhazards) rather than hazard functions, where the subhazard for a failure to cause m (e.g., marriage) is defined as the instantaneous probability of failure from cause m at time t , given either no failure before t or failure from another cause before t (e.g., cohabitation) (Cleves, Gould, and Gutierrez 2010). Technically, it consists of keeping competing risks observations in the risk set with diminishing weights, rather than considering them as censored (Pintilie 2011). Thus, contrary to other models often mobilized in research on cohabitation and marriage choice such as multinomial discrete time logistic or Cox hazard models, the Fine and Gray model does not need to make the assumption that the two competing events – cohabitation and marriage – are independent of each other. This feature is a main advantage of the model since, as pointed out by researchers, assuming such independence can be problematic, as in the case of union formation analyses (Clarkberg 1999; Kalmijn 2011). The effects of covariates estimated in the Fine and Gray model are called subhazard ratios (SHR) and are interpreted in a similar fashion to a hazard ratio in a Cox regression. For instance, if the estimated subhazard ratio for a covariate is greater than one when predicting whether a relationship will end in marriage, this suggests a higher risk of marriage, controlling for other covariates and that cohabitation can also occur. As in Cox models, the effects of the covariates are assumed to be proportional, and models can accommodate time-varying covariates.

The survey collected background characteristics and detailed retrospective activity and education histories from respondents, along with socioeconomic information on the partner involved in each relationship, including his/her age at the beginning of the relationship, his/her ethnic group, his/her main occupation and educational attainment at the beginning and end of the relationship, and dates of changes in occupation and educational status. Thus the BPO survey allows the integration in the competing risks models of fixed and time-varying covariates related to both partners involved in the relationship, and also tests the validity of Oppenheimer's and the individualization hypotheses in the context of Ouagadougou. For both male and female partners, these variables include age at the beginning of the relationship and time-varying variables reflecting educational attainment (no formal schooling, primary, secondary and post-secondary levels of education), school enrollment status (enrolled/not enrolled), and employment status. The employment variables distinguish between three employment statuses for male partners (not employed, working in the informal sector, and employed in the formal sector) and two statuses (working/not working) in the case of the female partner. The final set of covariates is related to the characteristics of the relationship and includes ethnic endogamy (whether or not partners are from the same ethnic group) and the respondent's religion (Muslim/non-Muslim – the latter are mostly Christian) and a

time-varying covariate variable reflecting whether or not the conception of a first birth has occurred.

4. Results

4.1 Relationship transitions to first union in Ouagadougou

Figure 1 shows the cumulative incidence curves of marriage and unmarried cohabitation.

Figure 1: Cumulative incidence curves of marriage and cohabitation

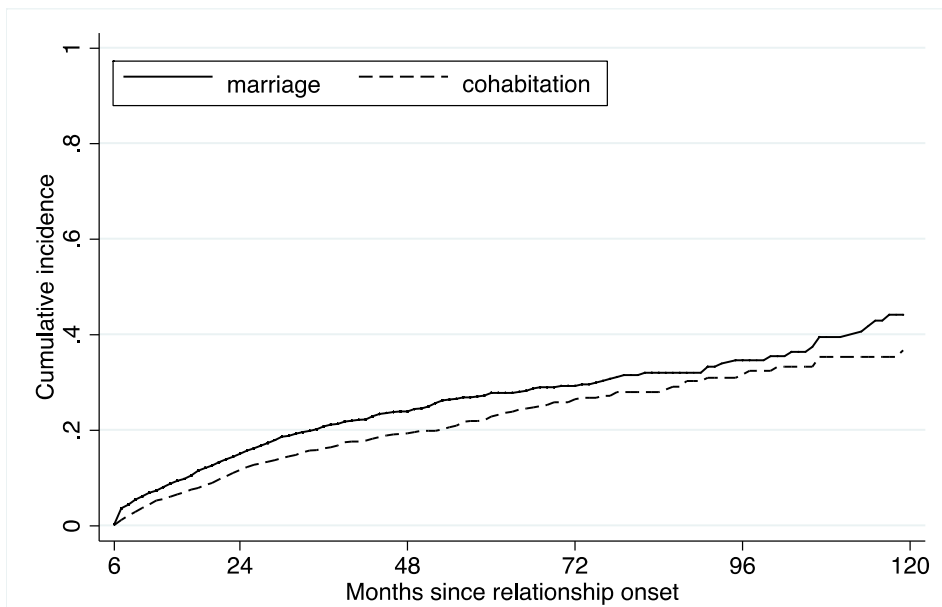


Figure 1 suggests that while entering a first union by means of unmarried cohabitation in Ouagadougou is less common than entering a first union via marriage, a non-negligible proportion of unmarried couples choose to live together without participating in a wedding ceremony. In fact, after four years of existence, the risk that a significant relationship led to a formal wedding is around 25% compared to 20% for a transition to cohabitation. Overall, in Ouagadougou a high proportion (around 44%) of

all first unions are formed through unmarried cohabitation rather than direct marriage. Figure 1 also indicates that while the incidence curve of cohabitation rises slowly over time, the incidence of marriage rises sharply within the first seven months of the relationship and more slowly thereafter. Some of the marriages that occurred early in the relationship are likely to be arranged marriages, which are less prevalent in the capital city but which still exist (Calvès and Gnoumou Thiombiano 2014).

