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## Census measures of union formation in the time of cohabitation<sup>1</sup>

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### 1. Introduction

If today John Hajnal would have had to use proportions single from census data to characterize marriage regimes of countries in terms of timing and intensity, he would be faced with the widespread phenomenon of unmarried cohabitation (shortened to cohabitation) that is increasingly dissociating union status from legal marital status. In the absence of cohabitation, typical marital status categories sufficed to distinguish between those never in union (single) and those ever in union (married, divorced, separated and widow). But the presence of unmarried cohabitation challenges the use of traditional marital status categories for research on union formation because single persons in unmarried cohabitation cannot be treated as not in union. Writing almost half a century ago, Hajnal was already aware of the fact that there were several accepted forms of union whereby only some were classified as marriages in the census. He particularly considered marital status data for Latin American countries and the Caribbean area to be “largely useless because so many people who ought to be counted as married have been treated in the statistics as unmarried” and even put in doubt, for similar reasons, “the accuracy and meaningfulness of marital status data for European countries” like Sweden (Hajnal, 1965: p. 105).

Since Hajnal's seminal publication, non-marital cohabitation has increased in varying degrees in most, though not all parts of the world<sup>4</sup>. In consequence, collecting data on cohabitation has become a need in

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<sup>4</sup> This has been well documented in previous research (see e.g. Bumpass et al. (1991), Casper and Cohen (2000) for the US; Hall and Zhao (1995), Rao (1990) for Canada; Binstock (2005), Castro Martín (2001), Fussell & Palloni (2004), Quilodrán (1999; 2006), Cabella (2009), Rodríguez Vignoli (2005) for Latin America; Andersson and Philipov (2002), Gerber and Berman (2006), Kiernan (2001), Muresan (2007), Perelli-Harris (2009), Philipov and Jasilioniene (2008), Prskawetz et al (2008), Sobotka et al. (2008), Sobotka and Toulemon (2008), Spéder (2005), for Europe; Jones (2004; 2007), Iwasawa et al (2006) for Asia); and Carmichael (1998) for Australia. It should be mentioned that there are no comparable figures on cohabitation for Asian countries (Quah, 2008). In addition, in some cultural contexts, especially in many parts of Africa, a multiplicity of marriage forms, including consensual unions, polygynous marriages and outside wifeships are recognized (Oheneba-Sakyi and Takyi, 2007). Moreover,

most of the world's countries, as being recognized by the United Nations in their principles and recommendations for population and housing censuses. In this context the main objective of this paper is to document how, both historically and currently, censuses have dealt with and captured unmarried cohabitation. To do so, we first examine the recommendations that the United Nations have made over the years in this respect. Secondly, we provide an overview of the number of countries or areas for which population censuses have been held and are analyzed in this paper. Censuses are classified according to UN macro region and by census round. Thirdly, we present and discuss three direct and one indirect way in which individuals currently living in consensual unions can be potentially identified on the basis of the census questions. Lastly, countries and territories are classified based on the best available option to capture cohabitation from their respective census questionnaires. To this end, 721 census questionnaires have been exhaustively analyzed, representing 235 countries and overseas territories and practically covering the world's population from 1960 to 2010.

Before going further with the analysis, some justification about why census should care about unmarried cohabitation is needed at this point. Despite the rise in retrospective and longitudinal survey data that have made most limitations of cross-sectional data to become obsolete for many research purposes, particularly with regard to causal analysis, the advantages of census data may still outweigh its inconveniences depending on the objective of the research. For instance, advantages of census data include its sample density, its detail (information on hundreds of variables) and its multi-level perspective (the possibility to link characteristics of individuals to those of other household members and the dwelling and the aggregation of individual characteristics into municipal, regional or other sub-population level statistics, such as ethnicity and educational level). In addition, most countries in the world still regularly hold full or partial population and household censuses: 190 out of 233 according to the last completed census round (2000) (Table 1). Moreover, easy and free access to internationally comparative census micro data made possible by the Minnesota Population Center Integrated Public Use Microdata Series (IPUMS-International) means that 325 million person records from 55 countries and 158 censuses are currently available online (<https://international.ipums.org/international/>). Furthermore, countries for which data are available include many low- to middle- income ones, i.e. countries which often lack recent and representative demographic survey data. Census data are thus an excellent source for comparative research.

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marriage is often “a process”, making the exact determination of when a couple is married or cohabit ambiguous (Van der Walle, 1993; Goode, 1963). Also typical in sub-Saharan Africa (as well as the Caribbean) are the so-called “visiting unions” rather than husband/wife dyads (Frank and McNicoll, 1987), exacerbated in sub-Saharan Africa by the practice of polygyny and concubinage (Falen, 2008; Goode, 1963). Finally, as logic would tell us, where child marriages are very common (e.g. among Muslims) marriage is early and universal and therefore little or no “cohabitation” in the sense of consensual unions (van de Walle and Lardoux, 2005).

Table 1. Number of countries/areas in which traditional population censuses have been held, by region\* and census round

	1960	1970	1980	1990	2000	2010	1960	1970	1980	1990	2000	2010	1960	1970	1980	1990	2000	2010
	Northern Africa						South America						Southern Europe					
Number of countries/areas	7	7	7	7	7	7	14	14	14	14	14	14	11	11	11	15	16	16
Population census conducted	6	7	5	5	5	4	12	12	13	13	13	9	8	9	8	12	12	11
Number of censuses analysed	4	4	5	4	4	3	11	8	11	10	10	6	0	6	4	5	12	6
	Eastern Africa						Western Asia						Eastern Europe					
Number of countries/areas	18	18	18	18		19	15	15	15	16	18	18	7	7	7	8	10	10
Population census conducted	13	13	18	17	13	11	9	10	9	14	15	13	7	7	6	8	10	9
Number of censuses analysed	7	8	18	14	12	9	3	2	4	3	15	4	1	7	6	5	10	6
	Western Africa						Central Asia						Australia and New Zealand					
Number of countries/areas	17	17	17	17	17	17	0	0	0	0	5	5	4	4	4	4	4	4
Population census conducted	16	10	15	14	13	9	0	0	0	0	4	3	4	4	4	3	3	3
Number of censuses analysed	5	9	14	12	12	9	0	0	0	0	4	2	1	2	4	3	2	2
	Middle Africa						South-Eastern Asia						Micronesia					
Number of countries/areas	9	9	9	9	9	9	11	11	11	11	11	11	4	4	5	9	7	7
Population census conducted	8	4	8	7	4	3	9	8	9	9	9	9	4	4	4	8	7	6
Number of censuses analysed	1	4	7	5	2	3	1	7	6	5	9	6	0	0	1	2	7	4
	Southern Africa						Southern Asia						Melanesia					
Number of countries/areas	5	5	5	5	5	5	9	9	9	9	9	9	5	5	5	5	5	5
Population census conducted	5	5	4	5	5	5	7	8	9	5	7	8	5	5	5	5	5	5
Number of censuses analysed	0	3	4	5	5	4	0	4	6	4	7	3	1	3	4	4	5	3
	North America						Eastern Asia						Polynesia					
Number of countries/areas	5	5	5	5	5	5	8	8	8	8	8	8	7	9	9	9	9	9
Population census conducted	5	5	5	4	4	4	6	6	7	8	7	8	7	9	9	8	9	8
Number of censuses analysed	2	4	3	2	3	3	3	4	4	6	6	5	1	4	2	3	9	8
	Caribbean						Northern Europe											
Number of countries/areas	24	24	24	24	24	24	11	11	11	11	14	14						
Population census conducted	22	23	23	22	24	21	11	11	11	8	9	6						
Number of censuses analysed	19	15	18	12	20	9	3	4	4	4	8	1						
	Central America						Western Europe						<b>TOTAL</b>					
Number of countries/areas	9	9	9	8	8	8	9	9	9	9	9	9	<b>209</b>	<b>211</b>	<b>212</b>	<b>221</b>	<b>233</b>	<b>233</b>
Population census conducted	9	8	5	6	7	6	9	9	8	8	5	4	<b>182</b>	<b>177</b>	<b>185</b>	<b>189</b>	<b>190</b>	<b>165</b>
Number of censuses analysed	7	8	5	5	7	5	5	7	6	5	6	3	<b>75</b>	<b>113</b>	<b>136</b>	<b>118</b>	<b>175</b>	<b>104</b>

