

## The European Social Survey Round 9 Question Module Design Teams (QDT) Stage 2 Application

Applications **MUST** be submitted by 5pm (UK time) on Monday 30<sup>th</sup> May 2016

Applications should be emailed to [ess@city.ac.uk](mailto:ess@city.ac.uk)

<b>Is this application for a new or a repeat module</b>	
New module	Repeat module

**Proposed title for the Module**

**Abstract (Max 250 words)**

**Principal Applicant**

<b>Name</b>	
<b>Position</b>	
<b>Institution (including name of University School or Department)</b>	
<b>Address for correspondence</b>	
<b>Telephone:</b>	<b>Email:</b>

**Please refer to the application checklist on the reverse before submitting your application.**

## Checklist for Stage 2 applications for Round 9 QDTs

### Please ensure that your application includes:

- A completed Stage 2 application cover sheet - Mark on the cover sheet whether you are applying for a new or repeat module
- The main body of the application (max. 20 sides A4) including sections covering:
  - The rationale for fielding the module on the ESS in 2018/19
  - How the module can be implemented on the ESS
  - Team expertise and experience
  - Dissemination plans
- Bibliographic references (max. 3 sides A4)
- CVs (max. 2 side A4 each) for up to five proposed QDT members, including contact details

### Please also ensure that:

- Your application is in PDF format (other formats will NOT be accepted)
- It is written in Arial font size 11 pt
- Page margins are at least 2cm
- All pages are numbered
- All sections of your application are combined into a single document
- The proposed team includes people from at least three ESS countries (including an ESS ERIC member or observer country)

## 1. Rationale

European societies face profound demographic changes with effects that are both immediate and enduring. These changes include accelerated population ageing, declining fertility, heterogeneous family structures, reconfigured relationships between women and men and across generations, and surges in geographical mobility and migration. These changes, in tandem with the recent economic crisis and the ongoing globalization and digitalization of social and economic life, have dramatically altered the structure and experience of the life course for individuals, families, and whole cohorts. The timing, sequencing and prevalence of life events have especially been altered—whether events in adolescence, youth and early adult life related to residence, schooling, work, and family formation; in midlife related to divorce, remarriage, or support to young adult children and older parents; or in later life, such as retirement, grandparenthood, caregiving and receiving, or widowhood. Knowledge about these shifts is essential both for policy (especially in building a “social investment” strategy) and research (with the “European laboratory” informing research at the global level).

Such knowledge is generated by reliable information on the timing of life events and the determinants of the life-course choices that underpin demographic change. Through the proposed module, which repeats a significant subset of items from the earlier ESS-3 “**Timing of Life**” module (largely gathered in 2006), the European Social Survey is poised to maintain and enhance its position as a central contributor in this area. Of particular significance is that change can be measured from 2006 to 2018/19. The first wave of measurement occurred just prior to the Great Recession, which abruptly and unexpectedly changed options, resources, and plans for people in every period of life, and in every European country. The second wave of measurement, ten years after the onset of Great Recession, is located at an ideal interval for gathering detailed data on changes induced by the economic recession and other social, political and economic changes (such as the upsurge of right-wing parties across Europe, migration, globalization and digital life), and for gauging the long-lasting effects of these changes on the timing of life in different societies. There is preliminary evidence that Great Recession has had heterogeneous effects across European societies, as well as across generations and genders (e.g., Aassve, Cottini and Vitali 2013; Goldstein et al. 2013).

Life course and demographic change constitute central challenges for policy makers. For instance, the EU’s Directorate-General for Employment, Social Affairs and Inclusion monitors demographic change on an annual basis (European Commission 2015). The EU regularly organises a European Demography Forum (Billari used ESS-3 data for his presentation in the 2013 forum). Horizon 2020 has “**Health, Demographic Change and Wellbeing**” as one of its overarching challenges. International organisations such as OECD have consistently focused on demographic change and the life course in its comparative approach to social and economic policy (e.g., OECD 2007; OECD 2011). At the national level, policy-oriented forums have been organised (e.g., Berlin Demography Forum, started in 2012 and since then a regular annual event with the contribution of Allianz and the German Federal Government, with a repeated participation of Billari as a speaker; Budapest Demographic Forum, 2015, with Spéder as a scientific advisor). Despite repeated calls for stronger cross-national data on demographic changes and the life course, the evidence base across Europe, beyond basic population-level statistics and general economic surveys, remains inadequate. Some trends seem clear: younger Europeans, especially in the countries hardest hit by the recession and fiscal austerity, have suffered from difficult and uncertain transitions from education to the labour market, further slowing their entry into adult roles and responsibilities. For adult Europeans, too, the challenges associated with managing work and family have been similarly exacerbated in the aftermath of the recession. Other family issues that were somewhat “under the radar” of major social and political debate have now become central points of focus and even contention in many European countries—including same-sex marriages and partnerships and transnational migration, with its link to the upsurge of explicitly anti-migrant and anti-EU parties. It is also unclear whether the “gender revolution” (England 2010; Esping-Andersen and Billari 2015; Goldscheider, Bernhardt and Lappegård 2015) has similarly suffered setbacks during this period. For older Europeans, the “active ageing” agenda, which seeks to prolong the work and productivity beyond traditional retirement ages, has been challenged by growing and sometimes extraordinary high levels of youth unemployment in many countries, and by pension reforms that have often been accelerated to cope with challenging public finances. The need for cross-national evidence

on the changing timing of life across Europe, and the forces that drive these changes, is also underscored in social science theories, which we expand upon below.

The timing of the possible data collection in 2018/19 is also fortunate because it offers the opportunity to build bridges and synergy between the ESS and other important data collection efforts in the larger European research infrastructure. Other infrastructures have the changing life course as a main focus—especially the Generations and Gender Programme (GGP) and the Survey on Health, Ageing and Retirement in Europe (SHARE). But none of these infrastructures can provide the same of life-course information on as many countries, and with as many cohorts, as the ESS would, with the added value of a strongly co-ordinated and simultaneous data collection. An ESS 2018/19 module can also leverage some research funding already secured by our team. For example, the European Research Council (ERC) has awarded an Advanced Investigator Grant (2016-2021) to Billari on the role of macro-level change in shaping household and family change. That project explicitly mentioned the application for a repeat ESS module, and therefore funding could be used to support analyses should the repeat module. We will also seek additional funding as a Team (in Section 5 we expand on this point). Moreover, an American team member, Settersten, will lead a parallel application for a comparable module to be fielded in the 2018 U.S. General Social Survey.

Our proposal for a repeat module for ESS 2018/19 is based based on a subset of the ESS-3 module of roughly 30 questions. Based on our experience in designing and analysing the previous module and other comparative surveys, we do not anticipate any serious methodological or practical difficulties in either the data collection or data analysis phases. The proposal focuses on two sets of questions related to: 1) respondents' information on the actual timing of life events for women and men; 2) subjective views on the timing of life and life-course decisions for women and men. Gender issues are explicitly targeted with the proposal to reiterate the pioneering split-ballot design of the original module.

The team is composed of five members from Europe and one from the U.S.: **Francesco C. Billari** (Principal Applicant), Department of Sociology, University of Oxford and Nuffield College, **UK**; **Gunhild O. Hagestad**, NOVA/Norwegian Social Research, **Norway**; **Aart C. Liefbroer**, Netherlands Interdisciplinary Demographic Institute, Vrije Universiteit Amsterdam and University Medical Center Groningen, the **Netherlands**; **Zsolt Spéder**, Demographic Research Institute, Hungarian Statistical Office and Pécs University, **Hungary**; **Richard A. Settersten, Jr.**, Hallie E. Ford Center for Healthy Children and Families, Oregon State University, **USA** (who participated as a member of the team analysing the “Timing of life” ESS-3 module); and **Jan Van Bavel**, Centre for Sociological Research/Family & Population Studies, University of Leuven, **Belgium**, as a new member. In collaborations inside and outside of the ESS-3 module, members of the team have built up many years of shared research experience.

