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Correction of Dates of Partnership Formation and Separation in the Consolidated Wave 1 of the Generations and Gender Survey (GGS) Belgium

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Benjamin Marteau[1]

Abstract

The consolidated wave 1 of the Belgian Generations and Gender Survey (GGS), which is currently accessible on the Generations and Gender Programme platform (GGP-i), has errors in dates of union formation. The Belgian GGS use a broad definition of partnership history, collecting data for all non-coresident and coresident unions. Dates of the start of the relationship and the start of cohabitation were both covered in the survey. The harmonization of the data for all national surveys has led to two errors for Belgium. First, all "living apart together" partnerships are included in the database but not reported as such. Second, dates of entry into cohabitation for past unions actually refer to dates of the start of the relationship. In this note, I describe this problem and its consequences for cross-country comparison. Using the raw Belgian GGS dataset, I also propose a new version of the consolidated survey in order to revise partnership histories for future cross-national comparative analyses.

Introduction

This technical note describes the correction process of the partnership histories information in the first wave of the Belgian Generations and Gender Survey 2008-2010 (GGS). Inconsistencies in union formation dates were found between the original Belgian GGS (GG_1-0-0_BE) and the last version of the consolidated GGS dataset, currently distributed to researchers requiring access on the GGP-I platform[2] (GGS_Wave1_Belgium_V.4.3). These coding errors do not allow an exact comparison between Belgium and other countries in the dates of union start, as these dates are not based on the same definition of a couple. It also affects the creation of the

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[2] https://www.ggp-i.org/

Harmonized Histories (HARMONIZED-HISTORIES_ALL_GGSaccess) dataset which uses the same erroneous information. In this note, we offer an evaluation and a description of the problem, as well as a correction in order to improve the GGS dataset currently available.

Definition of Partnership Formation in GGS

The original definition

The initial core of the GGS Wave 1 questionnaire includes a section on partnership history. Apart from the current partnership, respondents were asked if they have ever lived together with someone as a couple. When they respond positively to this question, they complete a series of questions on their previous partner(s). Dates of start of living together (month and year) were part of these questions. Therefore, the information in the GGS dataset on partnership formation dates should refer, for all countries, to the dates of entry into a coresident union[3]. However, after having calculated ages at first union and at first separation in different GGS surveys as well as in Belgium[4], I found some inconsistencies compared to other European countries, along with missing values on marital status. I was able to detect errors for the Belgian GGS coming from the harmonization of data:

1) All non-coresident partnerships (or "Living Apart Together") are included for Belgium in the consolidated GGS datasets, but they are not mentioned as such, leading to a definition of union that is inconsistent with other countries where only coresident unions are considered.
2) In the consolidated GGS dataset, dates of entry into cohabitation for past relationships actually refer to dates of entry into a relationship. Regarding current unions at survey, dates of entry into cohabitation are correct.

[3] I use "coresidence" or "coresident couple" to describe a couple, married or not, whose partners are living together in the same dwelling.
[4] With variables a301AgeR, a301m and a301y, a334m, a334y, a344m, a344y in GGS Wave 1 file, with variables UNION_Y, IUNION_M, SEP_Y, ISEP_M in Harmonized Histories.

The Belgian definition of partnership formation

The Belgian GGS questionnaire had a different approach than the core questionnaire to measure partnership history (see the original questions in Appendix 1). Retrospective partnership histories in Belgium refer to all "stable relationships" that lasted at least 3 months, regardless of whether respondents lived with their partner in the same household or not. This means that respondents in Belgium were asked about their past coresident unions, as in all other countries, but also about all their past LAT relationships. For every relationship, respondents were asked on the dates of start of the relationship and, if they have lived together with their partner, the dates of start of cohabitation. When relationships did not lead to cohabitation, the marital status was automatically attributed a missing value.

This would not be a problem if only coresident unions were considered in the consolidated GGS and Harmonized Histories datasets, and if the start of cohabitation was used to define the date of union formation for Belgium. However, all unions were included, and the date of relationship start was reported rather than the date of the move into a same dwelling for previous partnerships. This leads to inconsistency with the harmonized definition used for other GGS countries regarding the dates of entry into a union.

Consequences of Errors on Partnership Indicators in the Harmonized Dataset

In this section, some results arising from these errors in the GGS Wave 1 dataset are presented to illustrate the complexity of comparing Belgium with other countries[5].

First, missing data on marital status (being married or not) are common for Belgium, with 1,206 missing values for 6,266 first unions (in chronological order in Harmonized Histories), while there are less than 100 missing values on marital status for first unions in other GGS countries. Unknown values on marital status are not limited to the first union; it even increases with union order (see Table 1). These missing values referred to unions formed and ended at young age, generally without a birth. A large number of first unions (about one third) started before leaving the parental home. Among those unions with missing information on marital status, half of them end after 1 year, and 70% after 3 years. Those relatively short durations are not surprising when

[5] I use the Harmonized Histories dataset to present the results (Perelli-Harris, Kreyenfeld & Kubisch, 2010), which already cleaned and standardized partnership histories in the consolidated GGS Wave 1. Errors on partnership dates are still similar between the two datasets.

we know that they are indeed non-coresident relationships, which on average last less longer than cohabitations (Régnier-Loilier, 2016).

Table 1: Distribution of marital status, depending on union order

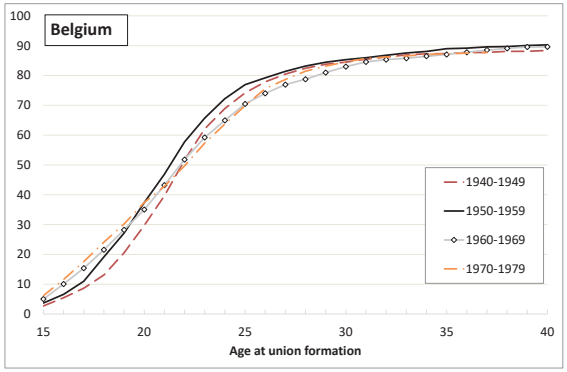
	1st union	2nd union	3rd union
Marriage	66.4	45.5	37.5
No marriage	13.5	33.5	33.0
Unknown	20.1	21.0	29.5
Total	6,266 couples	2,119 couples	568 couples

Source: Harmonized Histories. **Coverage**: 1st, 2nd and 3rd unions in Harmonized Histories. **Note**: Weighted with PERSWGT.

While ages at first partnership in Belgium remains within a range of possible values (see Figure 1), the proportion of respondents who have already experienced a first separation at certain ages shows distinctive values for Belgium compared to other countries. Proportions of individuals who have already experienced a separation at certain ages are alarmingly high in Belgium, with more than 25% of individuals born in the beginning of the 1970s having already ended a union at the age of 25 (Figure 2). For France, a country that shares a similar partnership context (Coleman, 2013), this proportion reaches 10% for the same cohorts.

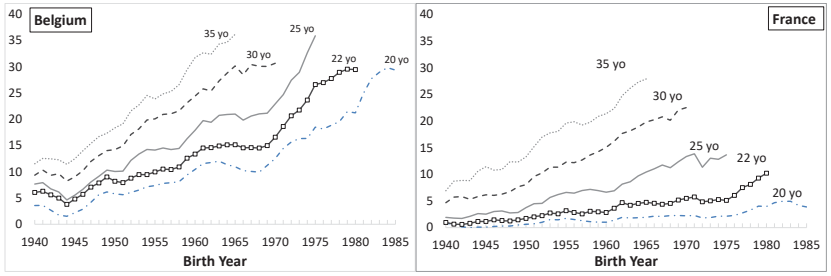
When comparing selected percentages of individuals who have already experienced a separation and the median age at which this happens (Table 2), it is very clear that the ages are low for Belgium. The first decile of separation is reached at the age of 21 in Belgium, while in Norway it is 25 years old.

Figure 1: Cumulative proportion of first coresident partnership formation, by groups of cohorts and age at cohabitation



Source: Harmonized Histories. **Coverage**: All individuals born 1940-1979. **Reading**: Among people born between 1970 and 1979 in Belgium, 69.9% have already formed a coresident union at the age of 25.

Figure 2: Proportion of individuals who already have separated depending on age and birth year



Source: Harmonized Histories. **Coverage**: All individuals. **Reading**: Among people born in 1970 in Belgium, 22.9% have already ended a coresident union at the age of 25.

Table 2: Age at first separation and percentage of people having experienced a union dissolution

	5%	10%	25%
Belgium (before correction)	19	21	32
Belgium (after correction)	25	28	40
Bulgaria	28	38	/
Czech Republic	26	29	47
Estonia	22	25	33
France	23	26	35
Georgia	37	/	/
Germany	25	30	/
Hungary	23	27	/
Lithuania	27	32	/
Norway	23	25	34
Poland	30	39	/
Romania	30	40	/
Russia	22	25	35
Sweden	21	22	28

Source: Harmonized Histories, Original Belgian GGS database after correction of the author. **Coverage**: All individuals born between 1950 and 1970. **Reading**: Among people born 1950-1970 in Belgium, the 1st decile of individual having separated is at the age of 21 before correction, 28 after correction. **Note**: / = the percentage of individuals having separated has not been reached.

Those errors mean that the age at partnership start or the durations of unions in Belgium are not comparable with data from other countries.

Correction of the Partnership Dates with the Original Belgian GGS Dataset

Creation of a new dataset for Belgium, with coresident unions and corresponding dates of starting cohabitation

Using the original Belgian GGS dataset (GGS_1-0-0_BE_fr), I could confirm that it is indeed the date at the start of relationship (Year + Month) that is encoded as the date of the beginning of cohabitation in Harmonized Histories as well as in the consolidated GGS database. This

inconsistency holds only for past relationships and not for the current relationship at the time of the survey, which provides the correct dates of cohabitation in both datasets.

I have reconstructed a new database, following the model of Harmonized Histories, where coresident unions are distinct from non-coresident unions. The Stata code for creating this variable is in the Appendix 4 and use the "GGS_1-0-0_BE" dataset. The new dataset was constructed in a long format (each line consists of a partnership, except for people who have never formed a couple), with two variables that distinguish all relationships (H_NREL) and coresident unions only (H_NCOH). At the end of the code, the dataset can be reshaped in a wide format, either for all unions or coresident unions only. As the personal ID's are the same between the datasets, it might be easily merged with the GGS consolidated wave 1 dataset (with variables ARID and acountry) or with the Harmonized Histories dataset (with variables ARID and COUNTRY).

