

THE BABY BOOM: NEW PERSPECTIVES AND NEW ISSUES.

A research initiative

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PRELIMINARY VERSION, DO NOT QUOTE

Introduction

The baby boom is generally thought of as a period of demographic effervescence that affected the developed nations of the world, especially for most of those participating in World War II, and took place between the mid-to late-1940s and the late-1960s or early-1970s. During this period the dynamics of reproduction changed with marriage rates accelerating, total fertility rising (or at least stable) and the number of births increasing substantially. The baby boom put an end to the decades-long decline in fertility dating back to the nineteenth century, though actual changes TFRs in different societies at mid-century varied widely. The baby boom came to an end with the advent of widespread and modern methods of birth control, rapidly declining fertility, lower marriage rates and a profound change in the prevailing attitudes towards the family and reproduction.

There is a large literature on the baby boom and its causes, but no definitive explanations exist (see Byerly [1985] for a literature review on the US experience; see also van Bavel and Reher [2012] for a review of current explanations). Much of this literature evaluates the processes involved and situates it within the perspective of long term population change (Chesnais, 1992; Sardon, 2006; Russell, 2006; Macunovich, 2002; Emeka, 2006; Romaniuk, 1984; Owram, 1996). Most explanations emphasize the importance of the return home of soldiers participating WWII, a period of economic growth that affected many countries in the aftermath of the war, a period in which relatively small cohorts had ample economic and social expectations before them, and a period of general optimism reinforced by cultural contexts in which large families were held up as a socially desirable goal for all. There

are, however, indications that in some countries the recovery of fertility began during the conflict (van Bavel, 2010; Calot and Sardonic, 1998; van Bavel and Reher, 2012). Unquestionably the work of Richard Easterlin centering for the most part on the experience of North America in which he emphasized the importance of relative cohort size for fertility outcomes, is a key point of reference for these ideas (Easterlin, 1961; 1966a, 1966b, 1968, 1969). For the most part, empirical analysis has given support to his ideas, though here the results are not uniform (Macunovich, 1998; Ermisch, 1979; Openheimer, 1976; Pampel, 1993; Wright, 1989). Other explanations have emphasized the role of female labor, especially during the war (Doepke et al, 2007; or, more generally, Macunovich, 1996), the links between fertility, income and subjective well-being (Thornton, 1978), the role of parents, especially fathers (Rutherdale, 1999); technological progress in the household sector (Greenwood, et al, 2005), and the importance of ideational and cultural change (Lesthaeghe and Surkyn, 1988).

There is an equally large bibliography on the long term implications of the baby boom. In many ways, much of what has been written about the demography of contemporary developed societies is linked, in one way or another, to the baby boom. Much of this literature is dedicated to analyzing the implications of the bulge in babies for society as it ripples through the population age structure. This literature is abundant for subjects such as the implications of the boom for education (see, for example, Villa, 1997; and Jacobs and Stoner-Eby 1998); housing (see, for example, Levin et al, 2009; Lindh and Malmberg, 2008; Ermisch, 1996; Mankiw, 1989); employment and the labor market (see, for example, Slack and Jensen, 2008; Vere, 2007; Manton et al, 2007), asset returns, interest rates, the stock market and economic growth (see, for example, Boersch-Supan and Ludwig, 2009; Lim and Weil, 2003; Abel, 2001; Lenehan, 1996; Baker, 2001; Bakshi and Chen, 1994; Blomquist and Wijkander, 1994; Wallace, 1999; Greller and Nee, 1989); the family, its ability to fulfill its role as a primary caregiver and the changes ensuing after the baby boom (see, for example, Sobotka and Toulemon, 2008; Weiss, 2000; Caputo, 1999; Wolf, 1999; Sell and Kunitz, 1997; Macunovich et al, 1995); aging in its different dimensions (health, retirement, care, pensions, etc) (see, for example, Goldsmith, 2008; Winston and Barnes, 2007; Wolff, 2007; Floden, 2003; Knickman and Snell, 2002; Calot and Sardon, 1999; Denton and Spencer, 1997; Lee and Mason, 2009; Lee et al, 2008); or other health-related issues (Strunk et al, 2006).

This literature has paid much less attention to several potentially important aspects of the baby boom which deserve more attention: (1) the underlying causes of the baby boom, especially those linked to the economic/cultural debates surrounding the Demographic Transition (Dyson, 2001; 2010; Reher, 2004; 2007; 2011; Lee, 2003), (2) the degree to which the baby boom also

affected parts of the developing world (Dyson and Murphy, 1985; 1986); (3) the disparities in reproductive change in different countries (ranging from nearly stable to sharply rising fertility); (4) the way different cohorts of women lived through this relatively brief period in history. All of these issues are central to this research initiative.

When the baby boom turned into the baby bust sometime around 1970, research on this subject lost much of its allure for the Social Sciences. Rather than continuing to work on the root causes of this process, scholarship began to be redirected either towards the new period of very low fertility or to the long term implications of the baby boomer cohorts that are only just now beginning to enter retirement age (see citations above). Ultimately, the baby boom itself apparently ceased to be of interest for mainstream research in the Social Sciences.