## 2. Theoretical/conceptual approach

The theoretical and conceptual framework that underpins the proposed repeat module is the study of population change, but grounded in the life course approach (Billari 2015). The life course approach has been a burgeoning interdisciplinary field of research that has significantly shaped the way in which scientists understand and analyse both anticipated and actual life pathways and their nexus with social change. In this approach, social change is epitomised by cultural developments, historical events (such as conflicts and economic crises), and the introduction of new policies that shape the structure and experience of life well beyond a specific time period (see, e.g., Elder and Giele 2009; Heinz, Huinink and Weymann 2009; Mayer 2009). In recent years, the growth of life course research has become even more visible through the foundation of two new journals, both of which began in 2009 (Billari is the Editor-in-Chief of one of these two, *Advances in Life Course Research*, and Hagestad, Liefbroer, Settersten, and Spéder are members of its Editorial Board; and the other is *Longitudinal and Life Course Studies*, which is published by the new *Society for Longitudinal and Life Course Studies*). The availability of innovative panel and longitudinal data, as well as specific retrospective data gathered for use in the broader scientific community, has been a primary driver of developments in life course research (Billari 2009; Bynner et al. 2009; Scott and Alwin 1998). The ESS-3 module on the “Timing of Life” (Billari et al. 2005) has been one of these important and emerging data sources. As we shall demonstrate, analyses based on the module

have contributed significantly to the field by providing strong evidence on the life course patterns of Europeans, with publications in a wide range of top venues that span the fields of demography, medicine, public health, sociology, and geography, and a wealth of theoretical and conceptual contributions that can fertilize the repeat module.

### *2.1 The actual timing of life*

Information on the actual timing of life events can be used to advance science and policy on many pressing social and economic issues, as research using ESS-3 data has already shown. For example, consider the pathways that youth take as they make the *transition to adulthood*. Billari and Liefbroer (2010) analysed between-country and between-cohort differences in the timing and sequencing of events traditionally associated with becoming adult. The lives of young adults reveal a degree of convergence to a new ideal-typical pattern: late, protracted and complex, albeit with important exceptions across Europe. Using a more complex approach based on sequence analysis and correspondence analysis, Lesnard et al. (2016) concluded that, while some convergence is observed, historical family systems still marked important between-country differences in the transition to adulthood. Nico and Caetano (2015) used ESS-3 data in a mixed-method article together with biographical narratives, to challenge the idea that the life course is becoming more de-standardized. Neels et al. (2013) disentangled short-term and long-term effects of the economic context on entry into parenthood and explored variations in the pace of fertility by age, gender, educational level and welfare state context. Focusing on the recessions of the 1970s, they showed that adverse economic conditions and high unemployment significantly reduce the likelihood of becoming a parent among men and women below age 30, particularly among the higher educated. For both of these examples, a 2018/19 round would offer the opportunity to examine whether new patterns and consequences have emerged within and across societies, and whether further convergence is achieved.

With regard to *gender, family and fertility*, Van Bavel and Róžańska-Putek (2010) studied the transition to the second birth, a central one in an era of low fertility. They found that in countries where the highly educated have lower second birth rates than the less educated, total fertility was often low, and vice versa. In addition, the effect of the timing of the first birth appeared to be mediated by level of education and child care availability: in countries where large proportions of young children attend formal child care, the more highly educated exhibited a much higher propensity to have a second child, while child care availability did not affect parity progression for the less educated. Van Bavel et al. (2012) asked whether there is an individual-level explanation for the existence of a positive correlation between divorce and total fertility at the country level. They found that, for both men and women, a past divorce experience was generally *negatively* associated with the number of children ever born, even for people who are in a new post-divorce union. These findings indicate that, contrary to what is suggested by aggregate level correlations, divorce has not become a pro-natal force in Europe. The only exception may be remarried men, who are in the ESS sample somewhat more likely to have three or more children. Again, it is crucial to have data at another time point to test whether these “new” family trends have held up against the discontinuity created by the Great Recession.

On *ageing and the relationships between generations*, Leopold and Skopek (2015) combined ESS-3 data with other survey data to document cross-national variation and changes over time in the timing of grandparenthood, a key issue for understanding ageing and its consequences for the whole population, including the relationships between generations. A key finding was that the timing of fertility was more important than mortality in shaping the length of the grandparenthood stage in the life course. Similarly, van Bavel and De Winter (2013) investigated the extent to which becoming a grandparent affects the timing of retirement in European countries. Using macro-level intergenerational policy indicators, they applied multilevel event history modelling and found that becoming a grandparent speeds up retirement, especially at the mid-decade and decade ages of 55 and 60 years, respectively. However, the effect was only statistically significant for women. As population ageing has advanced in the last 10 years, and quite differently across European societies, 2018-19 data would be fundamental in informing important matters like these.

### *2.2 Subjective views of the timing of life and life-course decisions*

The *cultural segmentation of life* is reflected in the fact that every society is characterised by an age system that divides the life span into recognized seasons of life (Hagestad and Neugarten

1985). People are channelled into positions and roles according to age criteria. Privileges, rights, and obligations are based on shared age definitions and reinforced through policies. Populations are divided into age groups whose interactions are socially structured and regulated, sometimes integrated and sometimes segregated from one another. These forms of age segmentation are also gendered (Moen 1996), but some aspects of the life course may also be understood as “unisex”. ESS-3 data showed that in 2006-7 there was surprisingly widespread agreement on the perceived ages of becoming “adult” and becoming “old” across Europe, even if the social markers that underlie these definitions (other than legal ages inscribed in social policies) are unclear (Settersten and Hagestad 2015).

Societies need data on how citizens perceive the organisation of the life course, the phases that comprise it, and what signals the movements of individuals out of one stage and into another. These “subjective” phenomena directly affect individuals’ life plans, goal-setting, and behavioural choices. Before ESS-3, there was no comparative research on this issue, and the module has significantly contributed to what is now known about the segmentation of the life course across Europe. For example, on the transition into adulthood, Spéder et al. (2014) probed similarities and differences in conceptions of adulthood for men and women in 25 countries. They examined perceptions of the age of “adulthood” and the importance of social markers (e.g., leaving home, having a full time job, living with a partner or spouse, becoming a parent) in achieving “adult” status. Their analyses revealed a shared, but gendered, European idea about the age of adulthood, with men always perceived as reaching adulthood later than women. Country differences are not simply explained by welfare state classification, but also by value systems. The social markers of adulthood for men and women were generally, and surprisingly, similar. Although economic independence mattered more for men’s lives, it was nonetheless salient for women as well. Even more surprising was that, in many countries, family formation emerged as a “unisex” organizer of the life course. That is, partnership and parenthood mattered as much in defining men’s lives as women’s lives.