Both dates of start of relationship and of cohabitation are mentioned in the new dataset (see the list of variables created in the Appendix 2, and a table comparing new variables to GGS and Harmonized Histories variables in Appendix 3). I also distinguish between the dates of ending the relationship and the dates of ending the cohabitation[6], which in certain cases are not concomitant.

Methods for imputing missing months

Similarly to the Harmonized Histories (Perelli-Harris, Kreyenfeld & Kubisch, 2010), the dataset contains two variables referring to the month of partnership events: the original month that is not corrected and the month that implies an imputation. Missing information on the month is imputed with a uniformly distributed random variable. In cases where the season is filled in, the month is imputed depending on the season: for example, spring months are coded from April to June.

In addition, the months are imputed by respecting as closely as possible the chronology of a partnership formation, cohabitation and separation. If they take place in the same year, for

[6] When asking when the end of relationship has happened, the Belgian questionnaire also asked if the coresidence ended at the same time or not.

example, the month of partnership formation is more likely to be imputed at the beginning of the year, and the month of separation at the end of the year.

Still, there are errors in the chronology of dates, which are identified with the variable "problem_dates". Six main types of possible errors are described:

1) Separation takes place before partnership formation or cohabitation.
2) Separation takes place before marriage.
3) Year of start of relationship or cohabitation is unknown
4) Year of separation is unknown
5) A cohabitation starts before the dissolution of a previous cohabitation.
6) A relationship starts before the age of 12.

Further corrections with these new dates are thus required, but go beyond the objectives of this work.

New results on partnership dynamics with corrected dataset

Table 3 shows the total number of coresident unions and the number of separations after correction. While 657 respondents have declared no relationship at all, 1,311 respondents have declared no coresident union.

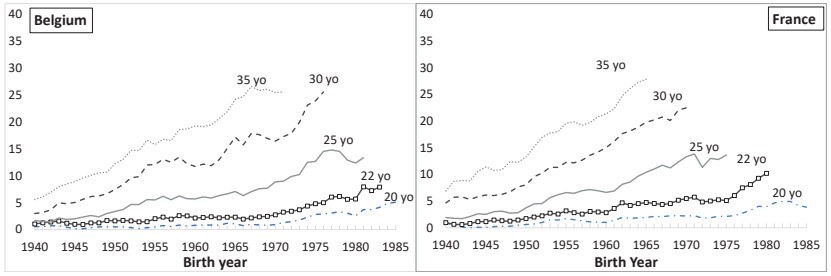
Table 2 and Figure 3 show that the results are much more consistent with partnership or residential trajectories already observed in Belgium (Billari & Liefbroer, 2010). For example, percentage of individuals having already experienced a separation at the age of 30 is about 12% in Belgium for individuals born in 1960 and 15% in France (Figure 3). Because of imputation procedure, the distribution of marital status for coresident unions no longer contains missing values (Table 4). The dates of the start of a union or separation, as well as the ages at these events, can now be compared with other countries that use the same definition of union.

Table 3: Number of relationships (LAT), of cohabitations and separations for each individual, after correction (7,163 respondents)

	Total number of relationships	Total number of cohabitations	Total number of relationship dissolutions	Total number of coresident union dissolutions
0	657	1,311	4,440	5,514
1	4,123	4,669	1,908	1,301
2	1,734	989	553	277
3	455	162	190	57
4	146	24	50	8
5	31	4	13	2
6	9	1	1	1
7	4	3	5	3
8	2		1	
9	1		1	
10	0		1	
11	1			

Source: Original Belgian GGS database after correction. **Coverage**: All respondents (N= 7,163) **Note**: A relationship exists if there is at least one answer to the questions on partnership histories (Variables PA93 to PA125). A cohabitation exists if there is at least one answer to the questions on cohabitation (Variables PA96 to PA125).

Figure 3: Proportion of individuals who already have separated depending on age and birth year (after correction)



Source: Harmonized Histories for France, Original Belgian GGS database for Belgium after correction. **Coverage**: All individuals born between 1940 and 1985. **Reading**: Among people born in 1970 in Belgium, 8.2% have already separated from a coresident union at age 25.

Table 4: Distribution of marital status, depending on coresident union order (Corrected with Belgian GGS dates)

	1st union	2nd union	3rd union
Marriage	81.6	46.3	36.0
No marriage	18.4	53.7	64.0
Total	5 852 unions	1 183 unions	194 unions

Source: Original Belgian GGS database for Belgium after correction. **Coverage**: 1st, 2nd and 3rd coresident unions.

Conclusion

This technical note improves the consolidated dataset of the first wave of the GGS survey, by correcting partnership formation dates that were not accurately harmonized in the case of Belgium. Starting from the original Belgian GGS database, my Stata code (also available in a do-file format on request) allows to correct the Harmonized database for Belgium. However, Belgian original dataset is not available when requesting the GGS access through the GGP-i platform. After contacting the Generations and Gender platform and the Harmonized Histories team, these modifications will hopefully be included directly in the GGS Wave 1 and Harmonized Histories datasets and lead to the revision of the data, to ensure a broad access to this new version of the Belgian data.

Acknowledgments:

I thank Christophe Vandeschrick, Jean-Paul Sanderson and Christine Schnor at UCLouvain who kindly helped me having access to the original Belgian GGS data. I thank Laurent Toulemon at Ined for reviewing this note. The harmonized data were obtained from the Generations and Gender Programme Data Archive in full compliance with the norms of confidentiality. All the analyses are done with Stata 16.

References

Billari, F. C., & Liefbroer, A. C. (2010). Towards a new pattern of transition to adulthood? *Advances in Life Course Research, 15*(2–3), 59-75.

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Perelli-Harris, B., Kreyenfeld, M., & Kubisch, K. (2010). Harmonized histories: Manual for the preparation of comparative fertility and union histories, MPIDR Working Paper WP 2010-011. Rostock: Max Planck Institute for Demographic Research. 32 p.

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Appendix

Appendix 1: Questions on partnership start and cohabitation: Belgian GGS Questionnaire French and Dutch

3.94 Quand cette relation a-t-elle commencé ? **Indiquez le mois:** 1 à 16 *(hiver, début d'année=13, printemps=14, été=15, automne et hiver fin d'année=16)* Autoriser Ne sait pas (code 97) et refus (code 98) **Indiquez l'année:** 1900 à 2010 Autoriser Ne sait pas (code 9997) et refus (code 9998)	PA94MM (Array 1-16) PA94YY (Array 1-16)
Si PA94YY = Ne sait pas (code 9997) ou Refus (code 9998): **3.95 Quel âge aviez-vous quand cette relation a commencé ?** **Age:** 0 à 99 Autoriser Ne sait pas (code 997) et refus (code 998)	PA95 (Array 1-16)
3.96 Quand avez-vous commencé à vivre ensemble avec votre *(premier (premiere)) conjoint/compagnon (conjointe/compagne)? ***deuxième pour la 2ème ligne du tableau, puis troisième pour la 3ème ligne, etc…*** **Indiquez le mois:** *1* à 16 *(hiver, début d'année=13, printemps=14, été=15, automne et hiver fin d'année=16)* *99 = l'enquêté(e) n'a jamais vécu ensemble avec ce partenaire* Autoriser Ne sait pas (code 97) et refus (code 98) **Indiquez l'année:** 1942 à 2010 *9999 = l'enquêté(e) n'a jamais vécu ensemble avec ce partenaire* Autoriser Ne sait pas (code 9997) et refus (code 9998)	PA96MM (Array 1-16) PA96YY (Array 1-16)
Si PA96YY = Ne sait pas (code 9997) ou Refus (code 9998): **3.97 Quel âge aviez-vous quand vous avez commencé à vivre ensemble avec votre *(premier (premiere)) conjoint/compagnon (conjointe/compagne) ?** ***deuxième pour la 2ème ligne du tableau, puis troisième pour la 3ème ligne, etc…*** **Age:** 0 à 99 Autoriser Ne sait pas (code 997) et refus (code 998)	PA97 (Array 1-16)

3.94 Wanneer is deze relatie begonnen? **Maand:** 1 tot 16 *(winter=13, lente=14, zomer=15, herfst=16)* Weet niet (code 97) en weigering (code 98) toelaten **Jaar:** 1900 tot 2008 Weet niet (code 9997) en weigering (code 9998) toelaten	PA94MM (Array 1-16) PA94YY (Array 1-16)
Als PA94YY_1 = weet niet (code 9997) of weigering (code 9998): **3.95 Hoe oud was u toen deze relatie is begonnen?** **Leeftijd:** 0 tot 99 Weet niet (code 997) en Weigering (code 998) toelaten	PA95 (Array 1-16)
3.96 Wanneer bent u voor het eerst gaan samenwonen met uw *eerste partner? ***tweede voor de tweede rij, derde voor de derde rij enz…*** **Maand:** 1 tot 16 *(winter=13, lente=14, zomer=15, herfst=16)* *99 = de geïnterviewde heeft nooit samengeleefd met deze partner* Weet niet (code 97) en weigering (code 98) toelaten **Jaar:** 1942 tot 2008 *9999 = de geïnterviewde heeft nooit samengeleefd met deze partner* Weet niet (code 9997) en weigering (code 9998) toelaten	PA96MM (Array 1-16) PA96YY (Array 1-16)
Als PA96YY = weet niet (code 9997) of weigering (code 9998): **3.97 Hoe oud was u toen u voor het eerst bent gaan samenwonen met uw *eerste partner?** ***tweede voor de tweede rij, derde voor de derde rij enz…***	PA97 (Array 1-16)

Appendix 2: List of new variables created with the original Belgian GGS database – Long format

