Giulia Ferrari & Ross Macmillan¹

'Til Work Do Us Part: The Economic Context of Non-Cohabiting Marriages

Background. Conventional demographic wisdom associates marriages with cohabitation. Such wisdom echoes an intrinsic logic whereby cohabitation provides a foundation for the social dynamics both withinand across-generations that facilitate satisfaction of emotional, as well as, physical needs that are fundamental features of modern societies. Co-residence also provides the immediate context for childbearing and child-rearing that are the basis for inter-generational reproduction. At the same time, broad processes of social structure and social change, the new globalized economy, are seen to destabilize and transform intimate relationships by decoupling work and family for specific locales and produce a intrinsically migratory workforce. Yet, the extent to which and how this happens has received relatively little attention, even although such work echoes long-standing interests in the intersection of work and family and emphasizes the nature of occupational demands as competing with and transforming traditional family relationships (Becker 1991). Moreover, the small amount of work that has examined non-cohabiting marriages has focused almost exclusively on the United States and has developed theoretical accounts that reference particular and unique features of American society, notably the high prevalence of long-term military service and the extraordinary incarceration rates (Rindfuss and Stephen 1990). Such work clearly provides important frameworks for understanding the role of work and occupations on family formations, yet it remains unclear whether such explanations generalize across cultures, contexts, and time or how macrosocial contexts may shape the meaning of work for family formations. Importantly, recent advances in data collection and harmonization produce unprecedented opportunity to examine cross-national and temporal variation in work-family linkages that shape the likelihood of non-cohabiting marriages.

Objectives. This research uses data from the multi-country International IPUMS program for three objectives. First, we map out the cross-national, and cross-time trends in non-cohabitation marriages. Second, we explicitly examine occupational variation in the non-cohabiting marriages and then use fixed effects models to examine the robustness of such differences against a backdrop of social and temporal heterogeneity. Third, we consider variation in the relationship between occupation and non-marital cohabitation through an explicit comparison of different country-periods that highlight different types of (statistical) relationships. Finally, we, where possible, make basic country specific, population projections of the prevalence of non-cohabitation marriages using standard extrapolation techniques.

Data and measures. In this study we use data from the IPUMS - International collection, which includes harmonized census microdata for 42 countries. Of these, we are able to make comparisons of the prevalence of non-cohabiting marriages over time on 28 countries. Our dependent variable is being married without sharing the same dwelling and it has been constructed on the basis of two questions: the marital status of the respondent and location of the spouse. Thus, people in a non-cohabiting marriage are those who are married whose spouse does not live in the same household. We will use several covariates that account for the individual level variation of the phenomenon as well as macro dimensions in order to capture country level heterogeneities. These include age, gender, educational attainment, and nativity status. Our focal independent variable is the respondent's occupation based on the Internal ISCO code classification. This classification scheme differentiates respondents who are "service workers" (reference category), "legislators, officials and managers," "professionals," "technicians and associate professionals," "clerks," "skilled agricultural and fishery workers," "crafts and related trades workers," "plant and machine operators and assemblers," "elementary occupations," "armed forces," "other occupations," and those "not employed."

Preliminary Results. Figure 1 shows the proportion of non-cohabiting marriages across countries in the IPUMS – International samples. Importantly, there is extensive heterogeneity. Likelihood of being in a non-cohabiting marriage is highest in Sierra Leone (.34) and the Sudan (.25), yet very low in the much of Europe, Costa Rica, Indonesia, and the United States (< .05). Although the source of such heterogeneity is unknown,

¹ Carlo F. Dondena Centre for Research on Social Dynamics, Bocconi University.

it is worth recognizing that the United States, the source of much of contemporary understanding of noncohabiting marriages, falls decidedly towards the low end of the continuum. Indeed, western industrial or OECD type countries show particularly low levels of non-cohabitating marriages. Overall however, descriptive statistics (see Table 1) reveal that approximately six percent of the same report being in a noncohabiting marriage.



Figure 1 Proportion of non cohabiting marriages

Table 1 Descriptive statistics

Variable	Mean	Std. Dev.	Min	Max
Non cohabiting marriages	0.06	0.24	0	1
Age	43.31	15.30	0	100
GENDER				
Females	0.51	0.50	0	1
Males	0.49	0.50	0	1
NATIVITY STATUS				
Migrant	0.10	0.30	0	1
Native	0.90	0.30	0	1
LEVEL OF EDUCATION				
Low	0.64	0.48	0	1
Medium	0.27	0.44	0	1
High	0.09	0.29	0	1
OCCUPATIONAL SECTOR				
Service workers	0.09	0.29	0	1
Legislators, officials and managers	0.05	0.21	0	1
Professionals	0.06	0.23	0	1
Technicians and associate professionals	0.04	0.19	0	1
Clerks	0.06	0.25	0	1
Skilled agricultural and fishery workers	0.15	0.36	0	1
Crafts and related trades workers	0.08	0.28	0	1
Plant and machine operators and assemblers	0.07	0.26	0	1
Elementary occupations	0.05	0.22	0	1
Armed forces	0.01	0.07	0	1
Other occupations	0.00	0.05	0	1
Not employed	0.33	0.47	0	1

Our efforts to delineate the relationship between occupation and non-cohabiting marriage begin with a simple set of logit models (see Table 2). As the sample includes over 3.3 million person records, we do not

discuss statistical significance except in the cases where covariates are *not* statistically significant. Model one simply includes an indicator of time and shows that the prevalence of non-cohabiting marriages has increased over time (β = .0187). In model 2, we include a small set of background covariates, including age (β = .0118), sex (β = .148), nativity (β = .556), and educational attainment (β = .270 and -.462, for secondary and tertiary education respectively) and all influence the likelihood of being in a non-cohabiting relationship, although effect size would only be considered large with respect to nativity (OR= 1.74) and tertiary educational attainment (OR = .63).