The importance of *social norms* for key life-course decisions has long been emphasized in the literature (Giele and Elder 1998; Hagestad and Neugarten 1985; Liefbroer and Billari 2010; Neugarten, Moore and Lowe 1965; Settersten and Hagestad 1996; Settersten and Mayer 1997). The ESS-3 module was a pioneering contribution to providing empirical evidence on social norms, both in assessing norms relevant to multiple periods of the life course and in taking a comparative perspective. Several excellent examples have already been offered. In addition, Aassve et al. (2013) studied social age deadlines for leaving the parental home, using a series of multilevel regression models that simultaneously accounted for country, regional, and individual-level factors. They found strong differences in the normative climates of countries, as well as significant but lower regional-level variation. Age deadlines for leaving home are significantly influenced by country-level ‘institutional’ factors, and by regional-level ‘cultural’ factors. Billari et al. (2011) studied “social age deadlines” for entry into fatherhood and motherhood across countries. They found that social age deadlines were lower than actual biological deadlines, and that the social age deadlines are perceived more frequently for women than for men. That is, there is stronger and earlier social pressure for women to become mothers than for men to become fathers. At the country level, the presence of social age deadlines for the childbearing of women was negatively associated with later fertility rates and the prevalence of assisted reproduction techniques, whereas later deadlines were positively associated with these factors. Mills et al. (2011) took a different view, using ESS-3 data to demonstrate “that individuals often overestimate the age at which a woman is able to have more children.” Van Bavel and Nitsche (2013) also showed that in regions with older ideal ages for parenthood, the progression to second births is lower for women with younger ages at first birth, and vice versa.

Because social norms are traditionally gendered but also highly contested and in flux, the module will again take advantage of the features of the innovative split-ballot (“4-cell”) design—a design that made the ESS-3 popular for comparing both the perceptions of women’s and men’s lives, and for comparing the judgments made by men and women. To assist in predicting childcare needs and childcare policies in Europe, Saraceno (2011) studied cross-country differences in the disapproval of a woman with a child under the age of 3 having a full-time job. Similarly, Rijken and Liefbroer (2012) examined differences across Europe in attitudes towards divorce of mothers and fathers with children under the age of 12. Using multilevel models, they found that the disapproval of divorce when young children are involved was lower in societies with lower rates of poverty for

single parents and with higher rates of enrolment in childcare. Cross-level interactions indicated that poverty among single parents had the strongest impact on attitudes about divorce for women. Merz and Liefbroer (2012) examined attitudes toward voluntary childlessness in 20 European countries, and their results corroborated individual-level expectations on the role of gender and socioeconomic status based on economic theories. Huijts et al. (2011) found that childlessness is generally inversely related to psychological well-being, but that the magnitude and direction of this relationship varies across European societies, especially among women. The gendered nature of the disapproval of childlessness, of working full-time while having children, and of family life course in general is further theoretically discussed and documented by Rijken and Merz (2014), Eicher et al. (2015), and Rijken and Liefbroer (2016). These papers all emphasize the presence of double standards. Will these gendered double standards fade or grow in the time interval between ESS-3 and ESS-9? Will these changes be influenced by the resurgence of social conservatism in some societies and by the push for higher gender equality in other societies?

As noted earlier, legal norms can underlie social norms. But the reverse is also true: social norms can play crucial roles in shaping legal norms. Ongoing debates about the ages of retirement, which have been heightened in the face of population *ageing*, are a clear example. Radl (2012) raised the issue of whether there was a limited understanding of the pervasiveness of age norms in influencing the debate on pension reforms, and used the ESS-3 to shed light on norms towards the timing of retirement in 14 Western European countries. Results suggested that social class had a strong impact on retirement age norms and exhibited a complex pattern of norms concerning the timing of retirement of men versus women. Further population ageing, coupled with pressure on pension reforms, are likely to have intensified or altered these norms in the last decade.

Besides normative pressure, *life planning* and *goal setting* are major determinants of actual life course experience, especially with gains in life expectancy and lowered morbidity, mortality, and fertility. The significance of life plans and goals has been particularly salient in the frameworks of many psychologists and sociologists of the life course, and is reflected in the core shared concept of human “agency” (Beck and Beck-Gernsheim 2002; Clausen 1991; Elder 1994; Giddens 1991; Heckhausen 1999; Settersten and Gannon 2005). As a result, life planning has become a general feature of life in many contemporary societies, and the ability to plan is often seen as a key determinant of successful life course transitions. Indeed, social policies presuppose that individuals have an ability to plan, that life outcomes are most often the result of good or bad choices, and that the welfare of citizens will improve when they become more self-reflective and planful. Using ESS-3 data, Hellevik and Settersten (2012) studied how personal and societal security affected the propensity of young adults to plan. They found opposing trends at the two levels: At the individual level, young adults with greater personal security were more likely to plan than those who had fewer personal resources. But at the country level, young adults who lived in countries with less favourable societal conditions were actually more likely to plan than those who lived in countries with more favourable conditions. This is a challenging finding, given the difficult economic conditions in many countries and the severely limited labour market opportunities for young adults. It also creates a premium for new data, and austerity policies heterogeneously implemented across the Great Recession will be key factors to be investigated using 2018-19 data.

### 3. Implementation

In this section, we elaborate on the content of the proposed ESS-9 Timing of Life module. Clearly, in constructing this module, we start from the corresponding ESS-3 module. First, we describe the content of the ESS-3 Timing of Life Module and outline our main criteria to select items for the repeat module in ESS-9. Next, we discuss the implementation by topic, which items we suggest to repeat, and which items to drop. Finally, we will add some general methodological considerations concerning fielding the repeat module.

#### 3.1. General guidelines for selecting items from Timing of Life Module in ESS-3

The Timing of Life module in ESS-3 consisted of 10 parts, described in Table 1.

The original set of questions is obviously too large to retain in the repeat module. In deciding on which items to retain and which to drop for the current proposal, we are led by three types of criteria:

- Scientific Interest;
- Methodological Quality;
- Use of Items in ESS-3.

*Table 1. Overview of the “Timing of Life” module in ESS-3*

Items	General topic	Specifics	Examples
D1-D14	Occurrence and timing life-course events	Entry into employment Leaving parental home Entry into co-residential union Marriage Children Grandchildren	“Have you ever lived with a spouse or partner for three months or more?” “In what year did you first live with a spouse or partner for three months or more?”
D15	Split-ballot filter question	Determines whether R gets male or female version of questions D17-D51	
D17-D19	Stages of life course	Entry into adulthood Entry into middle age Entry into old age	“At what age, approximately, would you say women reach old age?”
D20-D26	Reasons for stage membership	Importance leaving home Importance full-time employment Importance partnership Importance parenthood Importance frailty Importance grandparenthood	“To be considered an adult how important is it for a woman to have lived with a spouse or partner?”
D27-D30	Ideal ages	Entry into co-residential union Entry into marriage Entry into parenthood Permanent retirement	“In your opinion, what is the ideal age for a woman to retire permanently?”
D31-D39	Age deadlines	Leaving education Sexual intercourse Co-residential union Marriage Parenthood Retirement	“After what age would you say a woman is generally too old to consider having any more children?”
D40-D44	Family norms	Childlessness Cohabitation Child out-of-wedlock Combining work and family Divorce	“How much do you approve or disapprove if a woman has a full-time job while she has children aged under 3?”
D45-D51	Societal disapproval	Teenage motherhood Employment after 70 Childlessness Cohabitation Child out-of-wedlock Combining work and family Divorce	“Apart from your own feelings, how do you think most people would react if a woman they knew well did any of the following? Became a mother before the age of 18”
D52	Future life planning		“Do you generally plan for your future or do you just take each day as it comes?”
D53-D55	Pension income	Income worries Income responsibility Savings	“How worried are you, if at all, that your income <sup>44</sup> in old age will not be adequate enough to cover your later years.”



With regard to scientific interest, our main reason to repeat the suggested items is that we expect substantial period- and cohort-change in the items as well as interesting cross-national variation in the extent to which changes in these items are observed. With regard to methodological quality, we base our judgment on the extent to which problems were identified in ESS-3 with regard to understanding specific questions and on the level of non-responses on these items. In section 3.3, we return in more detail to these issues. Finally, we base our selection on the use – or non-use – of items included in this Module in ESS-3. If items were little used, this may suggest relatively little scientific interest in the topics to which the items relate, or that the items failed to grasp the scientifically relevant aspects of a topic.