4.2 Determinants of relationship transitions to marriage or cohabitation

Table 1 presents the results of the competing analysis of relationship transitions to marriage or cohabitation. The first column (Model I) shows the subhazard ratios (SHR) of the risk of marriage compared to on-going relationship for each covariate, with cohabitation as a competing risk. The second column (Model II) provides the same information for cohabitation, with marriage as an alternative event.

Providing support for the individualization hypothesis, Table 1 shows that cohabitation as a choice for first union is more common among educated youth, who are less likely to choose direct marriage and more likely to cohabit than their uneducated counterparts. The effect of the male partner's educational attainment (net of enrollment) on this choice is particularly pronounced. Marriage subhazards are significantly lower (SHR=0.54) and cohabitation subhazards significantly higher (SHR=1.9) for relationships involving male partners with a secondary or post-secondary education compared to those formed by young men who never attended school.

Table 1: Competing risks regressions: subhazard ratios for the competing risks of relationship transitions to marriage and cohabitation

	Model I Marriage	Model II Cohabitation
Female partner's characteristics		
Age at relationship onset	0.94***	0.98
Educational attainment ^{tv} (No formal schooling)		
Primary	0.75**	1.07
Secondary and higher	0.65**	1.14*
Enrollment status ^{tv} (Out of school) In school	0.47***	0.35***
Employment ^{tv} (Not working) Working for pay	0.74**	0.69**
Male partner's characteristics		
Age at relationship onset	1.06***	1.03**
Educational attainment ^{tv} (No formal schooling)		
Primary	0.67***	1.82***
Secondary and higher	0.54***	1.88***
Enrollment status ^{tv} (Out of school) In school	0.35***	0.55*
Employment ^{tv} (Not working)		
Working for pay, informal sector	1.60**	1.69**
Working for pay, formal sector	1.96***	2.09***
Relationship's characteristics		
Ethnic endogamy (Different ethnic group)		
Partners from same ethnic group	2.00***	1.09
Child conception ^{tv} (No conception) conception	1.62***	6.24***
Respondent's religion (Non-Muslim) Muslim	1.50***	0.75**
N =	5,197	5,197
Event of interest (failures)	588	472
Prob > chi2	***	***

Notes: ***p < 0.001 ; ** p < 0.01 ; * p < 0.05. tv Time-varying variable.

(1) with cohabitation as competing risk (2) with marriage as competing risk.

Unsurprisingly, male and female school enrollment postpones first union formation, and cohabitation and marriage subhazards both decrease for relationships involving female and male partners who still attend school. The analysis also shows that female employment negatively affects the likelihood of both marital and non-marital first unions. Economic independence gained by young women in the labor market does not favor entry into unconventional types of union (i.e., cohabitating), however, and employed women seem equally reluctant to enter a cohabitating union or a marriage (SHR around .70 in both cases) when compared to their non-working counterparts. As for the effect of male employment on the transition to marriage and cohabitation, the results do not provide support for the Oppenheimer hypothesis in the context of Ouagadougou. Male paid employment is associated with significantly higher subhazards of both marriage and cohabitation and the positive effect is equally strong for both types of union, suggesting that unemployment is not less incompatible with cohabitation than with marriage. Quality of male employment also matters, and employment in the more lucrative formal sector of the economy facilitates transition to both marriage and cohabitation even more readily than the man holding an informal sector job. Relationships involving young men working in the formal sector are about four times as likely to end in a marriage than those formed by unemployed male respondents, and about five times as likely to become a cohabiting union. Table 1 further shows that age at the onset of the relationship has an opposite effect for male and female partners. Relationships involving very young female partners are more likely to develop into marriage, while the female's age at the onset of the relationship does not affect the risk of subsequent unmarried cohabitation. As for male partners, the subhazards of both marriage and cohabitation slowly increase with their ages at the beginning of the relationship (SHR=1.06 and 1.03, respectively).