- H_NREL: Relationship order ID (LAT + coresident unions)
- H_NCOH: Coresident union order ID
- NBREL: Total number of relationships
- NBCOH: Total number of coresident unions
- START_Y: Year of beginning of the relationship
- START_M: Month of beginning of the relationship
- ISTART_M: Imputed month of beginning of the relationship
- COHAB_Y: Year of beginning of the cohabitation
- ICOHAB_Y: Imputed year of beginning of the cohabitation
- COHAB_M: Month of beginning of the cohabitation
- ICOHAB_M: Imputed month of beginning of the cohabitation
- MAR_Y: Year of marriage
- MAR_M: Month of marriage
- IMAR_M: Imputed month of marriage
- SEPREL_Y: Year of the end of relationship (break-up or death of partner)
- SEPREL_M: Month of the end of relationship
- ISEPREL_M: Imputed month of the end of relationship
- SEPCOH_Y: Year of the end of cohabitation (break-up or death of partner)
- SEPCOH_M: Month of the end of cohabitation
- ISEPCOH_M: Imputed month of the end of cohabitation
- DIVO_Y: Year of divorce
- DIVO_M: Month of divorce
- IDIVO_M: Imputed month of divorce
- BIRTHPART_Y: Year of birth of partner
- BIRTHPART_M: Month of birth of partner
- IBIRTHPART_M: Imputed month of birth of partner
- SEP: Relationship break-up variable (0 = No separation / 1 = Separation / 2 = Death of partner)
- SEPCOH: Coresident union dissolution variable (0 = No separation / 1 = Separation / 2 = Death of partner)
- NSEP: Total number of partnership separations (LAT + coresident)
- NSEPCOH: Total number of coresident union dissolutions
- Couple_enq: In a couple at time of survey (0 = No couple, 1 = Cohabitation, 2 = LAT)

Appendix 3: Equivalence between new variables and original variables

New Variables	GGS Original database V.4.3	Harmonized Histories
NBCOH	/	UNINUM
COHAB_Y	a301y, a334y_	UNION_Y
COHAB_M	a301m, a334m_	UNION_M
ICOHAB_M	/	IUNION_M
SEPCOH	a343_	SEP_
SEPCOH_Y	a344y	SEP_Y
SEPCOH_M	a344m	SEP_M
ISEPCOH_M	/	ISEP_M
mariage	a314a, a335a_	MARR_
MAR_Y	a314by, a335m_	MARR_Y
MAR_M	a314bm, a335y_	MARR_M
IMAR_M	/	IMARR_M
PA118_	a349a_	DIV_
DIVO_Y	a349y_	DIV_Y
DIVO_M	a349m_	DIV_M
IDIVO_M	/	IDIV_M
PA93_	ahg4_, a352b_	SEXP_
BIRTHPART_Y	ahg6y_, a336y_	YEARBIRP_
BIRTHPART_M	ahg6m_, a336m_	MONBIRP_
IBIRTHPART_M	/	IMONBIRP_
PA106_	a338_	NUMCHP_
PA107_	a341_	NUMCLIV_

Note: PA110_, PA93_, PA106_ and PA107_ are the original variables in the Belgian GGS and were not modified.