### *3.2 Proposed repeat module*

In this section, we discuss which items to retain and which items to drop from the ESS-3 Module. We discuss these items, following the order in which they appeared in the original module, and using the original question numbering. Table 2 contains the list of questions that we propose to retain, the share of respondents to which the questions apply (calculated as 100% minus the share of 'not applicable'), and the total number of refusals/no answer/don't know answers (computations are from ESS-3 Ed. 3.4, unweighted). In our proposal, we retain the original numbering of the ESS-3 questionnaire. We do not propose to add any new questions. The total module we propose amounts to 30.02 survey units, estimating applicability using ESS-3. The total number of items is 33. We are not counting interviewer coding items.

#### *Occurrence and timing of life-course events (D1-D14)*

The first set of items in the module asked whether people had experienced major life-course events, and if so, at what age. The timing and prevalence of individual life course events are key determinants of demographic change, as micro-level experiences of individuals, couples and families shape macro-level population change (Billari 2015). These questions were included in the ESS-3 module for two main reasons. The first, and foremost, reason was that people's subjective views on the structuring of the life course are strongly influenced by their own experiences. Given that these experiences are such strong predictors of these views, ascertaining these experiences was thought to be of paramount importance. Second, information on the structuration of people's own life courses allowed studying cross-national and cross-cohort differences in these life courses for a larger set of countries than is possible with any other dataset. For instance, 'Sharelife' (Börsch-Supan, Brandt and Schröder 2013) and the Generations and Gender Survey (GGS) (Vikat et al. 2007), also include information on the occurrence and timing of key life-course events, but for a much smaller number of countries and/or a smaller number of cohorts.

Extensive use has been made of these data in ESS-3, for both of the reasons mentioned above. The vast majority of papers that study the subjective structuration of the life course or life-course norms, uses objective information on the timing of these events in individuals' lives as individual-level covariates. In addition, a substantial number of papers have studied the information on the actual timing of events as its main topic of interest. The large number of countries included in the ESS, clearly has made this subsection interesting in this regard. We propose to reiterate this retrospective reconstruction of the respondents' life course, with questions on whether and when specific events have been experienced concerning: 1) the transition to adulthood; 2) gender, family and fertility; 3) ageing and relationships between generations. Such personal reconstruction provides the essential data for comparing the experience of individuals and cohorts across time and place. The repeat module will permit to examine both 1) the period between 2006 and 2018-19, which has brought significant social and economic changes for all cohorts, as well as the 2) experiences and options of new, younger cohorts as they have made the transition to adulthood. This part of the module follows standard practice and is reliable.

In the retrospective reconstructions of the life course questions (D1-D14), no particular fieldwork problems were encountered, with the highest share of issues in D3 (Leaving Home), where refusals are 0.2%, don't knows 3.7% and 'no answer' 0.7%. We therefore decided to retain the whole set of questions. This includes questions on grandchildren and great-grandchildren, which apply to a subset (a small subset in the case of great-grandchildren) of respondents, likely to become more relevant because of population ageing.

### *Split ballot filter (D15)*

A key innovation of the Timing of Life module in ESS-3, was the use of parallel questions for men and women, as the norms concerning the appropriate structuration of the life course differ for men and women. To accommodate this, we incorporated a split ballot filter to randomly assign respondents to either a male or a female version of most of the subjective questions. This approach proved highly successful. Not only were major differences between norms for men and women observed – attesting to the importance of distinguishing between norms for men and norms for women –, but it also allowed for specific studies examining these gender differences in life-course norms. We propose to retain the split ballot, a crucial and unique feature of the ESS-3 module. Depending on technological possibilities, this could either be done by posing a specific question (like D15 in ESS-3) or fully computerized.

### *Stages of the life course (D17-D19)*

Items D17 to D19 were posed to examine at which ages people were thought to experience the entry into main stages of the life course, like young adulthood, middle age, and old age. Information on these ages allows a better view on the segmentation of the life course as a whole. The major societal changes since 2006, in particular the Great Recession, have hit both young adults and old adults very hard, making it very interesting to examine whether views on the entry of adulthood and entry into old age have shifted. Changes in the definition of middle age are less apparent. In addition, relatively little use was made of this item. As items D17 and D19 did not suffer from particular problems, with D17 having 0.1% refusals, 3.1% don't know and 0.5% no answer, we propose to retain these two questions on entry into adulthood and entry into old age in ESS-9.

### *Reasons for stage membership (D20-D26)*

These questions were posed to fathom whether specific events and characteristics were linked to moving from one life-course stage to another. These items were not used very often and also showed relatively weak associations with the timing of entry into a next life-course stage. Therefore, we do not suggest to repeat them in ESS-9.

### *Ideal ages (D27-D30)*

These questions ask for the best age to enter a union, get married, have a child, and retire. The turbulent economic development of Europe in the last decade might have changed the views of Europeans on the ideal timing of these events quite substantially, as young adults have been hit particularly strongly by unemployment and the increased flexibility of the labour market, whereas older adults are strongly affected by changing retirement policies. No particular methodological problems were encountered, with the highest percentage of non-responses for D27 (on unmarried cohabitation), with 0.2% refusals, 5.7% don't know and 0.2% no answer. We propose to retain this set of items in ESS-9.

### *Age deadlines (D31-D39)*

This set of items taps into a core aspect of the concept of age norms, as it asks about ages before or after which people should not experience specific life events. These questions from ESS-3 were extensively used. As with ideal ages, we expect clear changes in these deadlines in the last decades, with stronger changes in countries that were hit hardest by the Great Recession. In ESS-3, a relatively high percentage of "don't know" answers were observed for these items, with the highest percentage of "don't know" answers (12.1%) for D39 on upper age limit to work. Given the crucial relevance of this age norm in the context of ageing we propose to retain the question. It is telling that the Oude Mulders et al. (2016), in a survey of top managers decided to adopt the ESS-3 formulation in their questionnaire. However, we propose to drop D32 (on age at first sexual intercourse) as it has been scarcely used and taps into a domain of the life course for which the study of change would need a much deeper focus.

### *Family norms (D40-D44)*

This set of items focuses on changes in the sequencing and combination of life-course events, like having a child out of wedlock, combining full-time employment and young children, and divorce with young children. In ESS-3, relatively large differences in these norms concerning women and

men were observed, making it particularly interesting to repeat these questions in ESS-9. On the one hand, a general increase in gender equality could be expected, and thus a convergence in how Europeans evaluate these items for men and women. On the other hand, one could argue that the advance of political parties emphasizing traditional family values across a number of European countries (e.g. Poland and Hungary), could have led to an increase in the gender gap in these norms in parts of Europe. No particular methodological issues were apparent in ESS-3, with the highest share of non-responses for item D44 (on divorce with children under age, with 0.1% refusals, 3.2% don't knows and 0.2% no answer. We propose to retain all of these questions in ESS-9

*Table 2. Question proposed for the repeat module. Share of applicability and percentage of refusals, no answers, don't knows. Source: ESS3-2006, Ed. 3.4*