Besides female and male partners' characteristics, variables related to relationships' characteristics have a strong and significant effect on both first marriage and first unmarried cohabitation subhazards. As seen in Table 1, the analysis shows that the traditional marital rule of ethnic endogamy remains strong in the capital city and that couples with partners from the same ethnic group are significantly more likely to marry (more than twice as likely) than those involving partners from different ethnic backgrounds. Importantly, providing support for the individualization hypothesis, the results suggest that ethnic endogamy norms seem to be less of an issue for transition to cohabitating unions and the effect of the covariate is not statistically significant in Model II. Besides ethnic endogamy, respondent's religion affects transition to marriage and cohabitation. As expected, when at least one partner is Muslim the subhazards of relationship transition to marriage increase significantly (SHR=1.50) while the risk of cohabitation decreases (SHR=0.75). The conception of a first child strongly affects both marriage and cohabitation subhazards but the incidence is unexpectedly higher in

cohabitation. As is shown in Table 1, the likelihood that a relationship will lead to a marriage almost doubles after the conception of a first child and the subhazards of cohabitation are seven times higher².

To further explore the link between first birth, cohabitation, marriage, and the nature of unmarried cohabitation, Table 2 presents the marital status of the relationship at time of conception, first childbirth, and two years after the birth of a first child where relevant, as well as the outcomes of cohabitating unions and the duration of such unions.

Table 2: Relationship status at conception, childbirth, and two years after the birth of the first child, and unmarried cohabitation outcome and duration

Relationship status at time of conception of first child	
Single, no cohabitation	31.7
Unmarried cohabitation	21.3
Marriage	47.0
N =	1002
Relationship status at time of first birth	
Single, no cohabitation	14.3
Unmarried cohabitation	32.6
Marriage	53.1
N =	1002
Relationship status two years after first birth	
Single, no cohabitation	13.8
Unmarried cohabitation	28.9
Marriage	57.3
N =	661
Unmarried cohabitation outcome	
Marriage	19.7
Rupture	06.8
No marriage/no rupture	73.5
N =	472
Unmarried cohabitation duration	
(Kaplan Meir estimates)	
% of cohabitating couples still in unmarried cohabitation after:	
1 year	95.6
2 years	88.3
3 years	81.8
5 years	66.8
N =	472

² Cross-sectional logistic analysis among relationships that led to a union, modeling the effect of the covariates on the choice between cohabitation and marriage, generated results that are consistent with the estimates of the competing models (data not shown): relationships involving educated youth, especially educated men, non-Muslim partners, and partners from different ethnic groups are more likely to choose cohabitation over marriage when entering a union, while, to the contrary, male occupation and economic standing do not favor one type of union over another.

Table 2 also shows that the majority of first children were conceived outside formal marriage in Ouagadougou. In fact, at the time of conception the majority of future parents are either single (32%) or living in unmarried cohabitation (21%). By the time of birth, however, most unmarried conceptions have been legitimized by a wedding or have led to an unmarried cohabitation, and most first-time parents live in either marital (53%) or non-marital (33%) unions. Importantly, Table 2 confirms that unmarried pregnancy encourages cohabitation more than marriage does. In fact, 20% of first children conceived to unmarried non-cohabitating parents were born within marriage, and 39% of them within an unmarried cohabitating union. The process of legitimization continues after birth. Interestingly, while only a few parents are still single and not cohabitating two years after the birth of their first child (14%), a non-negligible proportion (29%) are still cohabitating without any marital ceremony having been performed at that time. Overall, a long spell of unmarried cohabitation is not unusual among youth in Ouagadougou today. As can be seen in Table 2, at the time of the survey only 20% of all unmarried cohabitations had been formalized by a wedding, 7% had ended in a rupture, and 73% were still on-going cohabitating unions. To examine the duration of cohabitation we estimated the survival function of unmarried cohabitating unions using Kaplan Meier estimates. As can be seen in Table 2, a year after the onset of cohabitation a very large majority of unmarried cohabitating unions (96%) had still not resulted in a marriage or a rupture. While the proportion of unmarried cohabitations declines over time, our data suggest that the transition from unmarried cohabitation to marriage is slow. In fact, five years after the beginning of the union, 67% of cohabiting youth were still living together in a consensual union.

5. Discussion

Several important findings emerge from the analysis. If non-marital cohabitation has not yet become a policy concern or a matter of public debate in Burkina Faso, unlike in some other African countries, the analysis nevertheless confirms that a significant proportion of unmarried couples in the capital city who decide to form a first union choose to live together without any form of marital ceremony. Although unmarried cohabitation among Burkinabè youth appears to be socially understood and tolerated, especially by parents, the analysis further reveals that the general expectation of an imminent marriage (Attané 2007) is not fulfilled. In fact, although unmarried cohabitating unions are fairly stable and rarely end in separation, suggesting that a marriage may eventually follow, the transition from cohabitation to marriage takes a while and the majority of cohabiters are still living in unmarried cohabitation five years after the onset of their co-residence. In line with previous qualitative and quantitative

evidence (Calvès, Kobiané, and Martel 2007; Rossier, Sawadogo, and Soubeïga 2013), the analysis further shows that children's exposure to cohabitation is relatively high in Ouagadougou: births to cohabitating parents represent more than a third of all first births and childrearing within non-marital unions is also common. In fact, the unexpectedly positive and strong effect of the conception of a child on the transition to unmarried cohabitation in the competing risks model confirms that the social pressure to give birth within marriage has declined and that cohabitation is becoming an essential feature of the childbearing and childrearing context in the city.