\* This includes (semi-)autonomous territories who have, in most cases, their own statistical offices and census questionnaires. Examples include: Guernsey, Jersey, Isle of Man and former and current British overseas territories (mainly in the Caribbean), each of which form part of the United Kingdom but not the European Union and have their own specific census questionnaire, Greenland and the Faroe Islands (as part of Denmark) and Pacific Island territories (as parts of the US, New Zealand, Australia, France). On the other hand, former Czechoslovakia, USSR and Yugoslavia were each treated as one country until sub-national regions and republics became independent. This was also because the census questionnaires were the same for the whole country.

## **2. International recommendations for the collection of information on cohabitation in Population and Housing Censuses**

The United Nations has had an essential role in the design and coordination of population and housing censuses and other statistics since its foundation in 1945, with a view to improving the comparability and quality of the census data that is collected, and this role continues today. The UN began publishing its so-called Principles and Recommendations for population as well as housing censuses (hereon abbreviated as P&R) around the start of each new census round (except for 1990 when only a supplement to the previous P&R was written up) as a way to provide technical assistance to countries and areas in census operations and the compilation and disseminating of census results (UN 1949; 1958a; 1958b; 1969a; 1969b; 1980; 1990; 1997; 2008). The publications are general, although complimentary publications for UN-regions also exist that address issues in census undertaking that are specific to the region<sup>5</sup>. One of the recommendations concerns the selection of topics that ought to be included (core topics) or may be included (non-core topics) depending on local needs, in the census questionnaire(s) as well as how the topics should be captured. For the purposes of this study we will analyze how the UN P&R's and related publications have dealt with consensual unions or de facto marriages in each census round since 1950. In essence, there are two core topics from which non-marital unions can be identified: marital status and the relationship with the head of the household.

Since the first publication of the aforementioned P&R<sup>6</sup>, the United Nations has recommended the inclusion of the variable marital status in all population censuses, defining it as “the personal status of each individual in relation to the marriage laws or customs of the country” (UN, 1969: 22). In order to capture marital status and at the same time ensuring international comparability, a minimum of 4 qualifying categories were proposed: single (never married), married, widowed (not remarried) and divorced (not remarried), not counting the rest category “not stated”. In the P&R for the 1970 Population Censuses (UN, 1969) this increased to 5 with the inclusion of the “separated” category.

Despite this annotation, the definition of each marital status category and how it is to be imputed from the population has changed or rather, has been refined over time. The exception is what constitutes as “single”, which has always been defined as not being married, widowed or divorced in the sense that the other marital statuses are conceptualized in the different series of recommendations. For example, while

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<sup>5</sup> The following publications and papers issued by the regional commissions provide useful guidelines on census operations relevant to countries in each region: (a) UN Statistical Commission and Economic Commission for Europe (1978, 1987); UN Economic Commission for Europe and Statistical Office of the European Communities (1998; 2006). (b) UN Economic and Social Commission for Asia and the Pacific (2006a, 2006b). (c) UN Economic Commission for Latin America and the Caribbean (1999); Centro Latinoamericano y Caribeño de Demografía (2003; 2011). (d) UN Economic Commission for Africa (2006; 2008). (e) UN Economic and Social Commission for Western Asia (2006a; 2006b).

<sup>6</sup> The first publication, predecessor to the current P&R series, was published in 1949 under the title *Population Census Methods*(UN, 1949).

in 1949 it was considered that the married included persons in stable de facto unions, the 1958 P&R suggested that these are only included “if necessary and desirable”. It is worthy to note, however, that already for the 1950 census the Latin American Census Committee “recommended that those countries which find it possible and appropriate to do so investigate, in addition to the standard categories also common law unions; separated *de facto* (married persons not divorced, but living apart); separated legally” (UN 1949, pp. 21-22). The Committee did not make it clear in which of the major categories persons in ‘common law’ or de facto unions should be included if it was not enumerated as a separate category. It was not until the P&R for the 2000 census round that it was recommended that de facto marriages were to be treated as a separate category from civil and religious marriages (UN, 1997). Similarly, even though it was recommended in 1949 that married individuals living apart from their spouse but who had not divorced were to be classified separately from those who lived together, this was not so in the 1958 P&R. Instead, it was urged that the married should include all those formally married, irrespective if the individual lives with their spouse or not. As to the category divorced, it was proposed that persons were to be enumerated (if necessary and desirable) if they were legally separated or had lived in a stable de facto marriage but no longer considered to be part of this union. Moreover, it was considered that in some countries it would be desirable to denote people “legally separated” as a subcategory of “divorced”. Nevertheless, over time, the United Nations became more aware of the difficulty in some parts of the world to distinguish between legal marriages and de facto unions, between legally married but separated and from legally separated and divorced. The recommendations for the 1970 census round proposed the addition of the category married but legally separated and has recommended since the 1980 census round to split the latter category into two subcategories: legally separated and de facto separated (i.e. married but not separated legally), subpopulations that may under no circumstances be included in the married population.

However, despite the aforementioned additional categories, the still states that full information on unions is not always obtained given the extra-legal practices and different forms of marriages that exist in some regions of the world. From the outset they have therefore recommended that unregulated or non-legal unions be considered as well as non-western marriage customs such as concubinage, polygynous and polyandrous unions and inherited widows. Consequently, the United Nations proposes in its P&R’s an expansion of the basic classification of marital status based on the characteristics and wedding practices of each region, although for the purpose of international comparison it is requested that censuses do not deviate much from the basic list. If needed, a report should be written where the composition of each category is indicated, as well as new variables that captures de facto realities or through the use of direct questions or the variable that captures the relationship of each household member with the head or

reference person. All these alternatives are aimed to enable the combinations that are necessary to capture the different existing practices without impeding the possibility for world scale comparisons.