	<b>Applicable equivalent items</b>	<b>% refusal/no answer/don't know</b>
<b>D1</b>	1	0.2
<b>D2</b>	0.863	3.8
<b>D3</b>	1	4.1
<b>D4</b>	1	0.2
<b>D5</b>	0.8	2.0
<b>D6</b>	1	0.1
<b>D7</b>	0.704	1.1
<b>D8</b>	1	0.1
<b>D9</b>	1	0.2
<b>D11</b>	0.696	0.6
<b>D12</b>	0.501	1.0
<b>D13</b>	0.312	2.5
<b>D14</b>	0.147	1.0
<b>D17</b>	1	3.7
<b>D19</b>	1	3.1
<b>D27</b>	1	6.1
<b>D28</b>	1	4.1
<b>D29</b>	1	3.9
<b>D30</b>	1	5.5
<b>D31</b>	1	10.5
<b>D33</b>	1	8.3
<b>D34</b>	1	7.0
<b>D35</b>	1	5.3
<b>D36</b>	1	12.5
<b>D37</b>	1	11.0
<b>D38</b>	1	7.5
<b>D39</b>	1	12.9
<b>D40</b>	1	2.2
<b>D41</b>	1	1.6
<b>D42</b>	1	1.5
<b>D43</b>	1	2.1
<b>D44</b>	1	3.5
<b>D52</b>	1	1.1
<b>Total</b>	30.02	

### *Societal disapproval (D45-D51)*

This set of items taps into the same kind of issues as D40-D44, but rather than asking for people's own opinion about these issues, people are asked to evaluate whether these behaviours will be met with societal disapproval. Although these questions performed well, the answers correlated strongly with those given to D40-D44 and relatively little independent use has been made of these items. Therefore, we suggest not to retain them in ESS-9.

### *Future life planning (D52) and Pension income (D53-D55)*

Given the Great Recession and the increasing economic and political insecurity in Europe, the issue of future life planning has gained in importance, making it highly interesting to repeat it in ESS-9. Clearly, D53-D55 are also important questions, but their focus on welfare issues makes them better suited to be included in other parts of the ESS. In addition, relatively little use has been made of these items. Therefore, we suggest only to retain D52 in ESS-9.

### *3.3 Methodological or practical consideration*

Based on our (and other researchers') experience with the 2006 module on Timing of Life, our general conclusion is that this module's methodological quality is fine. Therefore, we do not envisage serious methodological or practical difficulties in either the data collection or the data analysis phases. Below, we briefly discuss what we consider key methodological aspects related to this particular module.

#### *Operationalization and cross-national equivalence of key concepts*

Given that almost all concepts have been measured by one item, no formal statistical testing of cross-national equivalence was possible. However, we have little reason to question the quality of the data that have been collected. As far as we are aware, country-teams reported little difficulty in translating the questions and in answering these questions by the respondents. In our view, the main problem encountered is that in France, the concept 'middle age' cannot be readily translated. The fact that in France, respondents mentioned a much earlier age at which middle age is entered than in other countries, attests to this potential problem. Given this difficulty, and given that (a) the answering patterns for this question across countries did not deviate much from those of entry into adulthood and entry into old age, and (b) little use has been made of this question, we propose to drop this specific question on entry into middle age in this repeat module.

The 2006 module also included questions on the actual life-course behaviour of respondents. Aggregate-level comparisons of the information on the timing of events with that in other types of surveys and earlier studies, offer insights in the reliability of the questions used (Scott and Alwin 1998). Kreyenfeld et al. (2011) make an explicit comparison of ESS-3 fertility data with other administrative or survey-based sources on the timing of life course events in German-speaking countries, confirming that ESS-3 data are in line with other sources. Billari and Liefbroer (2010) examined cohort-related changes in the timing of events to adulthood, and the cohort-patterns they observed were also in line with what we know from other studies. Therefore, evidence suggests that the questions on the actual occurrence and timing of events offered reliable information.

#### *Split ballot design*

A major innovation in the ESS-3 module was the use of a split ballot design, in which a random half of the respondents had to answer questions on the appropriate occurrence, timing and sequencing of events for women, and another random half answered the same questions for men. The reason for this split ballot was that it was expected that different norms existed for appropriate behaviours of men and women. In countries where CAPI was used, the computer randomly selected respondents into either the female or the male mode of the questions. In countries where a paper-and-pencil questionnaire was used, a split ballot question was used to decide whether a respondent had to answer the male or the female version of the questions. This split ballot approach worked well and did not pose any serious problems in data collection. In all countries, approximately equal parts of the sample answered the male and the female version of the questions.

From a substantive point of view, the split ballot design proved to be essential. On the far majority of questions, clear differences in norms for women and norms for men were observed. This was true for questions on the timing of events (with lower ages expected for women), but for other types

of norms as well (e.g. questions on combining full-time employment and having a child under the age of three, or on divorce while young children were present). Although it is not possible to examine differences in norms for men and women at the intra-individual level, examining these differences between persons proved very valuable (e.g., Liefbroer, Merz and Testa 2015; Merz and Liefbroer 2012). By adding the split-ballot indicator to the analysis and interacting this indicator with other indicators of interest, it could be assessed whether there were differences between societal groupings (e.g. different levels of education, men and women) or between countries, in the extent to which life-course related expectations were gendered. Repeating the split ballot in ESS-9 would also allow examining whether the gender gap in these norms has become smaller in the last decade, or whether the increased political emphasis on family values in some countries has led to an increase in this gender gap.

Given their clear theoretical and empirical relevance, and given its practical feasibility, we propose to retain the split ballot approach in the ESS-9 repeat module. In addition, this approach might generate methodological innovation—for instance Bruno Arpino, now at the Research and Expertise Centre for Survey Methodology of Pompeu Fabra, and formerly a member of the LIFETIMING project linked to our ESS-3 module, has been working on matching pre-processing for the estimation of double standards using the split ballot design (Arpino 2016).

#### *Within-country and cross-national variation in responses*

An important aspect in evaluating the items in the ESS-3 module is whether they showed sufficient within-country and across-country variation. Within-country variation did not constitute a problem at all. Besides, cross-national differences in the extent of within-country variation is theoretically interesting, as a low level of within-country variation suggests that a norm is widely shared within a country, whereas a high level of within-country variation suggests that normative consensus is low. The article by Aassve, Arpino and Billari (2013) is one of the first ESS-based paper that adopts a three-level multilevel strategy to assess the role of both the national and the regional context in shaping age deadlines on leaving home. The team is experienced in using state-of-the-art statistical techniques (in particular multilevel statistical models) that are necessary to make the most out of these data.

Cross-national variation in answering patterns varied. For some questions, the variation was much larger than for others. But again, that is substantively interesting. For none of the questions was the cross-national variation so small, that it warrants the removal of the questions. So, our proposal to drop items from the original module is based on substantive arguments, rather than on arguments related to the lack of cross-national variation in the relevant questions.

#### *Geographical spread*

The ESS-3 module was fielded in 25 countries. It had a good spread across Europe, with the exception of Mediterranean countries. We hope for more Mediterranean countries participating in ESS-9, which would allow a better assessment of differences in life-course norms in countries that have a strong family-oriented culture. Billari and Liefbroer (2010) already linked GGS data from Italy to those of the ESS in their study of the transition to adulthood. Should the bid to include a module in the U.S. General Social Survey be successful, we would be able to make comparisons with another important society.

#### *Conclusion*

In our view, the experience with the Timing of Life module in ESS-3 was extremely positive. Few problems were encountered. Based on the analysis of the ESS-3 data, no major flaws in the data were detected. Therefore, our selection of questions from the original module is guided by substantive considerations.