Table 2: Logit Coefficients: Non-Cohabiting Marriages Regressed on Occupation and Backgrou	ınd
Covariates, IPUMS – International Sample of 100 Country-Periods.	

	Model (1)	Model (2)	Model (3)
Time	0.0187***	0.0192***	0.0191***
	(0.000246)	(0.000247)	(0.000248)
Age		-0.0118***	-0.0132***
		(0.000394)	(0.000400)
Females		0.148***	0.0317***
		(0.00615)	(0.00799)
Migrant		0.556***	0.577***
		(0.00865)	(0.00863)
Education (ref. Lower than secondary)			
Secondary education		-0.270***	-0.213***
		(0.00711)	(0.00781)
Tertiary education		-0.462***	-0.326***
		(0.0122)	(0.0146)
Occupational sector (ref. Service workers)			
Legislators, officials and managers			-0.453***
			(0.0210)
Professionals			-0.196***
			(0.0193)
Technicians and associate professionals			-0.241***
			(0.0192)
Clerks			-0.246***
			(0.0169)
Skilled agricultural and fishery workers			-0.284***
			(0.0131)
Crafts and related trades workers			-0.223***
			(0.0149)
Plant and machine operators and assemblers			-0.107***
			(0.0156)
Elementary occupations			0.295***
			(0.0148)
Armed forces			0.918***
			(0.0282)
Other occupations			0.301***
			(0.0412)
Not employed			0.158***
			(0.0115)
Constant	-3.618***	-3.177***	-3.051***
	(0.00832)	(0.0183)	(0.0211)

Occupation is included in model 3 and dramatically increases the fit of the model ($\Delta \chi^2 = 514, 11 df$). Equally important, there is significant and substantial variation across occupational categories in the likelihood of non-cohabiting marriages. For example, relative to those in the service sector (the reference category), high status occupations such as "legislators, officials, and managers" have much lower odds of such relationships (β = -.453, OR =.64). In contrast, "professionals," also a fairly high status occupation but not one bounded to a particular geography, has a lower, but considerably smaller likelihood of non-cohabiting marriages (β = -.196, OR =.82). Indeed, the likelihood of non-cohabiting marriages among professionals is little different than that of "technicians and associate professionals" (β = -.241, OR =.79), "clerks," (β = -.246, OR =.78), "skilled agricultural workers," (β = -.284, OR =.75), or "crafts and related trades" (β = -.223, OR =.80), even although all of these occupational groupings would score significantly lower on any occupational prestige measure (Hauser and Warren 1997). In contrast, two occupational groupings increase the risk of non-cohabiting marriages. Of these, the considerably larger effects are seen for those in the "armed forces" (β = .918, OR =2.50), a finding that provides cross-national support for the conclusions drawn by Rindfuss and Stephen (1990). At the same time, those in "elementary" and otherwise "unclassified" occupations also have elevated risk of non-cohabiting marriages (β = .295, OR =1.34 and β = .301, OR =1.35). Really, the only occupational category that did not show robust differences from service workers were "plant and machine operators and assemblers" (β = -.107, OR =.90).

In Table 3 we report the logistic regression coefficients of an additional model that does not account for variations across time. Results appear to be very similar to those displayed in Table 2, meaning that background characteristics and differences in occupational sectors act almost equally over time on the likelihood of being in a non-cohabiting marriage. The only exception concerns the risk of non-cohabiting marriages among those that are "not employed" which is now comparable to that of "service workers" (β =.045, OR =1.05).

Future work. The full presentation will extend this research in two ways. First, we will further examine non-cohabitating marriages and their relationship with occupation with the aim of highlighting different groups of countries . Second, for countries in which more than a time point is available, we make basic country specific, population projections of the prevalence of non-cohabitation marriages using standard extrapolation techniques.

Age	-0.00930***
8-	(0.000444)
Females	0.0563***
	(0.00822)
Migrant	0.880***
8 a b	(0.0105)
Education (ref. Lower than secondary)	(
Secondary education	-0.0937***
2	(0.00951)
Tertiary education	-0.174***
5	(0.0159)
Occupational sector (ref. Service workers)	
Legislators, officials and managers	-0.451***
	(0.0213)
Professionals	-0.254***
	(0.0194)
Technicians and associate professionals	-0.248***
	(0.0195)
Clerks	-0.237***
	(0.0172)
Skilled agricultaral and fishery workers	-0.473***
	(0.0140)
Crafts and related trades workers	-0.189***
	(0.0152)
Plant and machine operators and assemblers	-0.0972***
	(0.0159)
Elementary occupations	0.138***
	(0.0155)
Armed forces	0.893***
	(0.0300)
Other occupations	0.286***
	(0.0433)
Not employed	0.0448***
	(0.0121)
Constant	-0.656***
	(0.0416)

Table 3 Logit Coefficients: Non-Cohabiting Marriages Regressed on Occupation and Background Covariates – Fixed Effects on Time, IPUMS – International Sample of 100 Country-Periods.

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