Competing risks analysis of the socioeconomic factors underlying the transitions to marriage and cohabitation among unmarried couples also provides valuable insights into the validity of Oppenheimer's and the individualization hypotheses in the context of urban Burkina Faso. Although unemployment among urban youth increased dramatically in the 1990s and young generations of Burkinabè city dwellers have increasingly turned to less profitable and less stable economic activities in the informal sector of the economy (Calvès and Schoumaker 2004; Garcia and Fares 2008), cohabitation has not become "the poor man's marriage" in Burkina Faso, as Oppenheimer's hypothesis would predict. Contrary to research findings in Botswana (Mokomane 2005a; 2005b) and popular discourse in Cameroon and Kenya (Chigiti 2012; Tambenkongho 2010), the study suggests that in Ouagadougou cohabitation is not motivated by financial constraints. Male employment (especially in the more stable and lucrative formal sector of the economy) facilitates transition to informal union as much as entry into first marriage and there is no indication that a man's failure to provide economically would be less of a problem for cohabitation than for marriage. The fact that the prohibitive costs of contemporary marriages, especially those related to bridewealth payment, seem to be less of an issue in Burkina Faso than in Botswana, Cameroon, or Kenya may explain this result. In a context where gender roles assign to men the duty of setting up a household, and where cohabitation does not represent a significantly more affordable alternative to marriage, the end of schooling for young men and male employment (preferably within the formal sector) are, unsurprisingly, equally crucial to entry into both cohabitation and first marriage. Interestingly, female activity also influences union formation and, like male activity, it affects one type of union more than the other. Female schooling is clearly incompatible with both marriage and cohabitation, and female employment also postpones entry into both marriage and cohabitation. This result suggests that in Ouagadougou today, women's economic independence reduces, at least in the short-term, the benefits of all kinds of union relationship, since employment makes young women less dependent on men (a husband or cohabiting partner) for economic support. In line with previous evidence (Adjamagbo et al. 2006; Kobiané, Kaboré, and Gnoumou Thombiano 2012), the difficult current economic context as well as the changing perceptions and dynamics of

female employment appear to provide incentives for young working women in Ouagadougou to postpone marriage or settling down in a cohabiting union.

Overall, the study thus suggests that while male and female economic characteristics are important determinants of the timing of entry into a first union (regardless of the marital status of the union), ideational changes and cultural factors rather than economic ones motivate youth to choose cohabitation instead of marriage. Dating couples who are willing and able to distance themselves from familial expectations and marital norms are indeed less likely to marry and more likely to cohabit. Thus, the study shows that, net of school enrollment, educational attainment, especially male partner's level of education, favors cohabitation while it discourages marriage. The results also provide support for the idea that young people in Burkina Faso may sometimes use cohabitation to impose a priori 'unsuitable' marriage candidates upon their families (Attané 2007; Maïga and Baya 2014). In fact, respecting marital norms regarding ethnic endogamy strongly favors marriage, but has no significant effect on cohabitation. Consistent with previous findings (Calvès and Meekers 1999; Gage-Brandon 1993; Legrand and Younouissi 2009) and with the emphasis on premarital chastity among Muslims, the results also show that Muslim couples clearly favor marriage over cohabitation when forming a first union.

The study's findings open up avenues for future research. First, the research confirms the necessity of "bringing back the men" into the picture and taking a truly two-sided analysis of marriage and cohabitation (Kalmijn 2011; Pereiro, Pace, and Didonna 2014). Qualitative data on representations and motivations underlying the choice of non-marital cohabitation, and how they differ by gender, would be particularly valuable at this stage. In a context where the social pressure to get married remains high for young women (Lewis and Calvès 2011; Mazzocchetti 2010), and where the decision to make a cohabiting union official by a wedding is still largely in the hands of men, the social meaning attached to consensual unions is likely to be different for young women and men. Second, the short- and long-term futures of cohabiting unions, and especially how both female and male partners' characteristics affect the chances that those unions become marriages or end in separation, deserve more attention. Finally, in view of the significant number of children born and raised in cohabiting unions in Ouagadougou today, and in a context of rising public concern about the potential negative implications of cohabitation for women and children elsewhere in the region, exploring the social and economic consequences of women and children's exposure to cohabitation is very much needed.