Appendix 4: Stata code : Do-file "Belgium_Correction_GGS_Final.do", 21/11/20

```
/* cd "D:\XXX GGS data folder\" */

** Opening the Original GGS Database
use GGS_1-0-0_BE_fr.dta, clear

** Removing some unused variables to lighten the database
drop AR* AP* IN* HH44* CH4* CH6* CH7* HO* FE* PH2* PH3* PH4* PH5* PH6* PH7* PH8* PH9*

rename id ARID

keep ARID regio WEIGHT_BE HH12_2 HH12_3 HH12_4 HH12_5 HH12_6 HH13_1 HH14MM_1 HH14MM_2 ///
HH14MM_3 HH14MM_4 HH14MM_5 HH14MM_6 HH14YY_1 HH14YY_2 HH14YY_3 HH14YY_4 HH14YY_5
HH14YY_6 ///
HH15_1 HH19 HH22YY HH23 HH32 HH38_1 HH56 HH62YY HH62MM HH63 HH65 HH66MM HH66YY HH67 HH69 ///
HH70MM HH70YY HH71 CH28 CH29 PA* PH10R PH11 PH12 PH13 PH100 PH104 PH115 PH118 PH13* PH14* VA*CV*

drop PA109UU* PA124UU* PA125UU* PA127 PA128 PA130 PA131 PA132 PA133AA PA133UU PA134 PA135 ///
PA136 PA137AA PA137UU PA138 PA139 PA140 PA141AA PA141UU PA142 PA143 PA144_1 PA144_2 PA144_3PA144_4

** Number of coresident unions with at least one date available
local list PA5YY PA6 PA97_1 PA97_2 PA97_3 PA97_4 PA97_5 PA97_6 PA97_7 PA97_8 PA97_9 ///
PA97_10 PA96YY_1 PA96YY_2 PA96YY_3 PA96YY_4 PA96YY_5 PA96YY_6 PA96YY_7 PA96YY_8 PA96YY_9
PA96YY_10
egen NBCOH = rownonmiss(`list')

** Number of relationships (LAT + coresident) with at least one date available
local list PA3YY PA4 PA34YY PA35 PA94YY_1 PA94YY_2 PA94YY_3 PA94YY_4 PA94YY_5 PA94YY_6 ///
PA94YY_7 PA94YY_8 PA94YY_9 PA94YY_10 PA95_1 PA95_2 PA95_3 PA95_4 PA95_5 PA95_6 PA95_7 PA95_8///
PA95_9 PA95_10
egen NBREL = rownonmiss(`list')

** Reshape wide to long to create variables for each relationship
local PART1 PA93_ PA94MM_ PA94YY_ PA95_ PA96MM_ PA96YY_ PA97_ PA98_ PA99_ PA100MM_ PA100YY_ ///
PA101_ PA102MM_ PA102YY_ PA103_ PA104MM_ PA104YY_ PA105_ PA106_ PA107_ PA108_ PA109FF_ PA110_///
PA111MM_ PA111YY_ PA112_ PA113_ PA114MM_ PA114YY_ PA115_ PA116_ PA117A1_ ///
PA117A2_ PA117A3_ PA118_ PA119MM_ PA119YY_ PA120_ PA121_ PA122_ PA123A1_ PA123A2_///
PA123A3_ PA124FF_ PA125FF_
```

```
reshape long `PART1', i(ARID) j(num)

** Label variables
label variable PA93_ "Sex of partner"
label variable PA94MM_ "Month of start relationship"
label variable PA94YY_ "Year of start relationship"
label variable PA95_ "Age at start relationship"
label variable PA96MM_ "Month of start cohabitation"
label variable PA96YY_ "Year of start cohabitation"
label variable PA97_ "Age at start cohabitation"
label variable PA98_ "Contract of life together"
label variable PA99_ "Marriage ?"
label variable PA100MM_ "Month contract of life together"
label variable PA100YY_ "Year contract of life together"
label variable PA101 "Age contract of life together"
label variable PA102MM_ "Month of marriage"
label variable PA102YY_ "Year of marriage"
label variable PA103 "Age at marriage"
label variable PA104MM_ "Month of birth of partner"
label variable PA104YY_ "Year of birth of partner"
label variable PA105 "Age of partner at start of relationship"
label variable PA106 "Number of children of partner atcohabitation"
label variable PA107 "Total number of children of partner"
label variable PA108 "Age of youngest child of partner at start ofcohabitation"
label variable PA109FF "Freq. of meeting with children of partner"
label variable PA110 "End of relationship (separation/death of partner)"
label variable PA111MM "Month of end relationship"
label variable PA111YY "Year of end relationship"
label variable PA112 "Age at end relationship"
label variable PA113 "End of cohabitation at end of relationship ?"
label variable PA114MM_ "Month of end cohabitation"
label variable PA114YY_ "Year of end cohabitation"
label variable PA115 "Age at end cohabitation"
label variable PA116 "Who decided to break-up"
label variable PA117A1 "Reason of separation 1"
label variable PA117A2 "Reason of separation 2"
label variable PA117A3 "Reason of separation 3"
```



```
label variable PA118 "Divorced ?"
label variable PA119MM "Month of Divorce"
label variable PA119YY "Year of Divorce"
label variable PA120 "Age at Divorce"
label variable PA121 "Who started the legal process of Divorce"
label variable PA122 "Children born within the union"
label variable PA123A1 "1st Living arrangements of children afterseparation"
label variable PA123A2 "2nd Living arrangements of children afterseparation"
label variable PA123A3 "3rd Living arrangements of children afterseparation"
label variable PA124FF "Frequence meetings with children after separation"
label variable PA125FF "Frequence ex-partner meetings with children afterseparation"
label variable NBCOH "Number of cohabitations"
label variable NBREL "Number of relationships (LAT + cohabitation)"
label variable num "Relationship order (as declared byrespondents)"

** Delete observations with no information
drop if num!=1 & PA94MM_==. & PA94YY_==. & PA95_==. & PA96MM_==. & PA96YY_==.///
& PA97_==. & PA98_==. & PA99_==. & PA100MM_==. & PA100YY_==. & PA101_==. ///
& PA102MM_==. & PA102YY_==. & PA103_==. & PA104MM_==. & PA104YY_==. & PA105_==. ///
& PA106_==. & PA110_==. & PA111MM_==. & PA111YY_==. & PA112_==. & PA113_==. & PA114MM_==. ///
& PA114YY_==. & PA115_==. & PA116_==. & PA117A1_==. & PA117A2_==. & PA117A3_==. & PA118_==.///
& PA119MM_==. & PA119YY_==. & PA120_==. & PA121_==. & PA122_==.

sort ARID num

** Distinguishing the current relationship from past relationships
expand 2 if (PA3YY!=. | PA6!=. | PA4!=. | PA5YY!=. | PA34YY!=. | PA35!=.) & num==1

bysort ARID (num) : gen dup=1 if num==num[_n-1] & ARID==ARID[_n-1]

drop if dup==1 & num==1 & PA94MM_==. & PA94YY_==. & PA95_==. & PA96MM_==. & PA96YY_==.///
& PA97_==. & PA98_==. & PA99_==. & PA100MM_==. & PA100YY_==. & PA101_==. & PA102MM_==.///
& PA102YY_==. & PA103_==. & PA104MM_==. & PA104YY_==. & PA105_==. & PA106_==. & PA110_==. ///
& PA111MM_==. & PA111YY_==. & PA112_==. & PA113_==. & PA114MM_==. & PA114YY_==. & PA115_==. &///
PA116_==. & PA117A1_==. & PA117A2_==. & PA117A3_==. & PA118_==. & PA119MM_==. & PA119YY_==. ///
& PA120_==. & PA121_==. & PA122_==.

bysort ARID (num) : replace dup=2 if num==num[_n+1] & ARID==ARID[_n+1]
```

```
** Remove information on dates of past relationships when this is the current relationship
local list PA93_ PA94MM_ PA94YY_ PA95_ PA96MM_ PA96YY_ PA97_ PA98_ PA99_ PA100MM_ PA100YY_///
PA101_ PA102MM_ PA102YY_ PA103_ PA104MM_ PA104YY_ PA105_ PA106_ PA107_ PA108_ PA110_ ///
PA111MM_ PA111YY_ PA112_ PA113_ PA114MM_ PA114YY_ PA115_ PA116_ PA117A1_ PA117A2_ PA117A3_///
PA118_ PA119MM_ PA119YY_ PA120_ PA121_ PA122_

foreach var of local list {
replace `var'=. if `var'!=. & dup==1 & num==1
}

** Remove information on current relationship when it refers to pastrelationships
local list PA3MM PA3YY PA4 PA5MM PA5YY PA6 PA7 PA8MM PA8YY PA9 PA10 PA11MM PA11YY PA12 ///
PA13 PA14 PA15MM PA15YY PA16 PA17 PA18 PA19 PA20 PA21 PA22 PA23 PA24 PA25 PA26_1 PA26_2///
PA26_3 PA27_1 PA27_2 PA27_3 PA28_1 PA28_2 PA28_3 PA29_1 PA29_2 PA29_3 PA30_1 PA30_2 ///
PA30_3 PA31YY PA32 PA33 PA34MM PA34YY PA35 PA36 PA37 PA38 PA39 PA40 PA41MM PA41YY PA42 ///
PA43MM PA43YY PA44 PA45 PA46MM PA46YY PA47 PA48 PA49MM PA49YY PA50 PA51 PA52MM///
PA52YY PA53 PA54 PA55MM PA55YY PA56 PA57MM PA57YY PA58 PA58R PA59 PA60 PA61 PA62MM ///
PA62YY PA63 PA64 PA65 PA66 PA67 PA68 PA69 PA70 PA71 PA72 PA73_1 PA73_2 PA74_1 PA74_2 ///
PA75_1 PA75_2 PA76_1 PA76_2 PA77_1 PA77_2 PA78YY PA79 PA80 PA81HH PA81MM PA82FF PA82UU///
PA83 PA84a PA84b PA84c PA84d PA84e PA85 PA86 PA87a PA87b PA87c PA87d PA87e PA87f ///
PA87g PA88a PA88b PA88c PA88d PA88e PA88f PA89a PA89b PA89c PA89d PA90 PA91

foreach var of local list {
replace `var'=. if `var'!=. & num==1 & dup==2
replace `var'=. if `var'!=. & num>1
}

drop dup

** New variable of year of start of relationship for every union
// Current relationship
gen START_Y=PA3YY if PA3YY!=.
replace START_Y=HH14YY_1+PA4 if PA4!=.
replace START_Y=PA34YY if PA34YY!=.
replace START_Y=HH14YY_1+PA35 if PA35!=.

// Past relationships
```



```
replace START_Y=PA94YY_ if PA94YY_!=.
replace START_Y=HH14YY_1+PA95 if PA94YY_==. & PA95_!=.

//// When missing
replace START_Y=9999 if NBREL>0 & START_Y==.
replace START_Y=9999 if START_Y==. & PA110_!=.

// Month of start of relationship
gen START_M=PA94MM_ if PA94MM_!=.
replace START_M=PA3MM if PA3MM!=.
replace START_M=PA34MM if PA34MM!=.

** New variable of year of start of cohabitation for coresident unions
gen COHAB_Y=PA96YY_ if PA96YY_!=.