## **4. Team expertise and experience**

The Team is international, interdisciplinary and with expertise and experience in collecting and analysing cross-national and/or timing of life data, and covers Europe also in terms of regional expertise. Billari, Hagestad, Liefbroer, and Spéder are the four members of the ESS-3 original proposing team (PI Billari), while Settersten and Van Bavel bring complementary expertise and

experience. Billari, Hagestad, Liefbroer, Settersten and Spéder have also collaborated in the targeted project “The timing of life: understanding cross-national differences in the organisation of the life course in Europe” (LIFETIMING, “Eurocores programme”, coordinated by the European Sciences Foundation and funded by national research organisations, PI Liefbroer), built around the ESS-3 module.

**Billari** is a demographer and life course sociologist, with cross-cutting interest in comparative research, quantitative methods and policies. He has extensive experience in cross-national survey design, having worked (currently as Chair of the Consortium Board) for 16 years in the design team of the Generations and Gender Survey, and has been the PI for the ESS-3 application. His methodological expertise is acknowledged by publications in statistics journals, and he has contributed to hazard modelling, life course, and multilevel modelling (including with ESS regional and national data). He is the PI of the ERC Advanced Grant “Discontinuities in Household and Family Formation” (2016-2021). He is an Italian and also brings key expertise on Southern Europe.

**Hagestad** is a sociologist and a major figure in the development of the life course approach. Her work has shaped the field of the social understanding and measurement of age and ageing, also including a gender perspective. She has importantly contributed to shape pioneering survey instruments and to build and develop comparative research project on ageing and intergenerational relationship in Europe. She is a member of research team for AgePaths, a longitudinal study of life after 40. Seminal work on how norms shape the life course has been co-authored with Settersten and has organized an international symposium on Her and His Adulthood at the Norwegian Academy of Arts and Science. Hagestad also brings key expertise on Nordic societies.

**Liefbroer** is a sociologist and demographer, with a focus on the transition to adulthood in a comparative perspective and its long-term consequences. He has also contributed to the design of the Generations and Gender Survey (serving also as the Principal Investigator of an FP7 Design Study), and has been the PI of the targeted project “The timing of life: understanding cross-national differences in the organisation of the life course in Europe” (LIFETIMING, “Eurocores programme”, coordinated by the European Sciences Foundation and funded by national research organisations). He is PI of the ERC Advanced Grant “Contexts of Opportunity: Explaining Cross-National Variation in the Links Between Childhood Disadvantage, Young Adult Demographic Behaviour and Later-Life Outcomes” (2013-2018). Liefbroer also brings key expertise on Continental European societies.

**Settersten** is a sociologist of age and the life course, has a broad interdisciplinary training and expertise, and is versed in quantitative and qualitative methods. His research has focused on the transition to adulthood and on later life transitions, as well as on the intersection between policies and life course trajectories. Among other roles, he has been a member of the MacArthur Research Network that developed a module on transitions to adulthood for the 2002 U.S. General Social Survey (GSS). He is also a co-author of all four ESS-3 module proponents. He also brings key expertise on market-oriented societies.

**Spéder**, a sociologist by training, directs the Demographic Research Institute at the Hungarian Central Statistical Office. He has a long-standing experience in designing, fielding and analysing sample surveys, and has a broad experience in comparative surveys, being a co-founder of the Generations and Gender Programme. He currently directs a large-scale panel survey in Hungary (“Turning Points in the Life Course”). He also brings key expertise on Central and Eastern European societies.

**Van Bavel** is a demographer and sociologist. His research has focused on fertility and family processes across Europe. He currently studies the broad implications of the reversal of the gender gap in educational achievement in Europe for family life courses and reproduction. He has been a central user of ESS-3, with a strong demographic and methodological expertise and an important publication record. He is the PI of the ERC Starting Grant “Implications of the Shifting Gender Balance in Education for Reproductive Behaviour in Europe” (2012-2017). He also brings key expertise on Continental European societies.

All applicants have a solid record of quantitative and comparative life course research, including theory, study design and data collection. They have also a record of collaborating as a team. They work in five ESS countries, including three ESS ERIC Member countries (UK, Belgium,

Netherlands) a Guest country (Hungary), and an Observer country (Norway). Settersten also provides a key link to the U.S., and he will serve as the Principal Investigator in the application for the module to be fielded in the U.S. 2018 General Social Survey.

## 5. Dissemination

We plan to maximise the **impact** of findings from the repeat module along both standard dimensions: academic impact, and economic and societal impact. A crucial aspect of our dissemination strategy is that it will focus on change between 2006 and 2018/19 and its determinants. While findings from 2018/19 will also be valuable *per se*, in particular for what concerns retrospective information on the timing and prevalence of life course events, change and its determinants will be more attractive and innovative. A co-ordinated strategy with the ESS Eric will be used throughout.

For what concerns **academic impact**, we plan to: 1) target a generalist science journal with a flagship article containing key findings concerning the changing timing of life. Team members have experience with publications on general science journals (e.g. Nature, PloS One)—it is foreseeable that the novelty of the findings on change between 2006 and 2018/19 will be attractive for a general science journal. This will be beneficial also for the ESS as a whole, given the importance of “being on the map” in general science for key research infrastructures. The flagship article will ideally be submitted within the first six months after the data are available; 2) support team members, their students and post-docs in publishing journal articles for different disciplines, and in presenting work at international conferences. Here the record from the 2006 module is important. As we showed in our review, publications based on the module appeared in journals in demography, geography, gerontology, medicine, public health and sociology. The repeat module will make ESS data even more attractive for this broad audience; 3) publish a collective book mainly aimed at an audience of non-specialists, on the changing timing of life in Europe. Both Billari (in Italian) and Settersten (on the US) have an experience in publishing such books. While this kind of publication mostly aims at a broader social and economic impact, it is also important in shaping the awareness of other scholars on the importance of social science research. The book will build on the scientific articles arising from the project. Given the timing of Billari’s ERC funding, a target date for publication will be 2021. However, the Team plans to have a joint funding application, ideally to be submitted before data collection—potential targets are multi-country schemes such as ORA or NORFACE, but specific Horizon 2020 opportunities will also be monitored. Moreover, Nuffield College will be used as a co-ordinating seat, and it is likely to provide co-funding for research activities.

For what concerns **social and economic impact**, we plan to: 1) in co-ordination with the ESS-Eric, present the findings, during a flagship event to be held in Brussels to be held in conjunction with the first flagship publication. Population Europe (the Network of Europe’s Leading Demographic Research Centres) will be the likely organising partner for this event, with a strong organisational experience (Billari is currently the President of Population Europe’s Council of Advisors). This flagship event will help to attract the attention of policy-makers, NGO and business organisations, as well as journalists; 2) again in co-ordination with the ESS-Eric, develop a social media strategy to promote the diffusion of evidence based on the repeat module (to this date, Twitter and Facebook are the likely social media, with Team members already engaged, but from here to 2019 the landscape may change); 3) apply for funding that is aimed at fostering knowledge exchange between academics and non-academics—for instance the University of Oxford funds knowledge exchange through an ESRC-funded Impact Acceleration Account (for which Billari is the current PI for the whole university) and impact on the general public. Several members of our team have had rigorous media training at their institutions and extensive experience working with journalists, including writing op-eds. The team is committed to disseminating of our research in major print, radio, and digital media outlets. The team’s has been covered in major news outlets such as the Economist, New York Times, Guardian, Times, Wall Street Journal, USA Today, Le Monde, Corriere della Sera, BBC, NPR.