6. Acknowledgements

The author wishes to thank all the members of the research team in the *Institut Supérieur des Sciences de la Population* in Ouagadougou who made the BPO data collection a success. Special thanks to Bilampoa Gnomou Thiombiano for her invaluable work in coordinating this effort. The author is also grateful to anonymous reviewers and to the Associate Editor for their insightful comments and suggestions on the initial version of the paper, as well as to Philippe Bocquier for his methodological advice when reviewing the paper. Funding for this research was provided by the Social Sciences and Humanities Research Council of Canada.

References

- Adjamagbo, A., Antoine, P., Béguy, D., Dial, F.B. (2006). *Comment les femmes concilient-elles mariage et travail à Lomé et à Dakar?* Paris: DIAL.
- Agadjanian, V. and Dommaraju, P. (2011). Culture, modernization, and politics: Ethnic differences in union formation in Kyrgyzstan. *European Journal of Population/Revue européenne de Démographie* 27(1): 79–101.
- Antoine, P., Djiré, M. and Laplante, B. (1995). Les Déterminants socioéconomiques de la sortie du célibat à Dakar. *Population* 50(1): 95–117. doi:10.2307/1533794.
- Antoine, P. and Dial, F. B. (2005). Mariage, divorce et remariage à Dakar et Lomé. In: Vignikin, K. and Vimard, P. (eds.). *Familles au Nord, Familles au Sud*. Louvain-la-Neuve: Academia-Bruylant: 205–232.
- Antoine, P., Razafindrakoto, M., and Roubaud, F. (2001). Contraints de rester jeunes? Évolution de l'insertion dans trois capitales africaines: Dakar, Yaoundé, Antananarivo. *Autrepart* 18: 17–36. doi:10.3917/autr.018.0017.
- Attané, A. (2007). Choix matrimoniaux: le poids des générations. L'exemple du Burkina Faso. In: Antoine, P. (éd.). *Les relations intergénérationnelles en Afrique: approche plurielle*. Nogent-sur-Marne: CEPED: 167–195.
- Badini, A. (1994). *Naître et grandir chez les Moosé traditionnels*. Paris: SEPIA-A.D.D.
- Bardem, I. and Gobatto, I. (1995). *Maux d'amour, vies de femmes: sexualité et prévention du sida en milieu urbain africain (Ouagadougou)*. Paris: L'Harmattan.
- Bertho, B. (2012). Trajectoires et revendications féminines dans le règlement des différends conjugaux autour de deux études de cas en milieu Mossi (Burkina Faso). *Autrepart* (2): 99–115. doi:10.3917/autr.061.0099.
- Bledsoe, C.H. and Cohen, B. (1993). *Social Dynamics of Adolescent Fertility in Sub-Saharan African Washington, D.C.* National Academy Press.
- Bocquier, P. and Khasakhala, A. (2009). Factors influencing union formation in Nairobi, Kenya. *Journal of biosocial science* 41(4): 433–455. doi:10.1017/S0021932009003319.
- Brien, M.J., Lillard, L.A., and Waite, L.J. (1999). Interrelated family-building behaviors: Cohabitation, marriage, and nonmarital conception. *Demography* 36(4): 535–551. doi:10.2307/2648089.

- Calvès, A. E. (2002). Abortion risk and abortion decision making among youth in urban Cameroon. *Studies in Family Planning* 33(3): 249–260. doi:10.1111/j.1728-4465.2002.00249.x.
- Calvès, A. E. (2007). Too Poor to Marry? Urban Employment Crisis and Men's First Entry into Union in Burkina Faso. *Population* (62): 293–311. doi:10.3917/pope.702.0293.
- Calvès, A.E. and Meekers, D. (1999). The advantages of having many children for women in formal and informal unions in Cameroon. *Journal of Comparative Family Studies* 30(4): 617–639.
- Calvès, A.E. and Schoumaker, B. (2004). Crise économique et évolution de l'emploi des jeunes citadins au Burkina Faso. *African Population Studies* 19(1): 35–58.
- Calvès, A.E., Kobiané, J.F., and Martel, E. (2007). Changing transition to adulthood in urban Burkina-Faso. *Journal of comparative family studies* 38(2): 265–283.
- Calvès, A.E. and Gnomou Thiombiano, B. (2014). Quand les jeunes célibataires se mettent en couple: scolarisation féminine et choix des partenaires à Ouagadougou. In: Marcoux, R. and Antoine, P. (eds.). *Le mariage en Afrique. Pluralité des formes et des modèles matrimoniaux*. Québec: Presses de l'Université du Québec: 266–287.
- Capron, J. and Kohler, J.M. (1978). De quelques caractéristiques de la pratique matrimoniale mossi contemporaine. In: Oppong C., Abada G., Bekombo-Priso M., and Mogley J. (eds.). *Marriage, fertility and parenthood in West Africa*. Canberra: The Australian National University: 187–223.
- Carle, J. and Bonnet, D. (2009). Identité et question des origines dans l'abandon d'enfants au Burkina Faso. *Anthropologie et sociétés* 33(1): 141–155. doi:10.7202/037817ar.
- Cavin, A.C. (1999). *Droit de la famille burkinabé: le code et ses pratiques à Ouagadougou*. Paris: L'Harmattan.
- Chigiti, J. (2012). The controversial Come-We-Stay Marriages [electronic resource]. Nairobi: The Star. <http://allafrica.com/stories/201211150189.html>.
- Clarkberg, M. (1999). The price of partnering: The role of economic well-being in young adults' first union experiences. *Social Forces* 77(3): 945–968. doi:10.2307/3005967.