To this respect, the African commission highlights the difficulty that supposes applying marriage/union categories mainly based on civil or religious marriage that are linked to a western marriage system. In order not to exclude a variety of other customary marriage systems typical of Africa the UN Economic Commission for Africa complemented the set of global guidelines by specific ones for Africa (Economic Commission for Africa, 2008)<sup>7</sup>. Similarly, since the 2000 census round the UN Economic Commission for Europe introduced specific recommendations for the region on extralegal unions, focusing on the identification of such unions through the core topic “relationship” as the de facto marital status is a non-core topic recommendation. In addition, in 2006 the UNECE introduced the distinction between heterosexual and same-sex unions, both among the married in the question on marital status and among the married and non-married in the question on the relationship to the head of household (UN Economic Commission for Europe and Statistical Office of the European Communities, 1998 and 2006).

On the subject of households and relationships between household members, in the recommendations of 1949 it said that households should be defined as either “family” or “collective”, although additional questions required consideration. These included whether the groups is defined as including all persons present at the time of the enumeration, or as including all persons whose usual place or residence is the housing unit; and whether all persons related in any way who live together are counted as one group, or whether subgroups such as a married son and his wife are counted as separate units. On the specific topic of relationships between household members, basically the same criteria were used as for marital status as they recommended to tabulate persons of each sex by marital status in several categories of household relationships. This including the following: (a) heads of ‘family households’, (b) wives of heads, (c) sons and daughters of heads, (d) other relatives of heads, (e) lodgers in ‘family households’ not related to the head, (f) servants in ‘family households’ not related to the head, (g) heads of ‘collective households’(lodging houses, hotels, institutions, etc.), (h) other members of ‘collective households’. However, no mention was made on how to treat the relationship between a head who lives with his (or her) partner without being formally married. In the subsequent publications, similar recommendations were made regarding the establishment of relations between household members from recognized family ties or understood as legal and only with respect to the reference person, without incorporating relationships or kinships between other individuals who share the same household. In terms of marital

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<sup>7</sup> While the UNECA has been committed to using the P&R and other international recommendations, there has been limited participation of the continent in processes leading to the international standards, norms, definitions, and classifications. Although more substantial contribution was provided to the revision of the global P&R for the 2010 round of Population and Housing Censuses by African countries, they still felt that a number of issues in census undertaking specific to the region needed to be paid particular attention.

relationships, until the latest census round it was recommended to provide the status of spouse of the HH or of the child of the HH in reference to the legal marital status. The incorporation of consensual, free or de facto unions therefore did not occur until the 2008 P&R in which it was recommended that the head's partner should either be identified as spouse or as partner in consensual union. Unfortunately, this distinction was not extended to the partner of the HH's child, which remained listed as just child-in-law, nor kinship and relationship links between the other members of the household, with the exception of the relationship with the head or reference person of the household.

Finally, conscious of the fact that there are still unions that may not be captured, the UN have made for the last two census rounds a final suggestion "that countries wishing to investigate these relationships should consider the possibility of collecting separate data for each person [and] on de facto unions" (UN 1997; 2008). However, they do so without providing details, apart from deriving this information indirectly from answers to the question on relationship to head/reference person. Nevertheless, as we will show in the next section, some countries are now using specific questions on cohabitation to enumerate non-marital unions in a unequivocal way.

### **3. Methods of capturing cohabitation in the census**

In this paper we have analyzed a total of 721 census questionnaires<sup>8</sup> from the 1960 to the 2010 census round. These were obtained from several sources, the most important ones being the Minnesota Population Center at the University of Minnesota ([http://www.hist.umn.edu/~rmccaa/IPUMSI/CensusForms/census\\_forms.htm](http://www.hist.umn.edu/~rmccaa/IPUMSI/CensusForms/census_forms.htm), [https://international.ipums.org/international/enum\\_materials.shtml](https://international.ipums.org/international/enum_materials.shtml) and through personal communication with the IPUMS's director R. McCaa) and the website of the United Nations (<http://unstats.un.org/unsd/demographic/sources/census/censusquest.htm>).

Table 1 shows for each census round, the number of countries<sup>9</sup> that existed at the time, the number of countries where a traditional (i.e. paper) census was held, and the number of countries whose censuses were analyzed in our investigation. Reasons for not being able to analyze censuses include not being able to obtain (all of) the census questionnaire, not being able to translate the questionnaire into English<sup>10</sup> (especially when written in a non-Latin alphabet) and the introduction of register-based censuses where information on consensual unions is derived from administration records (relatively common now in

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<sup>8</sup> Although in some censuses contained more than one questionnaire (e.g. an individual and housing one), these were treated as one.

<sup>9</sup> See note below Table 1.

<sup>10</sup> Although most questionnaires from the latest census round have an official English version, the authors had to translate numerous census questionnaires into English. This may have led to an oversimplification of certain concepts, although for the purpose of producing an inventory of census questions that can directly or indirectly capture consensual unions or non-marital cohabitation this is unlikely to bias the results.

Europe)<sup>11</sup>. Regarding the census rounds, the 2000 census round is best covered, as 92% of the questionnaires were analyzed for those countries where a census was held. The least covered regions were Western Asia, Northern Europe and Micronesia and the least covered census round were the 1960 and 2010 rounds. The main reason why coverage is low for the current round is because some countries have not yet conducted its census.

The examination of the questionnaires on if and how information on consensual unions can be obtained was carried out by keeping to the following procedure:

1. Identify if cohabitation is dealt with in the census. This was done by examining the questions related to the relationships between household members and marital status. In addition, examine the module on fertility (when available) on questions that are asked on related variables.
2. If so, where do they ask it? In which questionnaire is it being asked (often a census contains more than one questionnaire, e.g. one for the dwelling and one for each individual) and in which question / item is it asked?
3. How is cohabitation being treated? Is there a direct question on cohabitation or can cohabiting respondents only be identified indirectly, and if so, how?
4. On the basis of steps 1-3, is it possible to analyse or study cohabitation with the census information that was obtained?

After examining the 721 questionnaires, for simplicity we classified them into 4 main categories of possible ways in which persons currently living in consensual union can be identified from census questionnaires, under the condition of existing census micro data. To cater for the fact that the same type of census questions has been formulated in many ways across countries and over time, several sub-categories have also been created, while in order to be exhaustive, two other categories have been added: “not possible” and “possible through register linking”. The latter is to account for official, but virtual, censuses where information on consensual unions come from administrative registers, but for the purpose of this paper we will not discuss this in detail.

Our census classification on consensual unions is based on both direct and indirect ways in which cohabitation can be captured from the questionnaires. The direct way refers to the possibility of capturing cohabiting individuals from one category that comes from a single question and the indirect way refers to

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<sup>11</sup> It should be mentioned that despite the UN recommendation regarding each question, due to differences in marital systems and cultural significance regarding western concepts such as the different legal and non-legal marital statuses, the apparently same question or categories may therefore be interpreted differently by respondents from different countries and cultures. For example, in the case of the regional African P&R for the 2010 census round, “never married” as a concept was considered as suitable to prevent confusion when comparing with “single” as it was mentioned that “separated” or “divorced” would call themselves single (UN Economic Commission for Africa (2006, p. 26).



the fact that information is required from more questions. The most common example of the latter is using the questions on “marital status” and the “relationship to the head of household” to identify those who live in a consensual union/de facto marriage.