replace COHAB_Y=HH14YY_1+PA97 if PA97!=.
replace COHAB_Y=PA5YY if PA5YY!=.
replace COHAB_Y=HH14YY_1+PA6 if PA6!=.

// Month of start of cohabitation
gen COHAB_M=PA96MM_ if PA96MM_!=.
replace COHAB_M=PA5MM if PA5MM!=.

//// When year of cohabitation is missing
replace COHAB_Y=9999 if COHAB_Y==. & COHAB_M!=.

** Year of marriage
// Current relationship
gen MAR_Y=PA11YY if PA11YY!=.
replace MAR_Y=HH14YY_1+PA12 if PA12!=. & MAR_Y==.
replace MAR_Y=PA52YY if PA51==1
replace MAR_Y=HH14YY_1+PA53 if PA51==1 & MAR_Y==. & PA53!=.

// Past relationships
replace MAR_Y=PA102YY_ if PA102YY_!=.
replace MAR_Y=HH14YY_1+PA103_ if PA103_!=. & MAR_Y==.

//// When year of marriage is missing
replace MAR_Y=9999 if PA99_==1 & MAR_Y==.
```

```
replace MAR_Y=9999 if PA10==1 & MAR_Y==.

// Month of mariage
gen MAR_M=PA11MM if PA11MM!=.
replace MAR_M=PA102MM_ if PA102MM_!=.
replace MAR_M=PA52MM if PA52MM!=.

** Variable : Married or not
gen mariage=1 if PA10==1
replace mariage=1 if PA51==1
replace mariage=1 if PA99_==1

replace mariage=0 if mariage==.

** Minor corrections for year of cohabitation and start of relationship
// Replace START_Y = COHAB_Y if it exists
replace START_Y=COHAB_Y if START_Y==9999 & COHAB_Y!=9999 & COHAB_Y!=.

// Replace COHAB_Y=START_Y when COHAB_Y is missing
replace COHAB_Y=START_Y if COHAB_Y==9999 & START_Y!=9999

** Year of end of relationship
// Correction of the variable PA110_ where union dissolution was not encoded for 1
// observation
replace PA110_=1 if PA111YY_==2008 & PA110_==.

gen SEPREL_Y=PA111YY_ if PA111YY_!=.
replace SEPREL_Y=HH14YY_1+PA112_ if PA112!=. & PA111YY_==.
replace SEPREL_Y=9999 if SEPREL_Y==. & PA110_!=.

// Month of end of relationship
gen SEPREL_M=PA111MM_ if PA111MM_!=.

** Year of end of cohabitation
// When end of relationship different end of cohabitation
capture drop SEPCOH_Y
gen SEPCOH_Y=PA114YY_ if PA114YY_!=.
replace SEPCOH_Y=HH14YY_1+PA115_ if PA115!=. & PA114YY_==.
```



```
// When end of relationship = end of cohabitation
replace SEPCOH_Y=SEPREL_Y if PA113_!=2 & COHAB_Y!=. & SEPCOH_Y==.
replace SEPCOH_Y=SEPREL_Y if PA113_==2 & SEPREL_Y!=. &SEPCOH_Y==.

// Death of partner
replace SEPCOH_Y=SEPREL_Y if PA110_==2 & SEPCOH_Y==. & COHAB_Y!=.

// No information on year of end of cohabitation but end of separation
replace SEPCOH_Y=SEPREL_Y if SEPCOH_Y==. & SEPREL_Y!=9999 & SEPREL_Y!=. & PA110_!=. & COHAB_Y!=.

replace SEPCOH_Y=9999 if PA110_!=. & COHAB_Y!=. & SEPCOH_Y==.

// Month of end of cohabitation
gen SEPCOH_M=PA114MM_ if PA114MM_!=.
replace SEPCOH_M=SEPREL_M if PA113_==2 & SEPREL_M!=. &SEPCOH_M==.
replace SEPCOH_M=PA111MM_ if PA113_==1 & PA111MM_!=. &SEPCOH_Y!=.
replace SEPCOH_M=PA111MM_ if PA110_==2 & SEPCOH_M==. & SEPCOH_Y!=. & COHAB_Y!=.

** Year of Divorce
gen DIVO_Y=PA119YY_ if inlist(PA118_,1,2)

// When missing, year of end of cohabitation
replace DIVO_Y=SEPCOH_Y if PA118_==1 & DIVO_Y==.
replace DIVO_Y=9999 if DIVO_Y==. & PA118_==1

// Note : When death of partner, missing value

// Month of Divorce
gen DIVO_M=PA119MM_ if PA119MM_!=.

** Type of current relationship at time of survey (LAT orCohabitation)
capture drop couple_enq
gen couple_enq=1 if PA3YY!=.|PA5YY!=.|PA4!=.
replace couple_enq=2 if PA34YY!=.|PA35!=.
replace couple_enq=0 if couple_enq==.

label define couplelab 0 "No Relation" 1 "Cohabitation" 2 "LAT"
```

```
label value couple_enq couplelab

// Duplicates to remove when current relationship and past relationship are double counted
bysort ARID (COHAB_Y) : gen duplicate=1 if COHAB_Y==COHAB_Y[_n-1] & COHAB_M==COHAB_M[_n-1]///
& COHAB_Y!=. & COHAB_M!=.
bysort ARID (COHAB_Y) : replace duplicate=1 if COHAB_Y==COHAB_Y[_n+1] & COHAB_M==COHAB_M[_n+1]///
& COHAB_Y!=. & COHAB_M!=.
bysort ARID (COHAB_Y) : replace duplicate=1 if COHAB_Y==COHAB_Y[_n+1] & COHAB_Y!=. & COHAB_M!=.///
& SEPREL_Y==. & SEPREL_Y[_n+1]==.
bysort ARID (COHAB_Y) : replace duplicate=1 if COHAB_Y==COHAB_Y[_n-1] & COHAB_Y!=. & COHAB_M!=.///
& SEPREL_Y==. & SEPREL_Y[_n-1]==.
bysort ARID (COHAB_Y) : replace duplicate=1 if COHAB_Y==COHAB_Y[_n+1] & COHAB_Y!=. & COHAB_M!=.///
& SEPREL_Y==. & SEPREL_Y[_n+1]==.

bysort ARID (START_Y) : replace duplicate=1 if START_Y==START_Y[_n-1] & START_M==START_M[_n-1]///
& START_Y!=. & START_M!=.
bysort ARID (START_Y) : replace duplicate=1 if START_Y==START_Y[_n+1] & START_M==START_M[_n+1]///
& START_Y!=. & START_M!=.

// When no separation year and duplicates ==> Delete the observation
drop if duplicate==1 & couple_enq==0 & SEPREL_Y>=2008

drop duplicate

********* Imputation of months of relationship
gen ISTART_M=START_M

// When a season is mentioned
local list PA94MM_ PA3MM PA34MM
foreach var of local list {
set seed 4423618
capture drop randomnum_rel
gen randomnum_rel=runiform(0,1) if `var'==13 & ISTART_M>=13 & ISTART_M!=.
replace ISTART_M=1 if randomnum_rel>=0 & randomnum_rel<=0.33
replace ISTART_M=2 if randomnum_rel>=0.330001 &randomnum_rel<=0.66
replace ISTART_M=3 if randomnum_rel>=0.660001 & randomnum_rel<=1
capture drop randomnum_rel
set seed 5220369
```



```
gen randomnum_rel=runiform(0,1) if `var'==14 & ISTART_M>=13 & ISTART_M!=.
replace ISTART_M=4 if randomnum_rel>=0 & randomnum_rel<=0.33
replace ISTART_M=5 if randomnum_rel>=0.330001 &randomnum_rel<=0.66
replace ISTART_M=6 if randomnum_rel>=0.660001 & randomnum_rel<=1

capture drop randomnum_rel
set seed 9100537
gen randomnum_rel=runiform(0,1) if `var'==15 & ISTART_M>=13 & ISTART_M!=.
replace ISTART_M=7 if randomnum_rel>=0 & randomnum_rel<=0.33
replace ISTART_M=8 if randomnum_rel>=0.330001 &randomnum_rel<=0.66
replace ISTART_M=9 if randomnum_rel>=0.660001 & randomnum_rel<=1

capture drop randomnum_rel
set seed 311522584
gen randomnum_rel=runiform(0,1) if `var'==16 & ISTART_M>=13 & ISTART_M!=.
replace ISTART_M=10 if randomnum_rel>=0 & randomnum_rel<=0.33
replace ISTART_M=11 if randomnum_rel>=0.330001 &randomnum_rel<=0.66
replace ISTART_M=12 if randomnum_rel>=0.660001 & randomnum_rel<=1
}

// When no information is mentioned and other dates do not interfer (year of start
// of relationship different than the possible year of start of cohabitation and
// different than the possible year of end of relationship)
capture drop randomnum_rel
set seed 2164893
gen randomnum_rel=runiform(0.05,1.04) if ISTART_M==. & COHAB_Y!=START_Y &SEPREL_Y!=START_Y
replace ISTART_M=round(randomnum_rel*12) if randomnum_rel!=. & ISTART_M==.

// When no information is mentioned and year of cohabitation = year of startrelationship
capture drop randomnum_rel
set seed 20399
gen randomnum_rel=rgamma(1,2) if ISTART_M==. & COHAB_Y==START_Y & COHAB_Y!=.
replace ISTART_M=round(randomnum_rel) if randomnum_rel!=. & ISTART_M==.
replace ISTART_M=ISTART_M+1 if ISTART_M==0

// When no information is mentioned and year of start relationship = year of endrelationship
capture drop randomnum_rel
set seed 633356
```

```
gen randomnum_rel=rgamma(1,2) if ISTART_M==. & SEPREL_Y==START_Y & START_Y!=9999 &START_Y!=.
replace ISTART_M=round(randomnum_rel) if randomnum_rel!=. & ISTART_M==.
replace ISTART_M=ISTART_M+1 if ISTART_M==0

********* Imputation of months of start of cohabitation
gen ICOHAB_M=COHAB_M

// For individuals having the same season and same year of start of union AND cohabitation
// ==> Keeping the same imputed month than the start of relationship
replace ICOHAB_M=ISTART_M if START_M>=13 & START_M<=16 & COHAB_M==START_M &
START_Y==COHAB_Y

// When a season is mentioned
local list PA96MM_ PA5MM
foreach var of local list {
set seed 632561
capture drop randomnum_rel
gen randomnum_rel=runiform(0,1) if `var'==13 & ICOHAB_M>=13 & ICOHAB_M!=.
replace ICOHAB_M=1 if randomnum_rel>=0 & randomnum_rel<=0.33
replace ICOHAB_M=2 if randomnum_rel>=0.330001 &randomnum_rel<=0.66
replace ICOHAB_M=3 if randomnum_rel>=0.660001 & randomnum_rel<=1

capture drop randomnum_rel
set seed 52124942
gen randomnum_rel=runiform(0,1) if `var'==14 & ICOHAB_M>=13 & ICOHAB_M!=.
replace ICOHAB_M=4 if randomnum_rel>=0 & randomnum_rel<=0.33
replace ICOHAB_M=5 if randomnum_rel>=0.330001 &randomnum_rel<=0.66
replace ICOHAB_M=6 if randomnum_rel>=0.660001 & randomnum_rel<=1

capture drop randomnum_rel
set seed 91281535
gen randomnum_rel=runiform(0,1) if `var'==15 & ICOHAB_M>=13 & ICOHAB_M!=.
replace ICOHAB_M=7 if randomnum_rel>=0 & randomnum_rel<=0.33