- Clark, S., Kabiru, C. and Mathur, R. (2010). Relationship Transitions Among Youth in Urban Kenya. *Journal of Marriage and Family* 72 (1): 73–88. doi:10.1111/j.1741-3737.2009.00684.x.
- Cleves, M., Gould, W., and Gutierrez, R. (2010). *An Introduction to Survival Analysis Using Stata. Second Edition*. Texas: Stata Press.
- Cole, J. and Thomas, L.M. (2009). *Love in Africa*. Chicago: University of Chicago Press. doi:10.7208/chicago/9780226113555.001.0001.
- Cooper, E. (2012). Women and Inheritance in Sub-Saharan Africa: What Can Change? *Development Policy Review* 30(5): 641–657. doi:10.1111/j.1467-7679.2012.00592.x.
- Cox, D.R. (1972). Regression models and life-tables (with discussion). *Journal of the American Statistical Association* (Series B): 187–222.
- Dijkman, H. and Van Dijk, M.P. (1993). Female entrepreneurs in the informal sector of Ouagadougou. *Development Policy Review* 11(3): 273–88. doi:10.1111/j.1467-7679.1993.tb00042.x.
- Fine, J.P. and Gray, R.J. (1999). A proportional hazards model for the subdistribution of a competing risk. *Journal of the American Statistical Association* 94: 496–509. doi:10.1080/01621459.1999.10474144.
- Gage-Brandon, A. (1993). The formation and stability of informal unions in Côte d'Ivoire. *Journal of Comparative Family Studies* 24(2): 219–233.
- Gabrielli, G. and Hoem, J.M. (2010). Italy's non-negligible cohabitational unions. *European Journal of Population/Revue européenne de Démographie* 26(1): 33–46.
- Garcia, M. and Fares, J. (2008). Transitions to Working Life for Africa's Youth. In: Garcia M. and Fares, J. (eds.). *Youth in Africa's Labor Market*. Washington D.C.: World Bank:15–26. doi:10.1596/978-0-8213-6884-8_ch2.
- Herrera, J. and Torelli, C. (2013). Domestic Work and Employment in Africa: What Is the Trade-Off for Women? In: De Vreyer, P. and Roubaud, F. (eds.). *Urban Labor Markets in Sub-Saharan Africa*. Washington D.C.: World Bank: 221–249. doi:10.1596/9780821397817_ch07.
- Hertrich, V. (2007). Nuptialité et rapports de genre en Afrique. Tendance de l'entrée en union, 1950–99. In: Locoh, T. (ed.). *Genre et société en Afrique*. Paris: Ined: 281–307.

- Hoem, J.M. and Kostova, D. (2008). Early traces of the Second Demographic Transition in Bulgaria: A joint analysis of marital and non-marital union formation, 1960–2004. *Population Studies* 62(3): 259–271. doi:10.1080/00324720802313256.
- Isiugo-Abanihe, U.C., Ebigbola, A.J., and Adewuyi, A.A. (1993). Urban nuptiality patterns and marital fertility in Nigeria. *Journal of Biosocial Science* 25: 483–498. doi:10.1017/S0021932000021866.
- Jacquemin, M. (2009). « Petites nièces » et « petites bonnes » à Abidjan. *Travail, genre et sociétés* (2): 53–74.
- Kalmijn, M. (2011). The influence of men's income and employment on marriage and cohabitation: Testing Oppenheimer's theory in Europe. *European Journal of Population/Revue européenne de Démographie* 27(3): 269–293.
- Kobiané, J.-F., Kaboré, I., Gnoumou Thiombiano, B. (2012). *Étude qualitative sur genre et décisions économiques au Burkina Faso*. Ouagadougou: ISSP.
- Kolev, A. and Sirven, N. (2010). Gender disparities in Africa's labor market: a cross-country comparison using standardized survey data. In: Saba Abache, J., Kolev, A., and Filipiak, E. (eds.). *Gender disparities in Africa's labor market*. Washington DC: World Bank: 23–54.
- Kravdal, Ø. (1999). Does marriage require a stronger economic underpinning than informal cohabitation? *Population Studies* 53(1): 63–80. doi:10.1080/00324720308067.
- Lallemand, S. (1977). *Une famille mossi Paris*. C.N.R.S.
- Laurent, P.-J. (2013). Système de mariages et terminologie de parenté chez les Mossi (Burkina Faso). Contribution à l'approche de la terminologie omaha. *L'Homme* 2(206): 59–87.
- Le Bourdais, C., Mongeau, J., and Neill, G. (2001). Effet de la précarité économique sur la formation d'une première union au Canada. *Cahiers Québécois de Démographie* 30(1): 3–28. doi:10.7202/010297ar.
- Legrand, T.K. and Younoussi, Z. (2009). Consensual Unions in Burkina Faso: Trends and Determinants. *Canadian Studies in Population* 36(3–4): 267–294.
- Lesthaeghe, R. and Meekers, D. (1986). *Value changes and the dimensions of familism in the EEC*. Brussels: Vrije Universiteit.