Table 2 shows the different ways that consensual unions may be captured from censuses. The classification is based on direct and indirect methods, involving three main census topics: 1) relationship between household members (usually only to the head), 2) marital status and/or union status and 3) a direct question on cohabitation. The categories have been organized in the table from most to least favorable based on the pros and cons of each question and is explained in more detail below the table. We made the assumption here that a direct question on cohabitation is the best option and a combination of the relationship to the head of household category “spouse” with the marital status category “single” is the least convenient. Although microdata are not available for all countries, later in the paper (Table 4) we show for women aged 20-24 the proportion who cohabit according to the identified categories based on census data from IPUMS-International.

*Table 2. Ways to identify persons currently living in consensual union from census questionnaire*

1. Directly – using question on <u>cohabitation</u>	<p>a. Using the affirmative answer on whether the respondent lives as a (non-married) cohabiting couple.</p> <p>b. Using the affirmative answer of a direct question on whether the respondent lives as a couple (whether married or not) in combination with the marital status categories that refer to a non-married state (e.g. “single”).</p>
2. Directly – using marital and/or union <u>status</u>	<p>a. Using the question on marital status that includes one or more de facto marital status categories, e.g. “common-law marriage” (as opposed to registered marriage).</p> <p>b. Using the question on union status or a question that combines marital with union status, e.g. “cohabiting without marriage”.</p>
3. Directly – using <u>relationship status</u>	Employing the category “cohabiting partner” or similar between a respondent and the head of household (usually) or any other household member in combination with the marital status categories that refer to a non-marital state (e.g. “single”). In this case, the distinction between a legal and common-law partner is obvious and clear.
4. Indirectly approximated using <u>relationship status</u> (to head of household) and marital status	<p>a. Employing the category “spouse <b>or</b> partner” between a respondent and the head of household (usually) or any other household member in combination with the marital status categories that refer to a non-married state (e.g. “single”). In this case, no distinction is made between a legal and common-law partner.</p> <p>b. Employing the category “spouse (wife/husband)” between a respondent and the head of household (usually) or any other household member (occasionally) in combination with the marital status categories that refer to a non-married state (e.g. “single”).</p>
Directly possible through register linking based on administrative registers (e.g. “single person living in a consensual union”). Register information may be pre-printed on census forms whereby the respondent is asked to answer the remaining questions or the census is fully automated ( <i>virtual census</i> ).	
Not possible	

### *1. Direct: Using question on consensual union*

There are a growing number of censuses where there is a direct question on cohabitation, that is, if a person in a household cohabits with another person without being married. This question supplements the one on (legal) marital status as a supplementary way to capture de facto marital unions as suggested by the UN since the 2000 census round. Real examples include:

- Canadian 2001: Are you living with a common-law partner” (yes, no).
- Hungary 2011: Do you have a cohabiting partner? (yes, no)
- Montenegro 2011: Does person live in consensual union with partner? (yes, no)

This is the most precise way that information on non-marital cohabitation can be obtained. Even so, as can be discerned from the above examples, the wording is not always the same as such unions have been named or referred to differently by different countries or over time (e.g. “common-law partner”, “cohabiting partner” or “consensual union”).

### *2. Direct: Using marital status, de facto marital status and union status*

In most instances, marital status refers to the *legal* marital status of an individual. Especially regarding the older censuses this variable can therefore not be used directly when studying cohabitation because the usual categories that are provided are “single”, “married”, “widowed”, “divorced” and, less frequently, “legally separated”. However, more and more censuses now provide the option to identify cohabiting couples as well as other non-legal statuses as an explicit category (e.g. 26% of the 2000 and 2010 rounds of censuses analysed), something that many Latin American countries already did four decades ago. The following examples illustrate this:

- Belarus 1999 census: “Marital status” (never married, registered marriage, **common-law marriage**, widowed, divorced, separated).
- Costa Rica 1973 census: “Current marital status” (single, married, widowed, divorced, **consensual union**, separated).

In the case of Bulgaria (2001 census), an additional question is asked about the de facto marital status, whereby the possible replies are “not in marriage”, “in marriage”, “**consensual union**”, while in the case of the Russian Federation (2011 census) it is asked whether the marriage was registered. Other censuses applied a mixed approach, whereby either explicitly or implicitly a combined “marital/union status” question was asked to capture cohabitation. This method also has the advantage of being able to capture former unions and was used almost exclusively in Latin America, e.g.:

- Anguilla 2001 census: “What is your present marital union status?” (legally married, **common-law union**, visiting partner, not in union & married, not in union & legally separated, not in union & widowed, not in union & divorced, not in union & single, NS).
- Dominica 2001 census: “What is your present union status? (legally married, **common-law union**, visiting partner, married but not in a union, legally separated and not in a union, widowed and not in union, divorced and not in union, not in a union, don't know/not stated).

The last alternative used in this context is to provide both variables: marital status and union status, a method especially used in the Caribbean. Its main advantage is that it reduces the ambiguity that the traditional question on marital status had for the non-married, particularly the previously married, living in a consensual union and thus improves the accuracy of capturing individuals who cohabite. This is because the question on marital status refers to the legal situation and thus excludes “cohabiting” couples, while the “union status” question offers the possibility to state the de facto situation<sup>12</sup>. Another advantage of this approach is that all individuals of the household are asked the question, thereby allowing the possibility to capture all cohabiting individuals, regardless of the presence of the partner in the same household and of their marital status.

### 3. *Direct: Using relationship between household members and the head of household (HH)*

One of the main strengths of censuses is the fact that information is gathered on all household members, including the relationships between its members. Although the level of detail differs widely, one question that is almost always asked is the relationship that each individual has to the head of household or to the first person who answers the census questionnaire. Sometimes, as was the case in the 2011 Irish census, the relationship to others present in the household also has to be provided. In both cases, the question usually contains one of the following three main groups of categories:

- (a) (i) head, (ii) spouse, (iii) partner, (iv) ...
- (b) (i) head, (ii) spouse/partner, (iii) ...
- (c) (i) head, (ii) spouse, (iii) ...

The category most suitable for the study of consensual unions is the first one as it includes “partner” as a separate category from “spouse”, a term which is usually associated with the legal marital status.

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<sup>12</sup> When only “marital status” is asked without the option for unregistered or de facto marriages (the majority), cohabiting respondents usually (have to) state their *legal* marital status as single, although some may consider themselves as married.