replace ICOHAB_M=8 if randomnum_rel>=0.330001 &randomnum_rel<=0.66
replace ICOHAB_M=9 if randomnum_rel>=0.660001 & randomnum_rel<=1
capture drop randomnum_rel
set seed 1523481
gen randomnum_rel=runiform(0,1) if `var'==16 & ICOHAB_M>=13 & ICOHAB_M!=.
replace ICOHAB_M=10 if randomnum_rel>=0 & randomnum_rel<=0.33
```



```
replace ICOHAB_M=11 if randomnum_rel>=0.330001 &randomnum_rel<=0.66
replace ICOHAB_M=12 if randomnum_rel>=0.660001 & randomnum_rel<=1
}

// Correcting imputed month of cohabitation if chronologically before imputed month ofrelationship
replace ICOHAB_M=ISTART_M if START_M==13 & START_Y==COHAB_Y & ICOHAB_M<ISTART_M &
ICOHAB_M<=3
replace ICOHAB_M=ISTART_M if START_M==14 & START_Y==COHAB_Y & ICOHAB_M<ISTART_M &
ICOHAB_M>=4 & ICOHAB_M<=6
replace ICOHAB_M=ISTART_M if START_M==15 & START_Y==COHAB_Y & ICOHAB_M<ISTART_M &
ICOHAB_M>=7 & ICOHAB_M<=9
replace ICOHAB_M=ISTART_M if START_M==16 & START_Y==COHAB_Y & ICOHAB_M<ISTART_M &
ICOHAB_M>=10 &ICOHAB_M<=12

// When no information is mentioned and other dates do not interfer (year of start of relationshipdifferent
// than the possible year of start of cohabitation and different than the possible year of end ofrelationship)
capture drop randomnum_rel
set seed 1683223480
gen randomnum_rel=runiform(0.05,1.04) if COHAB_Y!=. & ICOHAB_M==. & COHAB_Y!=START_Y &
SEPCOH_Y!=COHAB_Y
replace ICOHAB_M=round(randomnum_rel*12) if randomnum_rel!=. & ICOHAB_M==.

// When no information is mentioned and year of cohabitation = year of startrelationship
capture drop randomnum_rel
set seed 914794
gen randomnum_rel=12-rgamma(1,2) if ICOHAB_M==. & COHAB_Y==START_Y &COHAB_Y!=.
replace ICOHAB_M=round(randomnum_rel) if randomnum_rel!=. & ICOHAB_M==.
replace ICOHAB_M=ICOHAB_M+1 if ICOHAB_M==0

// When no information is mentioned and year of cohabitation = year of endcohabitation
capture drop randomnum_rel
set seed 264175
gen randomnum_rel=rgamma(1,2) if ICOHAB_M==. & SEPCOH_Y==COHAB_Y & COHAB_Y!=9999 &COHAB_Y!=.
replace ICOHAB_M=round(randomnum_rel) if randomnum_rel!=. & ICOHAB_M==.
replace ICOHAB_M=ICOHAB_M+1 if ICOHAB_M==0

********* Imputation of month of marriage
gen IMAR_M=MAR_M
```

```
// For individuals having the same season and same year of start of cohabitation AND marriage
// ==> Keeping the same imputed month than the start of cohabitation
replace IMAR_M=ICOHAB_M if COHAB_M>=13 & COHAB_M<=16 & COHAB_M==MAR_M & MAR_Y==COHAB_Y

// When a season is mentioned
local list PA11MM PA52MM PA102MM_
foreach var of local list {
set seed 68434
capture drop randomnum_rel
gen randomnum_rel=runiform(0,1) if `var'==13 & IMAR_M>=13 & IMAR_M!=.
replace IMAR_M=1 if randomnum_rel>=0 & randomnum_rel<=0.33
replace IMAR_M=2 if randomnum_rel>=0.330001 &randomnum_rel<=0.66
replace IMAR_M=3 if randomnum_rel>=0.660001 & randomnum_rel<=1

capture drop randomnum_rel
set seed 45265
gen randomnum_rel=runiform(0,1) if `var'==14 & IMAR_M>=13 & IMAR_M!=.
replace IMAR_M=4 if randomnum_rel>=0 & randomnum_rel<=0.33
replace IMAR_M=5 if randomnum_rel>=0.330001 &randomnum_rel<=0.66
replace IMAR_M=6 if randomnum_rel>=0.660001 & randomnum_rel<=1

capture drop randomnum_rel
set seed 864
gen randomnum_rel=runiform(0,1) if `var'==15 & IMAR_M>=13 & IMAR_M!=.
replace IMAR_M=7 if randomnum_rel>=0 & randomnum_rel<=0.33
replace IMAR_M=8 if randomnum_rel>=0.330001 &randomnum_rel<=0.66
replace IMAR_M=9 if randomnum_rel>=0.660001 & randomnum_rel<=1

capture drop randomnum_rel
set seed 15645
gen randomnum_rel=runiform(0,1) if `var'==16 & IMAR_M>=13 & IMAR_M!=.
replace IMAR_M=10 if randomnum_rel>=0 & randomnum_rel<=0.33
replace IMAR_M=11 if randomnum_rel>=0.330001 &randomnum_rel<=0.66
replace IMAR_M=12 if randomnum_rel>=0.660001 & randomnum_rel<=1
}

// When no information is mentioned and other dates do not interfer (year of start of
// relationship different than the possible year of start ofcohabitation)
```



```
capture drop randomnum_rel
set seed 6195
gen randomnum_rel=runiform(0.05,1.04) if MAR_Y!=. & IMAR_M==. &MAR_Y!=COHAB_Y
replace IMAR_M=round(randomnum_rel*12) if randomnum_rel!=. & IMAR_M==.

// When year of marriage = year of cohabitation
// For all months, around 70% of cohabitation happened in the same month of marriage
capture drop randomnum_rel
set seed 25348
gen randomnum_rel=runiform(0.05,1.04) if MAR_Y!=. & IMAR_M==. & MAR_Y==COHAB_Y &MAR_Y!=9999
replace IMAR_M=ICOHAB_M if randomnum_rel<=0.8 & IMAR_M==.
replace IMAR_M=round(randomnum_rel*12) if randomnum_rel!=. & randomnum_rel>0.8001 & IMAR_M==.

********* Imputation of month of end of relationship
gen ISEPREL_M=SEPREL_M

// When a season is mentioned
set seed 5157
capture drop randomnum_rel
gen randomnum_rel=runiform(0,1) if PA111MM_==13 & ISEPREL_M>=13 &ISEPREL_M!=.
replace ISEPREL_M=1 if randomnum_rel>=0 & randomnum_rel<=0.33
replace ISEPREL_M=2 if randomnum_rel>=0.330001 &randomnum_rel<=0.66
replace ISEPREL_M=3 if randomnum_rel>=0.660001 & randomnum_rel<=1

capture drop randomnum_rel
set seed 70063121
gen randomnum_rel=runiform(0,1) if PA111MM_==14 & ISEPREL_M>=13 &ISEPREL_M!=.
replace ISEPREL_M=4 if randomnum_rel>=0 & randomnum_rel<=0.33
replace ISEPREL_M=5 if randomnum_rel>=0.330001 &randomnum_rel<=0.66
replace ISEPREL_M=6 if randomnum_rel>=0.660001 & randomnum_rel<=1

capture drop randomnum_rel
set seed 548916
gen randomnum_rel=runiform(0,1) if PA111MM_==15 & ISEPREL_M>=13 &ISEPREL_M!=.
replace ISEPREL_M=7 if randomnum_rel>=0 & randomnum_rel<=0.33
replace ISEPREL_M=8 if randomnum_rel>=0.330001 &randomnum_rel<=0.66
replace ISEPREL_M=9 if randomnum_rel>=0.660001 & randomnum_rel<=1
```

```
capture drop randomnum_rel
set seed 5002374
gen randomnum_rel=runiform(0,1) if PA111MM_==16 & ISEPREL_M>=13 &ISEPREL_M!=.
replace ISEPREL_M=10 if randomnum_rel>=0 & randomnum_rel<=0.33
replace ISEPREL_M=11 if randomnum_rel>=0.330001 &randomnum_rel<=0.66
replace ISEPREL_M=12 if randomnum_rel>=0.660001 & randomnum_rel<=1

// When no information is mentioned and other dates do not interfer (year of start
// of relationship different than the possible year of start of cohabitation and different
// than the possible year of end of relationship)
capture drop randomnum_rel
set seed 21550076
gen randomnum_rel=runiform(0.05,1.04) if ISEPREL_M==. & SEPREL_Y!=. & SEPREL_Y!=9999///
& SEPREL_Y!=START_Y & COHAB_Y!=SEPREL_Y
replace ISEPREL_M=round(randomnum_rel*12) if randomnum_rel!=. & ISEPREL_M==.

// When no information is mentioned and year of start relationship = year of endrelationship
capture drop randomnum_rel
set seed 3777914
gen randomnum_rel=12-rgamma(1,2) if ISEPREL_M==. & SEPREL_Y==START_Y & START_Y!=9999///
& START_Y!=. & SEPREL_Y!=9999 & SEPREL_Y!=.
replace ISEPREL_M=round(randomnum_rel) if randomnum_rel!=. &ISEPREL_M==.
replace ISEPREL_M=ISEPREL_M+1 if ISEPREL==0

// When no information is mentioned and year of cohabitation = year of endrelationship
capture drop randomnum_rel
set seed 6977
gen randomnum_rel=12-rgamma(1,2) if ISEPREL_M==. & SEPREL_Y==COHAB_Y & COHAB_Y!=9999///
& COHAB_Y!=. & SEPREL_Y!=9999 & SEPREL_Y!=.
replace ISEPREL_M=round(randomnum_rel) if randomnum_rel!=. & ISEPREL_M==.

********* Imputation of month of end of cohabitation
gen ISEPCOH_M=SEPCOH_M

// Replace with the same month of end of relationship if imputed and no other dates mentioned
replace ISEPCOH_M=ISEPREL_M if ISEPCOH_M>=13 & ISEPREL_M<=12 & PA114MM_==. & PA5MM==. &
SEPCOH_Y!=.

// When a season is mentioned
```



```
set seed 561689
capture drop randomnum_rel
gen randomnum_rel=runiform(0,1) if PA114MM_==13 & ISEPCOH_M>=13 &ISEPCOH_M!=.
replace ISEPCOH_M=1 if randomnum_rel>=0 & randomnum_rel<=0.33
replace ISEPCOH_M=2 if randomnum_rel>=0.330001 &randomnum_rel<=0.66
replace ISEPCOH_M=3 if randomnum_rel>=0.660001 & randomnum_rel<=1

capture drop randomnum_rel
set seed 56483
gen randomnum_rel=runiform(0,1) if PA114MM_==14 & ISEPCOH_M>=13 &ISEPCOH_M!=.
replace ISEPCOH_M=4 if randomnum_rel>=0 & randomnum_rel<=0.33
replace ISEPCOH_M=5 if randomnum_rel>=0.330001 &randomnum_rel<=0.66
replace ISEPCOH_M=6 if randomnum_rel>=0.660001 & randomnum_rel<=1

capture drop randomnum_rel
set seed 19865
gen randomnum_rel=runiform(0,1) if PA114MM_==15 & ISEPCOH_M>=13 &ISEPCOH_M!=.
replace ISEPCOH_M=7 if randomnum_rel>=0 & randomnum_rel<=0.33
replace ISEPCOH_M=8 if randomnum_rel>=0.330001 &randomnum_rel<=0.66