- Lewis, M.-J. and Calvès, A.-E. (2011). L'encadrement par les aînées de l'entrée en maternité des jeunes femmes à Ouagadougou: Continuités et changements. In: Leblanc M.-N. and M. Gomez (eds.). *L'Afrique des générations. Entre tensions et renégociations*. Paris: Karthala: 645–678.
- Lloyd, C.B. (2005). *Growing up Global. The changing transitions to adulthood in developing countries*. Washington, DC: The National Academies Press.
- Longfield, K. (2004). Rich fools, spare tyres and boyfriends: partner categories, relationship dynamics and Ivorian women's risk for STIs and HIV. *Culture, Health and Sexuality* 6 (6): 483–500. doi:10.1080/13691050410001701920.
- Luke, N. (2003). Age and economic asymmetries in the sexual relationships of adolescent girls in Sub-Saharan Africa. *Studies in Family Planning* 34(2): 67–86. doi:10.1111/j.1728-4465.2003.00067.x.
- Maïga, A. and Baya, B. (2014). Au-delà des normes de formation des couples au Burkina Faso: quand les cultures s'épousent. In: Marcoux, R. and Antoine, P. (eds.). *Le mariage en Afrique. Pluralité des formes et des modèles matrimoniaux*. Québec: Presses de l'Université du Québec: 61–82.
- Manning, W.D., Longmore, M.A., and Giordano, P.C. (2007). The changing institution of marriage: Adolescents' expectations to cohabit and to marry. *Journal of Marriage and Family* 69: 559–575. doi:10.1111/j.1741-3737.2007.00392.x.
- Manting, D. (1996). The changing meaning of cohabitation and marriage. *European sociological review* 12(1): 53–65. doi:10.1093/oxfordjournals.esr.a018177.
- Marcoux, R. and Piché, V. (1998). Crise, pauvreté et nuptialité à Bamako (Mali). In: Gendreau, F. (ed.). *Crises, pauvreté et changements démographiques dans les pays du Sud*. AUPELF-UREF: Paris: 219–236.
- Marcoux, R. and Antoine, P. (2014). *Le mariage en Afrique. Pluralité des formes et des modèles matrimoniaux*. Québec: Presses de l'Université du Québec.
- Mazzocchetti, J. (2007). De l'autorité à l'affect: transformation des paternités au sein de la jeunesse ouagalaise scolarisée (Burkina Faso). *Recherches sociologiques et anthropologiques* (38–2): 47–64.
- Mazzocchetti, J. (2010). À la recherche de l'homme capable.... Concurrence entre femmes (Ouagadougou, Burkina Faso). *Civilisations, Revue internationale d'anthropologie et de sciences humaines* (59–1): 21–36.