#### *4. Indirect method of identifying consensual unions*

However, particularly in the older censuses, often no distinction is made between legal and de facto spouses and in other instances they are grouped together. Nevertheless, in these cases, and in the absence of direct questions on consensual unions, persons living in a non-marital union can, at least in theory, be captured by performing a cross-tabulation between the legal marital status “single”, “widowed”, “divorced” or “separated” and the relationship to the HH variable. This approach is, however, not without its limitations. Firstly, it may be difficult to capture cohabitation where the reference person is not involved (in most censuses only the relationship to the HH is asked for). Second, spouses whose partners are absent cannot be identified in this manner. Indeed, an analysis on 20-39 year olds based on all census microdata samples from IPUMS shows that when “spouse” is the only option, a cross-tabulation with marital status reveals that in each census analyzed very few (< 1%) of single, divorced, separated or widowed individuals declared themselves as being the spouse of the HH (not shown). Conversely, when the category “partner” is available separate from “spouse”, the percentage is a lot higher in some countries, as we will show later (Table 4).

#### **4. Results of the census inventory of information on consensual unions**

In total, 196 traditional censuses from Africa, 203 from the Americas, 123 from Asia, 124 from Europe and 75 from Oceania were analysed, covering the 1960 to 2010 census rounds. Although most countries only conduct one census every decade, sometimes this is done once every five year (e.g. in Japan, Ireland, Canada, Australia and New Zealand). To avoid such countries being over-represented, only the first census of each census round was analysed. In other countries the time span between censuses has not always been regular as a result of political unrest (e.g. Chad, Liberia, Sudan), financial problems (e.g. the Cameroon 2002 census was eventually held in 2005) or natural disasters (e.g. the New Zealand 2011 census has been postponed to 2013 due to devastating earthquakes in 2010 and 2011). In addition, in an increasing number of countries, population censuses have been replaced by virtual, register-based censuses (e.g. all Scandinavian countries). While for many variables this may not have an effect or may even improve data quality, it is known that in the case of non-marital unions the use of register data jeopardizes the validity of the results that are being obtained. A simple example is the situation of many university students who are registered at the parents residence but live in the university town, often with others, and not seldom with a partner. Such individuals may in fact not change their official residence address until they finish their study, get married or buy a house. To overcome this, in Norway a separate questionnaire was sent for the 2001 census to students who had applied for grants for students living away from home during the same year according to the State Educational Loan Fund. This enabled information on the living conditions of students at their place of study (actual place of residence) to be obtained.

After identifying the ways in which persons currently living in consensual union can potentially be identified from one or more census questions, an inventory was made whose results have been summarized in Table 3 in the form of UN-region level totals, although the complete results of the inventory are provided in the Appendix. It should also be noted that although in some censuses different alternative ways exist to identify consensual unions, only the “best option” is provided. The following observations can be made from the table:

- Particularly in Northern Africa and much of Asia (especially Muslim countries) censuses do not provide a direct way of capturing non-marital cohabitation, even today.
- Few countries outside of Latin America did not provide a direct way of capturing non-marital cohabitation in the 1960s and 1970s.
- The most common way that non-marital current cohabitation is captured in sub-Saharan Africa is through an additional category in the question on marital status (i.e. distinguishing between de facto/common-law marriage or consensual unions and legal or church marriages).
- Latin America is where non-marital cohabitation has best been captured. For instance, in the Caribbean this was possible in all countries / territories where a census was held in the 1970s, 2000s and 2010s. The most common question used to capture cohabitation was the one on union status (as marital status was also asked, the identification of consensual unions under the formally married could also be identified), or the question on marital status but with detailed response categories.
- The direct question on whether someone cohabited or not was first asked in the 1970 census round in the two Latin American countries Honduras and the Dominican Republic. However, even today it is not a common census question, given that it was only asked in 15% of the 2010 round of censuses that were analysed (and in a third of the censuses in the Caribbean, South America, Western, Eastern and Southern Europe and Polynesia).
- In North America, Europe and Australia/New Zealand, the most common way that consensual unions have been captured over the last three census rounds has been with the question on the relationship with the head of household. Although the majority of households in these countries are nuclear households instead of extended households or, as in the case of the young adult (and often student) population, does not contain family members, a clear disadvantage in most cases is that the only relationship that is recorded is the one with the head of the household. This means that in certain circumstances non-married cohabiting couples cannot be identified (e.g. a young adult who lives at the parental house with another sibling as well as a boy/girlfriend, the latter of which is the child-in-law of the parent, but if data were available could retrospectively be identified as either the partner of the individual in question or the sibling).

Table 3 Best available option to capture current cohabitation according to census questionnaires by world region & decade (maximum one per country/territory per census round).

REGION	ROUND	IN COMB. WITH NON-MARRIED M.STATUS CAT.		DIRECTLY POSSIBLE BY			DIRECT QUESTION	NOT POSSIBLE	TOTAL ANALYSED
		Relationship to head of household			What is your ...		Lives as a co-habiting couple?		
		Spouse*	Wife or Husband/Partner		Marital Status?	Union Status? (de facto M.S.)			
			Aggregated	Disaggregated					
4b	4a	3	2b	2a	1				
NORTHERN AFRICA	1960s	3						1	4
	1970s	3						1	4
	1980s	4						1	5
	1990s	2						2	4
	2000s	3						1	4
	2010s	2						1	3
EASTERN AFRICA	1960s	3	1		1			2	7
	1970s	3			1			4	8
	1980s	12			2			4	18
	1990s	12			2				14
	2000s	5			5			2	12
	2010s	4			4		1		9
WESTERN AFRICA	1960s	1			2			2	5
	1970s	5			1			3	9
	1980s	12			1			1	14
	1990s	9			3				12
	2000s	7			5				12
	2010s	1	1		5		1	1	9
MIDDLE AFRICA	1960s	1			2				1
	1970s	1			2			1	4
	1980s	4			3				7
	1990s	3			1			1	5
	2000s	1			1				2
	2010s				1		1	1	3
SOUTHERN AFRICA	1970s							3	3
	1980s	1			1			2	4
	1990s	2			3				5
	2000s	1			4				5
	2010s				4				4
NORTH AMERICA	1960s	1						1	2
	1970s	2				1		1	4
	1980s			1		1			3
	1990s			2					2
	2000s			2			1		3
2010s			2			1		3	
CARIBBEAN	1960s		2		3	14			19
	1970s				3	11	1		15
	1980s	1		1	4	12			18
	1990s	1		1	2	1	6	1	12
	2000s			5	3	9	3		20
	2010s			2		4	3		9
CENTRAL AMERICA	1960s				7				7
	1970s				6	1	1		8
	1980s				4	1			5
	1990s				5				5
	2000s				6	1			7
	2010s				4			1	5
SOUTH AMERICA	1960s		1	1	7	2			11
	1970s				7	1			8
	1980s	1	1		7	1	1		11
	1990s		1		8		1		10
	2000s				6	2	2		10
	2010s				2	2	2		6
WESTERN ASIA	1960s	1						2	3
	1970s	1						1	2
	1980s	2						2	4
	1990s	2						1	3
	2000s	11			2			1	14
	2010s	4							4
CENTRAL ASIA	2000s	3			1				4
	2010s	2							2