## 6. CVs (bios) of the Applicants

**Principal Applicant: Francesco C. Billari (UK)**, *Nuffield College, New Road, Oxford OX1 1NF, UK. E-mail: [francesco.billari@nuffield.ox.ac.uk](mailto:francesco.billari@nuffield.ox.ac.uk)*

Francesco C Billari, a Fellow of the British Academy since 2014, is Professor of Sociology and Demography at the University of Oxford, where he is also a Professorial Fellow of Nuffield College. He has been the Head of the Department of Sociology between 2012 and 2015. His research focuses on demography and the life course, with cross-cutting interest in comparative research, quantitative methods and policies. He has contributed significantly to research on the transition to adulthood in Europe and on low fertility. He has pioneered the use of agent-based modelling and sequence analysis in demographic research and uses multilevel and/or hazard modelling regularly in his research. Together with Liefbroer, he kick-started to the new wave of research on the study and quantitative measurement of life course norms in large-scale surveys. The PI on the ESS-3 "Timing of Life" module, Billari has extensive experience in survey, including questionnaire design, pilot analysis and survey analysis. He has participated in questionnaire development for the Generations and Gender Programme since its beginning, and more recently he has coordinated the Questionnaire Design Group for the new GGS (to which also Liefbroer and Spéder participated). He has also participated in various comparative European projects (GGP, REPRO, LIFETIMING, FERTINT, POLYMOD). The co-applicants (Hagestad, Liefbroer, Settersten, Spéder, and van Bavel) have also participated in some of these projects. Billari has been awarded a new ERC Advanced Investigator Grant (DisCont, 2016-2021). Previously, Billari has held positions at Bocconi University (2002-2012), as a Professor of Demography, Vice-Rector for Development and Director of the Dondena Centre for Social Dynamics; at the Max Planck Institute for Demographic Research (1999-2002) as Head of the Independent Research Group on the Demography of Early Adulthood. He has held visiting positions at the University of Pennsylvania (2008-09) and at the Universitat Pompeu Fabra. He holds a Laurea in Economics (Statistics Major), Bocconi University (1994), and a PhD in Demography, University of Padua (1998). In 2013 he was awarded a Honorary Doctorate by the Catholic University of Louvain-la-Neuve. He is President of the European Association for Population Studies (2012-2016), and President of the Council of Advisors, Population Europe (2013-). He is Editor-in-Chief of *Advances in Life Course Research* (2008-), Editor of *Population Studies* (2013-). In 2012 he received the "Clifford C. Clogg" award of the Population Association of America. In 2014 he was admitted as a Foreign Member of the Austrian Academy of Science.

**Co-applicant 1: Gunhild O Hagestad (Norway)**, *NOVA/Norwegian Social Research, Oslo & Akershus College of Applied Sciences, Norway. E-mail: [gohagestad@gmail.com](mailto:gohagestad@gmail.com)*

Gunhild O. Hagestad, a sociologist trained in Norway and the US, is currently Senior Researcher (part-time), at NOVA/Norwegian Social Research/ Oslo and Akershus College of Applied Sciences, where she is a member of research team for *AgePaths*, a longitudinal study of life after 40. She also serves on the international advisory board of *Families And Societies*, an EU-funded project with 25 international partners. Hagestad was Professor at the University of Agder (1997-2010) and the University of Oslo (1989-1997). She has also held faculty positions at Northwestern University, Pennsylvania State University, and the University of Chicago.

Hagestad has been involved in research, writing and teaching on the life course for 4 decades. Her first publication (with B.L. Neugarten) appeared in 1976. Since then, she has produced 30 articles and chapters and delivered 15 keynote addresses on life course issues at major international conferences. In the early 1980s, she was a member of Social Science Research Council working group of Japanese and US scholars, focused on family and life course patterns. She was also a member of a team focused on measurement issues related to the study of age and aging. The work produced an edited volume, in which her contribution was titled *Life phase analysis: Norms, perceptions, and roles*. In the late 1980s she received funding from the Norwegian Research Council for a project on *Family Structures and Life Course Patterns*, analysing Norwegian registry data. At that time, she was also consultant and lecturer for a research center on life course at the University of Bremen. In Bremen, she organized an international summer school on life course analysis for PhD students from the US and a number of European countries. Since then, she has been part of 5 similar courses in Norway and Iceland, all with a dual focus on age and gender. In 2011, she organized an international symposium on *Her and His Adulthood* at the Norwegian



Academy of Arts and Science. The symposium included three papers using data from the ESS module on "Timing of Life". Her most recent publication is a chapter in the new Handbook of the Life Course (Hagestad and Dykstra 2016).

In addition to the collaborative project with Japan, Hagestad has been a member of several international research projects: 2002-06: Team Leader, EU Research training network (6 nations) with focus on grandparenthood. 2005-06: Member of team that created Timing of Life module for the European Social Survey, 2007-12: Team Leader, Nordic Centre of Excellence in Welfare Research, 2008-11: Member, research team, MULTILINKS, EU 7th Framework. 2008-12.

Hagestad has received a number of honours: Research Career Development Award, National Institute on Aging, 1983-88; Distinctive Creative Achievement Award, The Gerontological Society of America, 1995; Fellow, The Gerontological Society of America, 1995; member of the Norwegian Academy of Arts and Sciences, 2002. Fellow, NIAS, Netherland Institute of Advanced Studies, 2002-2003. In 2013, she received the Matilda White Riley Distinguished Scholar Award from the Section on Aging and the Life Course, the American Sociological Association, and in 2015 she was given the Norwegian Sociological Association's highest honour.

**Co-applicant 2: Aart C Liefbroer (the Netherlands), *Netherlands Interdisciplinary Demographic Institute, The Hague, the Netherlands.* Email: [liefbroer@nidi.nl](mailto:liefbroer@nidi.nl)**

Aart C. Liefbroer is leader of the Theme Group on Families and Generations at the Netherlands Interdisciplinary Demographic Institute in The Hague, a professor of Demography of Young Adults and Intergenerational Transmission at the Department of Sociology at VU University Amsterdam, and a professor of Life Course Demography at the Department of Epidemiology at the University Medical Centre Groningen.

Liefbroer's substantive research focuses on the transition to adulthood in a comparative perspective. He has studied a wide range of decisions in the (young adult) life course, including leaving home, the start of a partner relationship, marriage, entry into parenthood, divorce and separation. One strand of research concerns temporal and cross-national differences in the occurrence, timing, and sequencing of life events. He also has an interest in the determinants and consequences of the transition to adulthood. Currently, he studies cross-national differences in the influence of parental disadvantage on adult life courses. This CONOPP (Contexts of Opportunity) project is funded by an ERC Advanced Grant. It examines the relationships between the experience of childhood social disadvantage, demographic decision-making during young adulthood and subsequent economic, social and health outcomes from a comparative perspective. It examines one general explanation for cross-national differences: the strength of the relationships depend on the opportunities that societies offer to abate the adverse impact of economic and social deprivation. In testing this 'contexts of opportunity' hypothesis, attention is paid to three aspects of the national context: (1) economic aspects, like the level of economic development in a country, (2) cultural aspects, like the extent to which strong norms on family-related behaviour are operative, and (3) aspects of institutional arrangements, like the openness of the educational system, and existing family policies. To test these ideas, data from comparative data sets, like the Generations and Gender Programme and the European Social Survey, and a combination of sophisticated methods, including multi-level, latent variable and sequence analysis, are used. Finally, he is also interested in life-course norms, as the behaviours of individuals are influenced by the prevailing ideas and norms within society on the appropriate timing and sequencing of events in the life course. At the same time, norms will partly change in response to changes in societal behavioural patterns. In the recent past, Liefbroer chaired an ESF-funded project (The Timing of Life) that studied cross-national differences in life-course related norms.

Methodologically, Liefbroer has devoted much energy to survey collection efforts, both at the national and the international level. He has been involved (first as an assistant, later as PI) in a 6-wave panel study on the social integration of young adults, spanning the period 1985-2011. He also is a member of the team leading the Netherlands Kinship Panel Study, a longitudinal multi-actor, multi-method data collection, starting in 2003, with fourth waves of data collection.