- Meekers, D. (1992). The Process of Marriage in African Societies: a Multiple Indicator Approach. *Population and Development Review* 18(1): 61–78. doi:10.2307/1971859.
- Meekers, D. (1995). Freedom of partner choice in Togo. *Journal of Comparative Family Studies* 26(2): 163–178.
- Mensch, B., Grant, M.J., and Blanc, A. (2006). The Changing context of sexual initiation in sub-Saharan Africa. *Population Development Review* 32(4): 699–727. doi:10.1111/j.1728-4457.2006.00147.x.
- Mokomane, Z. (2005a). A demographic and socio-economic portrait of cohabitation in Botswana. *Societies in Transition* 36 (1): 57–73. doi:10.1080/21528586.2005.10419128.
- Mokomane, Z. (2005b). Formation of cohabiting unions in Botswana: A qualitative study. *Journal of Contemporary African Studies* 23(2): 193–214. doi:10.1080/02589000500176081.
- Mureithi, F. (2013). Marriage Bill Set for the House today [electronic resource]. Nairobi: The Star. <http://www.the-star.co.ke/article/marriage-bill-set-house-today#sthash.RqRd2f2r.dpbs>.
- Nazio, T. and Blossfeld, H.P. (2003). The diffusion of cohabitation among young women in West Germany, East Germany and Italy. *European Journal of Population/Revue européenne de démographie* 19(1): 47–82.
- Oppenheimer, V.K. (1988). A theory of marriage timing. *American Journal of Sociology*: 563–591. doi:10.1086/229030.
- Oppenheimer, V.K. (2000). The continuing importance of men's economic position in marriage formation. In: Waite, L., Bachrach, C., Hindin, M., Thomson, E. and Thornton, A. (eds.). *Ties that bind: Perspectives on marriage and cohabitation Hawthorne*. Aldine de Gruyter: 283–301.
- Oppenheimer, V.K. (2003). Cohabiting and marriage during young men's career development process. *Demography* 40(1): 127–149. doi:10.1353/dem.2003.0006.
- Pereiro, T.G., Pace, R., and Didonna, M.G. (2014). Entering first union: the choice between cohabitation and marriage among women in Italy and Spain. *Journal of Population Research* 31(1): 51–70. doi:10.1007/s12546-014-9123-7.

- Pintilie, M. (2011). An Introduction to Competing Risks Analysis. *Revista Española de Cardiología (English Edition)* 64(7): 599–605. doi:10.1016/j.recresp.2011.03.017.
- Posel, D., Rudwick, S., and Casale, D. (2011). Is marriage a dying institution in South Africa? Exploring changes in marriage in the context of ilobolo payments. *Agenda* 25(1): 102–111.
- Poulin, M. (2007). Sex, money, and premarital partnerships in southern Malawi. *Social Science and Medicine* 65: 2383–2393. doi:10.1016/j.socscimed.2007.05.030.
- Rossier, C. (2007). Attitudes towards abortion and contraception in rural and urban Burkina Faso. *Demographic Research* 17(2): 23–58. doi:10.4054/DemRes.2007.17.2.
- Rossier, C., Sawadogo, N., and Soubeiga, A. (2013). Sexualités pré-nuptiales, rapports de genre et grossesses non prévues à Ouagadougou. *Population* 68(1): 97–122. doi:10.3917/popu.1301.0097.
- Roth, C. (2010). Les relations intergénérationnelles sous pression au Burkina Faso. *Autrepart* 53(1): 95–110. doi:10.3917/autr.053.0095.
- Schröder, C. (2006). Cohabitation in Italy: Do parents matter? *Genus*: 53–85.
- Spronk, R. (2005). Female sexuality in Nairobi: Flawed or favoured? *Culture, health and sexuality* 7(3): 267–277. doi:10.1080/13691050410001731107.
- Tabutin, D. and Schoumaker, B. (2004). La démographie de l’Afrique au sud du Sahara des années 1950 aux années 2000. Synthèse des changements et bilan statistique. *Population* 59 (3–4): 521–621. doi:10.2307/3654994.
- Tambenkongho, E. (2010). Douala, 80 Mariages celebrated with display [electronic resource]. Yaoundé: Cameroon Tribune. https://www.cameroon-tribune.cm/index.php?option=com_content&view=article&id=62556:douala-80-mariages-celebrated-with-display&catid=4:societe&Itemid=3.
- Thiriart, M.P. (1999). Les unions libres en Afrique subsaharienne. *Cahiers Québécois de Démographie* 28 (1–2): 81–115. doi:10.7202/010260ar.
- Thomson, E. and Bernhardt, E. (2010). Education, values, and cohabitation in Sweden. *Marriage & Family Review* 46(1–2): 1–21. doi:10.1080/01494921003648431.
- Thornton, A., Axinn, W.G., and Hill, D.H. (1992). Reciprocal effects of religiosity, cohabitation, and marriage. *American Journal of Sociology*: 628–651. doi:10.1086/230051.

- Traoré, S. (2005). *Mariage et célibat à Ouagadougou*. Paris: L'Harmattan.
- Van de Kaa, D.J. (1987). Europe's Second Demographic Transition. *Population Bulletin* 42 (1): 1–57.
- Vinel, V. (2005). *Des femmes et des lignages: ethnologie des relations féminines au Burkina Faso (Moose, Sikoomse)*. Paris: L'Harmattan.
- Werner, J.F. (2006). Comment les femmes utilisent les médias visuels pour domestiquer la modernité: enquête ethnographique et diffusion et la réception des telenovas au Sénégal. In: Werner J.F. (ed.). *Medias visuels et femmes en Afrique de l'Ouest*. Paris: L'Harmattan: 145–194.