REGION	ROUND	4b	4a	3	2b	2a	1	NP	TOT
SOUTH-EASTERN ASIA	1960s	1						3	1
	1970s	4						1	7
	1980s	5							6
	1990s	5							5
	2000s	8			1				9
	2010s	5			1				6
SOUTHERN ASIA	1970s	1						3	4
	1980s	5						1	6
	1990s	3						1	4
	2000s	7							7
	2010s	2			1				3
EASTERN ASIA	1960s	2						1	3
	1970s	3						1	4
	1980s	3						1	4
	1990s	5						1	6
	2000s	5			1				6
	2010s	5			1				6
NORTHERN EUROPE	1960s	3							3
	1970s	4							4
	1980s	3		1					4
	1990s	1		3					4
	2000s			7		1			8
	2010s			1					1
WESTERN EUROPE	1960s	4		1					5
	1970s	6		1					7
	1980s	2	2	2					6
	1990s		1	2					5
	2000s	1	1	4					6
	2010s			2			1		3
SOUTHERN EUROPE	1970s	6							6
	1980s	3						1	4
	1990s	1	1	1	1			1	5
	2000s	2	1	8	1				12
	2010s		1	2		1	2		6
EASTERN EUROPE	1960s	1							1
	1970s	3		3				1	7
	1980s	4	1	1					6
	1990s	2			1		1	1	5
	2000s			2	6		2		10
	2010s			1	3		2		6
AUSTRALIA AND NEW ZEALAND	1960s	1							1
	1970s	2							2
	1980s	4							4
	1990s			1			1		3
	2000s	1		2					2
	2010s			2				2	
MICRONESIA	1980s				1				1
	1990s	1						1	2
	2000s	4		1	2				7
	2010s	2		1	1				4
MELANESIA	1960s		1						1
	1970s	2	1						3
	1980s	3	1						4
	1990s	1	1						4
	2000s	4				1			5
	2010s				2		1		3
POLYNESIA	1960s	1							1
	1970s	1						3	4
	1980s							2	2
	1990s	1						2	3
	2000s	6						3	9
	2010s	2			2		2	2	8
TOTAL	1960s	23	5	2	20	16	0	9	75
	1970s	47	1	4	20	14	2	25	113
	1980s	69	5	6	23	15	1	17	136
	1990s	52	4	10	26	1	9	16	118
	2000s	68	2	31	45	13	8	7	174
	2010s	29	2	13	31	7	17	6	105
<b>TOTAL</b>	<b>60s-10s</b>	<b>288</b>	<b>19</b>	<b>66</b>	<b>165</b>	<b>66</b>	<b>37</b>	<b>80</b>	<b>721</b>

\* although in theory the identification of cohabiting unions is possible by crossing the relationship variable with marital status, in practice this depends a lot on the country: Analysis showed that in sub-Saharan Africa and Europe cohabiting couples were obtained in this manner (although likely to be underestimated), but in Northern Africa and much of Asia India either no cases or an insignificant were obtained.

Finally, Table 4 is an illustration of applying the devised methods of capturing cohabitation on real census micro data. In this example we used data from IPUMS-International and calculated the proportion of 20-24 year old women who were in a consensual union at census night. Below we provide a few comments regarding the differences between the results according to the different methods, rather than on the levels themselves as this goes beyond the scope of this paper.

The best option to capture cohabitation, as mentioned earlier, is when there is a direct question on cohabitation (Option 1). This question is only a recent addition to census questionnaires in order to better capture this phenomenon and is usually only asked in countries with high levels of cohabitation. However, another good way to ask about consensual unions is through the question on marital status (Option 2), and in fact, some countries (e.g. Brazil) no longer ask a specific question on consensual union but capture it through the marital status variable. One is able to observe the improvement in capturing consensual unions when compared to the last two categories (as shown by the results for Chile, Puerto Rico, South Africa).

Option 3 contains individuals or their spouses who mention that the head of household is their unmarried partner (the latter information is possible to obtain from the IPUMS database through the variable RELATED\_SP). However, as information on the relationship between other household members is usually not obtained, proportions as shown in the table are sometimes slightly lower than in Option 4, the theoretically least attractive way to capture consensual unions as this is where the variables “relationship to HH” and the non-married “marital statuses” are combined. On other occasions, however, it provides a reasonable estimate when only few cases are obtained through Option 4 (e.g. Chile). Regarding the last option, there are two main reasons why in many countries (especially those not shown in table here) it was not possible to obtain singles in consensual union or proportions were extremely low:

1. Not possible culturally that singles can be considered to be the partner of the head of household (or any other member)
2. Singles in a relationship were either enumerated or coded as married.

Still, although proportions are always lower than when the direct question on cohabitation is used (c.f. Argentina 2000, Hungary 2001 and Saint Lucia 1991), we can say that using the indirect method should not be discarded in countries/times when cohabitation is common.



Table 4. Proportion of 20-24 year old women in a consensual union at census night in 10 countries according to different possible ways of capturing cohabitation.

Country and census year	Option 4	Option 3	Option 2	Option 1
	Relationship to head of household		Marital or union status	Direct question on consensual union
	Spouse/partner (aggregated)	Disaggregated		
Argentina 1970			6.3	
Argentina 1980			8.0	
Argentina 1991			14.5	
Argentina 2001	19.6			22.0*
Austria 1971	2.2			
Austria 1981	5.8	5.4		
Austria 1991	8.3	7.7		
Austria 2001	13.7	12.9		
Brazil 1960			3.0	
Brazil 1970			3.9	
Brazil 1980				8.9
Brazil 1991				15.7
Brazil 2000			21.5	
Chile 1970	0.3	1.6	2.9	
Chile 1982		2.9	3.9	
Chile 1992	0.1	5.1	6.9	
Chile 2002	0.9	8.1	12.8	
Costa Rica 1963		9.0	11.7	
Costa Rica 1973			11.2	
Costa Rica 1984			12.1	
Costa Rica 2000			18.4	
Hungary 1970	1.4	1.5		
Hungary 1980	1.7			
Hungary 1990	2.3	3.3		
Hungary 2001	13.0	11.0		14.7
Puerto Rico 1970			4.6	
Puerto Rico 1980			4.2	
Puerto Rico 1990	0.1	2.4	6.9	
Puerto Rico 2000	1.7	1.8		
Romania 1977				
Romania 1992	0.8			
Romania 2002	8.9			9.1
Saint Lucia 1991	21.7			25.1
South Africa 1996	2.3		6.2	
South Africa 2001			9.2	
South Africa 2007			8.4	

Source: IPUMS International Own calculations. \* Obtained in combination with the marital status categories “single”, “divorced”, “legally separated” and “widowed”.

## Conclusions and recommendations (tentative)

Both our results and those from the literature show that the spread of cohabitation is increasing the proportion single in many countries. The census measure ‘legal marital status’ is therefore losing its validity as an indicator of union status as it fails to capture both current and ever in cohabitation (and still single), but after analyzing census forms from many countries we have identified three main ways that current cohabitation can be captured:

- Combining ‘relationship to head’ and ‘legal marital status’ (esp. found since 1990s in Europe, US, Australia).
- Using a de facto ‘marital status’ or ‘union status’ (esp. observed since 1960s in Latin America and the Caribbean and some Eastern European countries since the 1990s).
- By means of a direct question on cohabitation, e.g.: Canada (since 1991), New Zealand (since 1986 except 1996) Romania (2002), Brazil (1960-00) and some Caribbean countries.