replace ISEPCOH_M=9 if randomnum_rel>=0.660001 & randomnum_rel<=1

capture drop randomnum_rel
set seed 15646120
gen randomnum_rel=runiform(0,1) if PA114MM_==16 & ISEPCOH_M>=13 &ISEPCOH_M!=.
replace ISEPCOH_M=10 if randomnum_rel>=0 & randomnum_rel<=0.33
replace ISEPCOH_M=11 if randomnum_rel>=0.330001 &randomnum_rel<=0.66
replace ISEPCOH_M=12 if randomnum_rel>=0.660001 & randomnum_rel<=1

drop randomnum_rel

********** Imputation of month of Divorce
gen IDIVO_M=DIVO_M

// When a season is mentioned
capture drop randomnum_rel
set seed 888992
gen randomnum_rel=runiform(0,1) if PA119MM_==13 & IDIVO_M>=13 & IDIVO_M!=.
replace IDIVO_M=1 if randomnum_rel>=0 & randomnum_rel<=0.33
```

```
replace IDIVO_M=2 if randomnum_rel>=0.330001 &randomnum_rel<=0.66
replace IDIVO_M=3 if randomnum_rel>=0.660001 & randomnum_rel<=1

capture drop randomnum_rel
set seed 669468
gen randomnum_rel=runiform(0,1) if PA119MM_==14 & IDIVO_M>=13 & IDIVO_M!=.
replace IDIVO_M=4 if randomnum_rel>=0 & randomnum_rel<=0.33
replace IDIVO_M=5 if randomnum_rel>=0.330001 &randomnum_rel<=0.66
replace IDIVO_M=6 if randomnum_rel>=0.660001 & randomnum_rel<=1

capture drop randomnum_rel
set seed 112396
gen randomnum_rel=runiform(0,1) if PA119MM_==15 & IDIVO_M>=13 & IDIVO_M!=.
replace IDIVO_M=7 if randomnum_rel>=0 & randomnum_rel<=0.33
replace IDIVO_M=8 if randomnum_rel>=0.330001 &randomnum_rel<=0.66
replace IDIVO_M=9 if randomnum_rel>=0.660001 & randomnum_rel<=1

capture drop randomnum_rel
set seed 130691
gen randomnum_rel=runiform(0,1) if PA119MM_==16 & IDIVO_M>=13 & IDIVO_M!=.
replace IDIVO_M=10 if randomnum_rel>=0 & randomnum_rel<=0.33
replace IDIVO_M=11 if randomnum_rel>=0.330001 &randomnum_rel<=0.66
replace IDIVO_M=12 if randomnum_rel>=0.660001 & randomnum_rel<=1

// When missing and different year than end of cohabitation orrelationship
capture drop randomnum_rel
set seed 1647915
gen randomnum_rel=runiform(0.05,1.04) if DIVO_Y!=SEPCOH_Y & DIVO_Y!=SEPREL_Y///
& IDIVO_M==. & DIVO_Y!=. & DIVO_Y!=9999
replace IDIVO_M=round(randomnum_rel*12) if randomnum_rel!=. & IDIVO_M==.

// When year of end of cohabitation = year of divorce
// For all months, around 50% of Divorce happened in the same month of end ofcohabitation
capture drop randomnum_rel
set seed 663307
gen randomnum_rel=runiform(0.05,1.04) if DIVO_Y!=. & IDIVO_M==. & DIVO_Y==SEPCOH_Y &DIVO_Y!=9999
replace IDIVO_M=ISEPCOH_M if randomnum_rel<=0.6 & IDIVO_M==.
replace IDIVO_M=round(randomnum_rel*12) if randomnum_rel!=. & randomnum_rel>0.6001 & IDIVO_M==.
```



```
** Date of birth of partner
capture drop BIRTHPART_Y
gen BIRTHPART_Y=HH14YY_2 if HH12_2==1
forvalues x=3/6 {
replace BIRTHPART_Y=HH14YY_`x' if HH12_`x'==1
}
replace BIRTHPART_Y=PA104YY_ if PA104YY_!=.
replace BIRTHPART_Y=START_Y-PA105_ if BIRTHPART_Y==. & PA105_!=. &START_Y<9999
replace BIRTHPART_Y=PA57YY if PA57YY!=. & BIRTHPART_Y==.
replace BIRTHPART_Y=START_Y-PA58 if PA58!=. & BIRTHPART_Y==. &START_Y<9999
replace BIRTHPART_Y=9999 if BIRTHPART_Y==. & START_Y!=.

// Month
gen BIRTHPART_M=HH14MM_2 if HH12_2==1
forvalues x=3/6 {
replace BIRTHPART_M=HH14MM_`x' if HH12_`x'==1
}
replace BIRTHPART_M=PA104MM_ if PA104MM_!=.
replace BIRTHPART_M=PA57MM if PA57MM!=. & BIRTHPART_M==.

***** Imputed month of birth of partner
gen IBIRTHPART_M=BIRTHPART_M

// When a season is mentioned
set seed 64564
capture drop randomnum_rel
gen randomnum_rel=runiform(0,1) if IBIRTHPART_M==13
replace IBIRTHPART_M=1 if randomnum_rel>=0 & randomnum_rel<=0.33
replace IBIRTHPART_M=2 if randomnum_rel>=0.330001 &randomnum_rel<=0.66
replace IBIRTHPART_M=3 if randomnum_rel>=0.660001 & randomnum_rel<=1

capture drop randomnum_rel
set seed 345893
gen randomnum_rel=runiform(0,1) if IBIRTHPART_M==14
replace IBIRTHPART_M=4 if randomnum_rel>=0 & randomnum_rel<=0.33
replace IBIRTHPART_M=5 if randomnum_rel>=0.330001 &randomnum_rel<=0.66
replace IBIRTHPART_M=6 if randomnum_rel>=0.660001 & randomnum_rel<=1
```

```
capture drop randomnum_rel
set seed 64689
gen randomnum_rel=runiform(0,1) if IBIRTHPART_M==15
replace IBIRTHPART_M=7 if randomnum_rel>=0 & randomnum_rel<=0.33
replace IBIRTHPART_M=8 if randomnum_rel>=0.330001 &randomnum_rel<=0.66
replace IBIRTHPART_M=9 if randomnum_rel>=0.660001 & randomnum_rel<=1

capture drop randomnum_rel
set seed 9615573
gen randomnum_rel=runiform(0,1) if IBIRTHPART_M==16
replace IBIRTHPART_M=10 if randomnum_rel>=0 & randomnum_rel<=0.33
replace IBIRTHPART_M=11 if randomnum_rel>=0.330001 &randomnum_rel<=0.66
replace IBIRTHPART_M=12 if randomnum_rel>=0.660001 & randomnum_rel<=1

drop randomnum_rel

********** Counting some problems in the chronological dates
// Separation before start of relationship or cohabitation (months imputed)
capture drop problem_dates
gen problem_dates=1 if (SEPREL_Y*12+ISEPREL_M)<(START_Y*12+ISTART_M) & SEPREL_Y!=9999///
& SEPREL_Y!=. & START_Y!=9999 & START_Y!=. & ISTART_M!=. & ISEPREL_M!=.
replace problem_dates=1 if (SEPCOH_Y*12+ISEPCOH_M)<(COHAB_Y*12+ICOHAB_M) & SEPCOH_Y!=9999///
& SEPCOH_Y!=. & COHAB_Y!=9999 & COHAB_Y!=. & ICOHAB_M!=. & ISEPCOH_M!=.

// Marriage after separation (months imputed)
replace problem_dates=2 if (SEPREL_Y*12+ISEPREL_M)<(MAR_Y*12+IMAR_M) & SEPREL_Y!=9999///
& SEPREL_Y!=. & MAR_Y!=9999 & MAR_Y!=. & IMAR_M!=. & ISEPREL_M!=. & problem_dates==.

// Year of start of relationship or cohabitation unknown
replace problem_dates=3 if (START_Y==9999|COHAB_Y==9999)

// Year of separation unknown
replace problem_dates=4 if (SEPREL_Y==9999|SEPCOH_Y==9999) & problem_dates!=3

// Start of a cohabitation before ending the previous
bysort ARID (COHAB_Y ICOHAB_M) : replace problem_dates=5 if problem_dates==. ///
& (COHAB_Y*12+ICOHAB_M)<(SEPCOH_Y[_n-1]*12+ISEPCOH_M[_n-1]) & COHAB_Y!=. & COHAB_Y[_n-1]!=.
```



```
// Start of a relation before age 12
replace problem_dates=6 if (START_Y*12+ISTART_M)-(HH14YY_1*12+HH14MM_1)<=144 & START_Y!=. &
START_Y!=9999

label define problemlab 1 "Sep<Start" 2 "Sep<Marr" 3 "Start Unk." 4 "Sep Unk." 5 "Cohab<Sep[-1]" 6 "Start<age 12"
label value problem_dates problemlab

sort ARID START_Y ISTART_M

** Relationship order and cohabitation order (accounting for imputed months)
** Last union is always the current one, even when dates are not in chronologicalorder
capture drop H_NREL
bysort ARID (couple_enq START_Y ISTART_M) : gen H_NREL=_n ifSTART_Y!=.
capture drop H_NCOH
bysort ARID (COHAB_Y ICOHAB_M couple_enq) : gen H_NCOH=_n if COHAB_Y!=.

// Some unions do not have a year of cohabitation or start of relationship, yet they are mentioned
// as a specific relationship ==> They are not counted in the union order
// Relationship order and cohabitation order may be slightly different when not in the same chronologicalorder

** New total number of relationships (LAT + coresident)
capture drop NBREL
by ARID : egen NBREL=total(H_NREL!=.)

** New total number of coresident unions
capture drop NBCOH
by ARID : egen NBCOH=total(H_NCOH!=.)

** Total number of separations
by ARID : egen NBSEP=total(PA110_==1 & H_NREL!=.)
by ARID : egen NBSEPCOH=total(PA110_==1 & H_NCOH!=.)

** Creation of a separation variable (LAT separation and coresident uniondissolution)
gen SEP=1 if PA110_==1 & H_NREL!=. // Separation (LAT or cohabitation)
replace SEP=2 if PA110_==2 & H_NREL!=. // Death of partner (LAT orcohabitation)
replace SEP=0 if H_NREL!=. & PA110_==. // Still in a couple orunknown

gen SEPCOH=1 if PA110_==1 & H_NCOH!=. // Separation (Cohabitation only)
```

```
replace SEPCOH=2 if PA110_==2 & H_NCOH!=. // Death of partner
replace SEPCOH=0 if H_NCOH!=. & PA110_==. // Still in a couple or unknown

label define seplab 0 "No Separation" 1 "Separation" 2 "Death partner"
label value SEP SEPCOH seplab

order ARID H_NREL H_NCOH couple_enq NBREL NBCOH NBSEP NBSEPCOH HH13_1 HH14YY_1 HH14MM_1 ///
HH32 HH56 HH62YY START_Y START_M ISTART_M COHAB_Y COHAB_M ICOHAB_M MAR_Y MAR_M IMAR_M
SEPREL_Y///
SEPREL_M ISEPREL_M SEPCOH_Y SEPCOH_M ISEPCOH_M DIVO_Y DIVO_M IDIVO_M SEP SEPCOH
BIRTHPART_Y ///
BIRTHPART_M IBIRTHPART_M PA110_ mariage

** Current relationship OR last relationship if no currentrelationship
capture drop last
bysort ARID (couple_enq H_NREL) : gen last=1 if _N==_n

tab last couple_enq, m

** Label variables
label variable couple_enq "In a couple at time of survey"
label variable START_Y "Year of start of relationship"
label variable START_M "Month of start of relationship"