Internationally, he acted from 2009 to 2013 as scientific coordinator of the Generations and Gender Programme, an international data research infrastructure, aiming to collect both micro-level (panel) and macro-level contextual data on key changes in life courses. Currently, at least one wave of the GGS has been fielded in 19 countries. Finally, he was one of the members of the team that designed a module on the Timing of Life in the 2006 wave of the ESS. He analysed cross-national

data with a mix of methods, including multi-level models, event-history models, and sequence analysis.

Liefbroer collaborated - and still collaborates - with most of the other co-applicants on this proposal. Collaboration in the past was not only restricted to the joint ESF-funded HumVIB project mentioned above, but also included EU-funded projects on the Generations and Gender Programme, and projects on reproductive decision making.

**Co-applicant 3: Zsolt Spéder (Hungary), Demographic Research Institute, Hungarian Statistical Office, Budapest, Hungary. Email: [speder@demografia.hu](mailto:speder@demografia.hu)**

A sociologist, Zsolt Spéder is educated in Hungary (Budapest University of Economics) and Germany (J.W. Goethe University), and holds a Ph.D. in Social Sciences. He is currently the director of the Hungarian Demographic Research Institute, at the Hungarian Central Statistical Office and a full professor and head of doctoral studies at the Pécs University, Institute of Social and Communication Science. He is member of the Editorial Boards of *International Sociology* and *Social Forces*. His primary fields of research are family formation and fertility, poverty and social inequalities, longitudinal panel research methods. He was member of the scientific board of the Hungarian Household Panel. He is currently directing a large-scale panel survey in Hungary ("Turning Points in the Life Course") since 2001 and he is co-founder of the Generation and Gender Programme.

Some of Spéder's international collaborative experiences: Tempus Project on Curricula on "Social Stratification" and "Family and households", 1992-94 (EU funded); Panel Comparability Project (on the ongoing European panel surveys), Luxembourg, CEPS 1995-1998; "Economic well-being of the Elderly", 1996-1999, funded by PHARE-ACE; CHER (Consortium of Household Panels for European Socio-economic Research) 1999- (EU funded); "Toward a New European System of Social Indicators", coordinated by ZUMA, Mannheim, 1998-2001 (EU funded); "Generation and Gender Programme" 2000- (country and EU funded); Reproductive Decision Making in Macro-micro Perspective 2008-2012 (EU funded) and LIFETIMING 2008-2012, (ESF HumVIB funded). He has collaborated with Billari and Liefbroer in the REPRO-project and in the Generations and Gender Programme; with Billari, Liefbroer, and Hagestad in designing and analysing the 2006 wave of the ESS. Spéder has extensively published on issues such as social transformation and European Union enlargement, poverty and inequality, family formation, especially on fertility intentions and realization, and economic well-being of the elderly.

**Co-applicant 4: Jan Van Bavel (Belgium), Centre for Sociological Research, University of Leuven (KU Leuven), Belgium. Email: [Jan.VanBavel@soc.kuleuven.be](mailto:Jan.VanBavel@soc.kuleuven.be)**

Van Bavel is Research professor in the Centre for Sociological Research, Katholieke Universiteit Leuven (KU Leuven), since 2011. Between 2005 and 2011 he was the Head of the research group *Interface Demography* at the Vrije Universiteit Brussel (VUB). He obtained a Ph.D. in Social Sciences from the University of Leuven (KU Leuven) in 2001. His research focuses on long term trends in reproductive behaviour and family change in Europe.

Among the research grants related to this proposal, a number of them has been using, or will be using, ESS data for the "Timing of Life" module. 2013 – 2018: ERC Starting Grant: Implications of the Shifting Gender Balance in Education for Reproductive Behaviour in Europe. Budget: 1 489 000 €. 2013 – 2017: EU-FP7 project FamiliesAndSocieties - Changing families and sustainable societies: Policy contexts and diversity over the life course and across generations; European consortium with 28 partners. 2009 – 2013: Divorce and Separation in Flanders. An Analysis of Risk and Enabling Factors, Consequences and Policy Implications, funded as Strategic Basic Research (SBO) by the Agency for Innovation by Science and Technology (IWT). Budget: 2 411 352 €. In a consortium with 4 other partners. 2010 – 2013: Family Situations and Trajectories of Children of Divorce, funded by Research Foundation – Flanders (FWO-Vlaanderen). Budget: 256 000 €. I am co-promoter with 4 other partners. 2008 – 2011: Second births in Europe: recent trends and future scenarios, funded by Research Foundation – Flanders (FWO-Vlaanderen). Budget: 111 820 €. 2008 – 2011: EU-FP7 MULTILINKS How demographic changes shape intergenerational solidarity, well-being, and social integration: A multilinks framework (<http://www.multilinks-project.eu/>), 1 499 694 € (total consortium budget, eight international partners; co-promoter). 2006 – 2011: ESF TransEurope Research Network: Transnationalisation and Changing Life Course Inequality in

Europe ([www.transeurope-project.org](http://www.transeurope-project.org)), 450 000 €; co-promoter and member of the Scientific Steering Committee.

**Co-applicant 5: Richard A. Settersten, Jr. (USA),** *Hallie E. Ford Center for Healthy Children & Families, Oregon State University, Corvallis, Oregon, USA. Email:*

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Richard A. Settersten, Jr., is Professor of Social and Behavioral Health Sciences, and Endowed Director of the Hallie Ford Center for Healthy Children & Families, in the College of Public Health and Human Sciences at Oregon State University. Settersten is a sociologist of age and the life course, with broad interdisciplinary training and expertise. He has a strong record of experience conducting research and collaborating across disciplines and age periods, and using both quantitative and qualitative methods to model life trajectories. Central to the proposed application is a strand of Settersten's research that illuminates the many social and cultural meanings and uses of age. This research has examined how age is not only a property of individuals but is embedded in social systems, including age-homogeneous social institutions (e.g., schools, residential facilities), age-based policies and laws (e.g., compulsory schooling, conferring adult status, retirement and pension rules), public discourse and face-to-face social interactions. This research has also probed how social systems frame the *subjective aging* of individuals by guiding expectations and goal setting and by shaping identity. Also central to the proposed application are strands of Settersten's research on understanding the structure and experience of transitions in early adulthood and in later life. He has long examined cultural scripts for the life course, and expectations and consequences related to the timing of transitions. For example, Settersten was for a decade a member of the 11-person interdisciplinary MacArthur Research Network on Transitions to Adulthood, and contributed to a National Academy of Sciences/National Research Council initiative on "Improving the Health, Safety, and Well-Being of Young Adults" in the U.S. In these and other projects, he has been involved in mining secondary and primary data sets to reveal radical changes in the process of becoming adult – in education, work, partnering, parenting, and other domains of functioning. Throughout, his research has probed how institutions and policies affect the life trajectories of young people, as well as the risk and protective factors that distinguish those who do well in early adulthood from those who do not. His research has also often been comparative, examining differences in developmental processes and outcomes across populations within the U.S. and across countries.

Settersten's research on transitions in later life has similarly focused on how individuals and cohorts are responding to the new social and economic realities of aging and the life course. Settersten has provided leadership in an National Institute of Aging R24 research network on understanding the long-term outcomes of military service for the health and well-being of veterans and their families, and on National Institutes of Health-funded research projects on scientific and medical efforts to control human aging and on anticipating the ethical, legal, and social implications of advances in genomic science and medicine. He has also contributed to a national Institute of Medicine initiative on "New Directions in Social Demography, Social Epidemiology, and the Sociology of Aging".

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