Yet the ‘ever in cohabitation’ is still a challenge, e.g. the proportion single women not in union at age 35 is suspiciously high in much of Latin America. We therefore think that if censuses do not address cohabitation properly, the ‘legal marital status’ variable will have no practical use in countries with high levels of cohabitation and recommend that future censuses have in the question on marital status a separate category for “de facto” marriages or directly ask whether the respondent is currently living in a consensual union.

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Annex Table 1 Best available option to capture current cohabitation according to census questionnaires by country & census year (maximum one per country/territory per census round).

	NOT POSSIBLE	POSSIBLE IN COMBINATION WITH NON-MARRIED MARITAL STATUS CATEGORIES		DIRECTLY POSSIBLE BY			DIRECT QUESTION		VIRTUAL CENSUS (through register linking)	
		Relationship to head of household			What is your ...			Lives as a couple? Yes: select non-married population		Lives as a cohabiting couple?
		Spouse	Wife or Husband/Partner		Marital Status?	Union Status? ( <i>de facto M.S.</i> )				
			Aggregated	Disaggregated						
1	2.1	2.2	3	4.1	4.2	6.1	6.2	9		
<b>AFRICA</b>										
<b>NORTHERN AFRICA</b>										
Algeria	2008	1960, 1977, 1998								
Egypt	1976, 1996	1986, 2006								
Morocco	1970, 1994	1960, 1982, 2004								
Sudan		1973, 1983, 1993, 2008								
Tunisia	1994	1966, 1975, 1984, 2004								
<b>EASTERN AFRICA</b>										
Burundi		1979, 1990			2008					
Comores		1991			1980					
Djibouti		1983, 2009								
Ethiopia	1970	1984, 1994, 2007								
Kenia		1962, 1969, 1979, 1989, 1999, 2009								
Madagascar	1975	1993								
Malawi	1961	1977, 1987, 1998, 2008								
Mauritius		1962			1972, 1983, 1990, 2000, 2011					
Mayotte	1978, 1991						2002			
Mozambique		1980			1997, 2007					
Reunion	1982	1961								
Rwanda		1978			1991, 2002					
Seychelles		1971, 1987			1994, 2002					
Somalia		1975, 1987								
Uganda	1959, 1969	1980, 1991, 2002								
Zambia	1969	1980, 1990			2000, 2010					
Zimbabwe		1961, 1969, 1982, 1992, 2002								
<b>WESTERN AFRICA</b>										
Benin		1979			1992, 2002					
Burkina Faso		1975, 1985			1996, 2006					
Cape Verde		1970			1980, 1990, 2000					
Cote D'Ivoire		1975			1988, 1998			2010		
Gambia	1973	1983, 1993, 2003								
Ghana		1984			1960, 1970, 2000, 2010					
Guinea		1983, 1996								
Guinea (Conakry)	1966, 1972									
Guinea Bissau		1970, 1979			2009					
Liberia	2008	1962, 1974, 1984								
Mali	1976	1987, 1998			2009					
Mauritania		1976, 1988, 2000								
Niger		1977, 1987, 2001								
Nigeria		1973, 1991, 2006								
Saint Helena			2008							
Senegal		1976, 1988, 2002								
Sierra Leone	1963, 1974	1985, 2004								
Tanzania		1978, 1988			2002					
Togo	1961	1970, 1981, 1993								
<b>MIDDLE AFRICA</b>										
Angola					1978					
Cameroon	2005	1976, 1987								
Central African Republic		1974, 1988, 2003								
Chad		1993			1968					
Congo (Republic Popular)		1984			1974			2007		
Congo Democratic Republic					1984					
Equatorial Guinea	1994	1983								
Eritrea		1998								
Gabon	1969	1960, 1980			1993, 2003					
Sao Tome And Principe					1981					
<b>SOUTHERN AFRICA</b>										
Botswana	1971	1981			1991, 2001					
Lesotho	1966, 1976	1986, 1996			2006					
Namibia					1991, 2001, 2011					
South Africa					1980, 1991, 2007					
Swaziland	1966, 1976	1986			1997, 2007					
<b>AMERICAS</b>										
<b>NORTHERN AMERICA</b>										
Bermuda	1960			2000, 2010	1970, 1980					
Canada		1971		1981				1991, 2001		
Greenland		1970								
United States	1970, 1980	1960		1990, 2000, 2010						
<b>CARIBBEAN</b>										
Anguilla					1960, 2001					
Antigua And Barbuda					1960, 1970, 2001			1991		
Aruba								1991, 2000, 2010		
Bahamas					1970	1963, 1980, 2000, 2010				
Barbados						1960, 1970, 1980, 2000		2010		
Cayman Islands	1989	1979		1999,		1960, 1970, 1980, 2000				
Cuba					1981, 2002					
Dominica						1960, 1970, 1981, 2001				
Dominican Republic					1960, 1981, 1993, 2002			1970		
Grenada						1960, 1970, 1981, 2001				
Guadeloupe										
Haiti										
Jamaica						1960, 1970, 1980		1991, 2001, 2011		
Martinique										
Montserrat						1960, 1970, 1980				
Netherlands Antilles										
Puerto Rico					1981, 1992, 2001					
Saint Kitts And Nevis					2000, 2010	1960, 1970, 1980, 1990				
Saint Lucia						1960				
Saint Vincent And Grenadines						1970, 1980		1991		
Trinidad And Tobago						1960, 1970, 1980, 2001, 2010		1991		
Turks And Caicos Islands						1960, 1980, 1990, 2000, 2010				
Virgin Islands, British						1960, 1970, 1980		2001		
Virgin Islands, United States						1960, 1970, 1980		1991		
				2000, 2010						