label variable ISTART_M "Imputed month of start ofrelationship"
label variable COHAB_Y "Year of cohabitation"
label variable COHAB_M "Month of cohabitation"
label variable ICOHAB_M "Imputed month of cohabitation"
label variable MAR_Y "Year of marriage"
label variable MAR_M "Month of marriage"
label variable IMAR_M "Imputed month of marriage"
label variable SEPREL_Y "Year of end of relationship"
label variable SEPREL_M "Month of end ofrelationship"
label variable ISEPREL_M "Imputed month of end ofrelationship"
label variable SEPCOH_Y "Year of end of cohabitation"
label variable SEPCOH_M "Month of end of cohabitation"
label variable ISEPCOH_M "Imputed month of end ofcohabitation"
label variable DIVO_Y "Year of divorce"
label variable DIVO_M "Month of divorce"
label variable IDIVO_M "Imputed month of divorce"
```



```
label variable mariage "Marriage (Yes/No)"
label variable BIRTHPART_Y "Year of birth of partner"
label variable BIRTHPART_M "Month of birth of partner"
label variable IBIRTHPART_M "Imputed month of birth of partner"
label variable H_NREL "Relationship order (LAT+cohabitation)"
label variable H_NREL "Relationship order (LAT+cohabitation)"
label variable H_NCOH "Cohabitation order"
label variable last "Last observation (for each individual)"
label variable ARID "Personal ID"
label variable NBREL "Total number of relationships(LAT+cohabitation)"
label variable NBCOH "Total number of cohabitations"
label variable NBSEP "Total number of separations"
label variable NBSEPCOH "Total number of co-resident uniondissolution"
label variable SEP "End of relationship or death of partner"
label variable SEPCOH "Separation of coresident union or death of partner"
label variable problem_dates "Existence of a problem with chronological dates order"

** Generate a code for merging with the Harmonized Histories database
gen COUNTRY=561

** Generate a code for merging with the global GGS database
gen acountry=23

** Save all the database in long format
save Belgium_Partnerships_GGSLong.dta, replace

********** Creating a wide format for all non-coresident unions
use Belgium_Partnerships_GGSLong.dta, clear

** Keep the basic sociodemographic variables, partnership variables and new variables created and the personal ID
keep ARID H_NREL H_NCOH couple_enq NBREL NBCOH HH13_1 HH14YY_1 HH14MM_1 HH32 HH56 HH62YY
START_Y ///
START_M ISTART_M COHAB_Y COHAB_M ICOHAB_M MAR_Y MAR_M IMAR_M SEPREL_Y SEPREL_M
ISEPREL_M ///
SEPCOH_Y SEPCOH_M ISEPCOH_M DIVO_Y DIVO_M IDIVO_M SEP SEPCOH BIRTHPART_Y BIRTHPART_M
IBIRTHPART_M///
WEIGHT_BE mariage PA93_ PA98_ PA100MM_ PA100YY_ PA101_ PA104MM_ ///
PA104YY_ PA105_ PA106_ PA107_ PA108_ PA109FF_ PA110_ PA116_ PA117A1_ ///
PA117A2_ PA117A3_ PA118_ PA119MM_ PA119YY_ PA120_ PA121_ PA122_ PA123A1_ PA123A2_ ///
```

```
PA123A3_ PA124FF_ PA125FF_ COUNTRY acountry problem_dates

// Note: if you want to consider only coresident unions in the analysis, you just have to select
// H_NCOH!=.

replace H_NREL=0 if H_NREL==.

** Save the labels before reshape
foreach v of var*{
local l`v' : variable label `v'
}

** Reshape long to wide for all relationships
local PART1 PA93_ PA98_ PA100MM_ PA100YY_ PA101_ PA104MM_ PA104YY_ PA105_ PA106_ PA107_ ///
PA108_ PA109FF_ PA110_ PA116_ PA117A1_ PA117A2_ PA117A3_ PA118_ PA119MM_ PA119YY_ PA120_ ///
PA121_ PA122_ PA123A1_ PA123A2_ PA123A3_ PA124FF_ PA125FF_ H_NCOH couple_enq START_Y START_M///
ISTART_M COHAB_Y COHAB_M ICOHAB_M MAR_Y MAR_M IMAR_M SEPREL_Y SEPREL_M ISEPREL_M
SEPCOH_Y///
SEPCOH_M ISEPCOH_M DIVO_Y DIVO_M IDIVO_M SEP SEPCOH BIRTHPART_Y BIRTHPART_M IBIRTHPART_M
mariage problem_dates

reshape wide `PART1', i(ARID) j(H_NREL)

** Get the labels back
local  rank  "PA93_  PA98_  PA100MM_  PA100YY_  PA101_  PA104MM_  PA104YY_  PA105_  PA106_  PA107_  PA108_
PA109FF_  PA110_  PA116_  PA117A1_  PA117A2_  PA117A3_  PA118_  PA119MM_  PA119YY_  PA120_  PA121_  PA122_
PA123A1_ PA123A2_ PA123A3_ PA124FF_ PA125FF_ H_NCOH couple_enq START_Y START_M ISTART_M COHAB_Y
COHAB_M  ICOHAB_M  MAR_Y  MAR_M  IMAR_M  SEPREL_Y  SEPREL_M ISEPREL_M  SEPCOH_Y  SEPCOH_M
ISEPCOH_M SEP SEPCOH DIVO_Y DIVO_M IDIVO_M mariage problem_dates"

foreach variable of local rank{
forvalues x=1/11 {
label variable `variable'`x' "`l`variable'' `v`x'': Partner `x'"
}
}

** Drop all variables with no information
drop *_0 *Y0 *M0 H_NCOH0 couple_enq0 mariage0 problem_dates0 SEP0 SEPCOH0
```



```
** Create a relationship indicator
forvalues x=1/11 {
gen RELATION_`x'=1 if NBREL>=`x'
label variable RELATION_`x' "Indicator of relationship order `x'"
}

order ARID* RELATION_* H_NCOH* START_Y* START_M* ISTART_M* COHAB_Y* COHAB_M* ICOHAB_M*///
MAR_Y* MAR_M* IMAR_M* SEPREL_Y* SEPREL_M* ISEPREL_M* SEPCOH_Y* SEPCOH_M* ISEPCOH_M* ///
DIVO_Y* DIVO_M* IDIVO_M* SEP* SEPCOH* BIRTHPART_Y* BIRTHPART_M* IBIRTHPART_M* PA93_* ///
PA98_* PA100MM_* PA100YY_* PA101_* PA104MM_* PA104YY_* PA105_* PA106_* PA107_* PA108_*///
PA109FF_* PA110_* PA116_* PA117A1_* PA117A2_* PA117A3_* PA118_* PA119MM_* PA119YY_* PA120_*
PA121_* ///
PA122_* PA123A1_* PA123A2_* PA123A3_* PA124FF_* PA125FF_* couple_enq* mariage*

** Save the database and partnership variables in a wide format
save Belgium_PartnershipsAll_GGSWide.dta, replace

********** Creating a wide format for all coresident unions
use Belgium_Partnerships_GGSLong.dta, clear

replace H_NCOH=0 if H_NCOH==.
drop if H_NREL>=1 & H_NREL!=. & H_NCOH==0 & last!=1

keep ARID H_NREL H_NCOH couple_enq NBREL NBCOH HH13_1 HH14YY_1 HH14MM_1 HH32 HH56 HH62YY
START_Y///
START_M ISTART_M COHAB_Y COHAB_M ICOHAB_M MAR_Y MAR_M IMAR_M SEPREL_Y SEPREL_M
ISEPREL_M ///
SEPCOH_Y SEPCOH_M ISEPCOH_M SEPCOH DIVO_Y DIVO_M IDIVO_M BIRTHPART_Y BIRTHPART_M ///
IBIRTHPART_M WEIGHT_BE mariage PA93_ PA98_ PA100MM_ PA100YY_ PA101_ PA104MM_ ///
PA104YY_ PA105_ PA106_ PA107_ PA108_ PA109FF_ PA110_ PA116_ PA117A1_ ///
PA117A2_ PA117A3_ PA118_ PA119MM_ PA119YY_ PA120_ PA121_ PA122_ PA123A1_ PA123A2_ ///
PA123A3_ PA124FF_ PA125FF_ COUNTRY acountry problem_dates

** Save the labels before reshape
foreach v of var*{
local l`v' : variable label `v'
}

** Reshape long to wide for all relationships
```

```
local PART1 PA93_ PA98_ PA100MM_ PA100YY_ PA101_ PA104MM_ PA104YY_ PA105_ PA106_ PA107_ ///
PA108_ PA109FF_ PA110_ PA116_ PA117A1_ PA117A2_ PA117A3_ PA118_ PA119MM_ PA119YY_ PA120_ ///
PA121_ PA122_ PA123A1_ PA123A2_ PA123A3_ PA124FF_ PA125FF_ H_NREL couple_enq START_Y START_M///
ISTART_M COHAB_Y COHAB_M ICOHAB_M MAR_Y MAR_M IMAR_M SEPREL_Y SEPREL_M ISEPREL_M
SEPCOH_Y ///
SEPCOH_M ISEPCOH_M DIVO_Y DIVO_M IDIVO_M SEPCOH ///
BIRTHPART_Y BIRTHPART_M IBIRTHPART_M mariage problem_dates

reshape wide `PART1', i(ARID) j(H_NCOH)

** Get the labels back
local  rank "PA93_ PA98_ PA100MM_ PA100YY_ PA101_ PA104MM_ PA104YY_ PA105_ PA106_ PA107_ PA108_
PA109FF_ PA110_ PA116_ PA117A1_ PA117A2_ PA117A3_ PA118_ PA119MM_ PA119YY_ PA120_ PA121_ PA122_
PA123A1_ PA123A2_ PA123A3_ PA124FF_ PA125FF_ H_NREL couple_enq START_Y START_M ISTART_M COHAB_Y
COHAB_M ICOHAB_M MAR_Y MAR_M IMAR_M SEPREL_Y SEPREL_MISEPREL_M
SEPCOH_Y SEPCOH_M ISEPCOH_M DIVO_Y DIVO_M IDIVO_M SEPCOH mariage problem_dates"

foreach variable of local rank{
forvalues x=1/7 {
label variable `variable'`x' "`l`variable" `v`x'": Partner `x'"
}
}

** Drop all variables with no information
drop *_0 *Y0 *M0 H_NREL0 SEPCOH0 couple_enq0 mariage0 problem_dates0

** Create a coresident union indicator forvalues x=1/7 {
gen COUPLE_`x'=1 if NBCOH>=`x'
label variable COUPLE_`x' "Indicator of union order `x'"
}

order ARID* COUPLE_* START_Y* START_M* ISTART_M* COHAB_Y* COHAB_M* ICOHAB_M* MAR_Y*
MAR_M*///
IMAR_M* SEPREL_Y* SEPREL_M* ISEPREL_M* SEPCOH_Y* SEPCOH_M* ISEPCOH_M* DIVO_Y* DIVO_M* ///
IDIVO_M* SEPCOH* BIRTHPART_Y* BIRTHPART_M* IBIRTHPART_M* H_NREL* PA93_* PA98_* ///
PA100MM_* PA100YY_* PA101_* PA104MM_* PA104YY_* PA105_* PA106_* PA107_* PA108_* PA109FF_*///
PA110_* PA116_* PA117A1_* PA117A2_* PA117A3_* PA118_* PA119MM_* PA119YY_* PA120_* PA121_*///
PA122_* PA123A1_* PA123A2_* PA123A3_* PA124FF_* PA125FF_* couple_enq* mariage*
```



```
save Belgium_PartnershipsCoh_GGSLong.dta, replace
use Belgium_PartnershipsCoh_GGSLong.dta, clear

** Merge with Harmonized Histories (keeping Belgium only)
merge 1:1 ARID COUNTRY using HARMONIZED-HISTORIES_BEL, nogen
```

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