	NOT POSSIBLE	POSSIBLE IN COMBINATION WITH NON- MARRIED MARITAL STATUS CATEGORIES		DIRECTLY POSSIBLE BY			DIRECT QUESTION		VIRTUAL CENSUS (through register linking)	
		Relationship to head of household			What is your ...			Lives as a couple? Yes: select non- married population		Lives as a cohabiting couple?
		Spouse	Wife or Husband/Partner		Marital Status?	Union Status? ( <i>de facto</i> M.S.)				
			Aggregated	Disaggregated						
1	2.1	2.2	3	4.1	4.2	6.1	6.2	9		
<b>CENTRAL AMERICA</b>										
Belize					1970, 1980, 2000					
Costa Rica					1963, 1973, 1984, 2000, 2011					
El Salvador					1961, 1971, 1992, 2007					
Guatemala					1964, 1981, 1994, 2002					
Honduras					1961, 1988, 2001			1974		
Mexico					1960, 1970, 1980, 1990, 2000			2010		
Nicaragua					1963, 1971, 1995, 2005					
Panama					1960, 1970, 1980, 1990, 2000, 2010					
Panama Canal Zone					1970					
<b>SOUTH AMERICA</b>										
Argentina					1960, 1970, 1980, 1991			2001, 2010		
Bolivia			1976, 1992		2001					
Brazil						1960, 1970, 2000, 2010			1980, 1991	
Chile					1960, 1970, 1982, 1992, 2002					
Colombia					1964, 1973, 1985, 1993				2005	
Ecuador					1962, 1974, 1982, 1990, 2001, 2010					
French Guiana		1982	1961							
Paraguay					1962, 1972, 1982, 1992, 2002					
Peru				1961	1972, 1981, 1993, 2007					
Rep. of Guyana/British Guiana						1960, 1980, 2002				
Suriname									2004	
Uruguay	2004				1962, 1975, 1985, 1996	2011				
Venezuela					1961, 1971, 1981, 1990, 2001					
<b>ASIA</b>										
<b>WESTERN ASIA</b>										
Armenia			1989		2001					
Azerbaijan			1989, 1999							
Bahrain	1991									
Cyprus	1976		1960		2001					
Georgia			1989, 2002							
Iraq			1987, 1997							
Israel	1961		1972, 1983, 1995, 2008							
Jordan	1961, 1979		2004							
Kazakhstan			1989, 1999, 2009							
Kuwait			1980							
Oman	1995		2003							
Palestine			1997, 2007							
Qatar			2004, 2010							
Saudi Arabia			1995							
Syria			2004							
Turkey			2000							
United Arab Emirates	1970	2005								
Yemen			1994, 2004							
<b>CENTRAL ASIA</b>										
Kyrgyzstan			1989, 1999, 2009							
Tajikistan			1989		2000					
Turkmenistan			1989							
Brunei	1971									
Cambodia			1998, 2008							
Indonesia			1971, 1980, 1990, 2000, 2010							
Laos			1973, 1995, 2005							
Malaysia			1970, 1980, 2000							
Myanmar			1983							
Philippines			1970, 1980, 1990		2000					
Singapore	1970, 1980		1990, 2000							
Thailand			1970, 1980, 1990, 2000, 2010							
Timor-Leste			2004							
Vietnam			1960, 1989, 1999, 2009							
<b>SOUTHERN ASIA</b>										
Afghanistan			1979							
Bangladesh	1974		1981, 1991, 2001							
Bhutan					2005					
India	1971, 1981, 1991		2001, 2011							
Iran			1986, 1996, 2006							
Maldives			1985, 2000							
Mongolia			1989		2000					
Nepal			1981, 2001							
Pakistan	1973		1981, 1998							
Sri Lanka			1971, 1981, 2001							
<b>EASTERN ASIA</b>										
China	1970		1982, 1990, 2000							
Hong Kong	1961, 1981		1971, 1991, 2001							
Japan			1960, 1970, 1980, 1990, 2000, 2010							
Korea, South			1960, 1970, 1980	2000						
Macao			1991, 2001							
Mongolia					2011					
Taiwan			1990, 2000							
<b>EUROPE</b>										
<b>NORTHERN EUROPE</b>										
Estonia			1989		2000					
Finland						2000				
Iceland			1960, 1981							
Ireland			1966, 1971, 1979, 1991		2002, 2011					
Latvia			1989		2000					
Lithuania			1989		2001					
Norway			1970		1980, 1990				2001	
Sweden			1960, 1970						1980, 1990	
UK: England			1961, 1971, 1981		1991, 2001					
UK: Guernsey					1991, 2001					
UK: Isle of Man					2001					
UK: Northern Ireland					1991, 2001					
UK: Scotland			1961, 1971, 1981		1991, 2001					
UK: Wales			1961, 1971, 1981		1991, 2001					



	NOT POSSIBLE	POSSIBLE IN COMBINATION WITH NON- MARRIED MARITAL STATUS CATEGORIES			DIRECTLY POSSIBLE BY		DIRECT QUESTION		VIRTUAL CENSUS (through register linking)
		Relationship to head of household			What is your ...		Lives as a couple? Yes: select non- married population	Lives as a cohabiting couple?	
		Spouse	Wife or Husband/Partner		Marital Status?	Union Status? ( <i>de facto</i> M.S.)			
			Aggregated	Disaggregated			3	4.1	
<b>WESTERN EUROPE</b>									
Austria		1961, 1971			1981, 1991, 2001				
Belgium	1991, 2001	1961, 1970, 1981							
France			1982		962, 1975, 1990, 1995, 1971, 1981				
Germany (Democratic Republic)									
Germany (Federal Republic of)	1987	1970						2011	
Germany (United)									
Liechtenstein			1980		2000				
Luxembourg		1966, 1981	2001						
Netherlands		1960, 1971							2001
Switzerland		1960, 1970	1980, 1990		2000, 2010				
<b>SOUTHERN EUROPE</b>									
Albania					2001				
Croatia					2001		2011		
Gibraltar		1970, 1981			2001				
Greece		1971, 1981, 1991			2001				
Italy		1971			1991, 2001, 2012				
Macedonia, FYR					2002				
Malta	1985	1967			1995, 2005				
Monaco		2000							
Montenegro		2003						2011	
Portugal	1981	1970				1991, 2001			
Serbia									2011
Serbia and Montenegro		2001							
Slovenia					1991, 2002				
Spain		1970, 1981	1991, 2001, 2011						
<b>EASTERN EUROPE</b>									
Belarus		1989				1999, 2009			
Bulgaria		1965				1985	2001, 2011		
Czech Republic			1980		1970, 2001, 2011				
Czechoslovakia			1980		1970				
Hungary		1980			1970				1990, 2001, 2011
Moldova		1989				2004			
Poland	1988	1960, 1970			2002	1995			
Romania		1966, 1977, 1992							2002, 2011
Russian Federation		1989				2002, 2010			
Slovak Republic			1980		1970, 2001				
Ukraine		1989				2001			
USSR		1989							
<b>OCEANIA</b>									
<b>MICRONESIA</b>									
Federated States of Micronesia		2000							
Federated States of Micronesia: Chuuk	1989								
Federated States of Micronesia: Kosrae		1986							
Guam		2000, 2010							
Kiribati		1995, 2000							
Marshall Islands						1999			
Nauru						2002			
Northern Mariana Islands		2000, 2010							
Palau					2000	1980			
<b>MELANESIA</b>									
Fiji	1986	1966, 1976, 1996				2007			
New Caledonia		1983	1963, 1969, 1989						2004
Papua New Guinea		1980, 2000							
Solomon Islands		1970, 1986, 1999							
Vanuatu	1989						1999, 2009		
<b>POLYNESIA</b>									
American Samoa	1974	2000, 2010							
Cook Islands		1986, 1996	2001						
French Polynesia		1996							2002
Niue	1986, 1997					2001			
Samoa	1981	1961, 1971, 2001, 2011							
Tokelau	1996,	2001							
Tonga	1976, 1986, 1996								
Tuvalu	1968	2002							
Wallis and Futuna		1996							
<b>AUSTRALIA AND NEW ZEALAND</b>									
Australia		1971, 1981			1996, 2001				
Christmas Island		1981							
New Zealand		1961, 1971			1991, 2001	1981			
Norfolk Island		1981, 1991							