It is our contention that a thorough reassessment of both the causes and the consequences of the baby boom (or the baby booms) is long overdue. We feel that the implications of the baby boom throughout the world are far greater than existing research would have us believe. Eventually it will be important to assess this issue for the developing world where the realities of development have seldom been seen specifically in terms of the way these nations experienced the baby boom. Innovative analytical perspectives are necessary before our understanding of this process can be considered adequate. Much of the existing research has been based on concerns closely tied to the concrete social, scientific and political interests of individual societies undergoing periods of increasing fertility (see, for example, much of the bibliography cited above). This has ended up limiting our ability to ascertain the larger implications of just how and why this entire process came about, how the challenges it posed changed over time in different contexts, and what it eventually meant for society. Considering the importance of the subject and the fact that a key source of information -the women themselves who participated in it- may soon no longer be available, it behooves the scientific community to undertake innovative research on this subject.

Renovating our understanding of the baby boom may also be able to shed some light on both the present challenges and the future trajectory of population in much of the world. The Boom itself was a largely unexpected change of course of fertility that, at least in the developed world, had already reached low levels during the interwar period (van Bavel, 2010). It was followed by another sharp decline in fertility to levels near or far below replacement in much of the world. This episode in world history created an important surplus of births that has been moving since then through population age structures the world over. This surplus created both challenges and opportunities for different societies that have not always been met

successfully. These tended to affect educational systems first, later job and housing markets and - more recently- the immediate future of pension systems. Throughout they have also had important implications for family organization. The degree to which societies were able to meet these challenges is related in many ways to the intensity of the population bulge emanating from the baby boom itself, as well as to a whole host of factors involving economic growth, social stability and governmental efficiency. A comparative analysis of the way these challenges were met is necessary and will provide a more nuanced perspective on the way development has progressed throughout the world over the past 3-4 decades. Before this sort of analysis can be undertaken reliably, it is first necessary to pinpoint comparatively the starting and ending dates of the baby boom, as well as the actual size of the bulge -the number of excess births it actually created. These time and size dimensions of the baby boom varied widely not only because the rise in fertility varied widely as well, but also because the duration of the boom was very short in some places but quite lengthy in others, especially when there were delays in the adoption of contraceptive practices. Again a comparison between the Spanish experience and that of much of the rest of the world will prove to be instructive. These too are issues that will be addressed in the course of this project.

Low fertility is common in Spain and throughout much of the world, yet another example of the globalizing forces so vibrant today. Is it here to stay or is there any chance there will be another change of course in the future, similar to the one that took place in the 1940s-1960s? Of course, there have been TFR “upturns” in many developed countries in recent times, but they have been modest, unlike what happened during the baby boom in many countries (see, for example, Goldstein, Sobotka and Jasilioniene, 2009). If the current low fertility nearly everywhere is solely the product of contraceptive use, then perhaps the answer is no. This, however, may only be part of an issue that also has strong cultural, social and economic underpinnings. In a recent paper, Myrskylä, Kohler and Billari (2009) have shown that recent upturns in fertility may be related at least indirectly to human development, affecting mainly the most advanced nations in American and Northern Europe. These are the sorts of questions that need to be asked of the baby boom period. What were the factors underlying the rise in fertility, and its subsequent fall? Is there any possibility that these factors will or can be replicated in the foreseeable future? If a link is to be found in the past, it will provide an important road map for understanding the future. Reading the course of future events is, of course, impossible, but identifying the basic contexts of reproductive change in the past may help understand how these might also influence patterns of change in the future. The baby boom provides the only historical example of a similar trend change in the more or less recent past. Deepening our understanding of the underlying processes

involved may help us understand better the contexts within which a similar change might take place in the future.

Premises and working hypotheses

This research initiative is based on the following theoretical, methodological and practical premises:

1. The baby boom is a pivotal event whose importance is as yet inadequately understood.
2. Not all social groups participated equally in the trend towards higher fertility. Identifying precisely those that participate in the baby boom and those that do not will enable us to understand better the contexts of increasing fertility in a way that may have implications for our understanding of the potential pathways of future fertility trends in both in Spain and in the rest of the world.
3. All forms of reproductive behavior were affected by the baby boom, including accelerating marriage rates and marital fertility. Generating viable explanations for marriage behavior, for general fertility and for fertility within marriage is imperative. Determinants of marriage are not necessarily the same as those affecting fertility within marriage.
4. Explanatory models of reproductive change will differ when using aggregate country-level indicators or when making use of micro data. Both types of perspective are necessary.
5. In order to assess the impact of change in reproductive patterns adequately, it is essential to analyze behavior not only from a cross-sectional standpoint but longitudinally. Both types of methodological approach are necessary.
6. Underlying explanations for reproductive dynamics should not be based solely on standard indicators like levels of development, wealth or social structures. Comparative research will have to assess the importance of people's -women's- expectations and the ways they are conditioned. Attitudes towards reproduction can be influenced by national institutions, by the media, by social groups and, of course, by the concrete situation surrounding people's lives.
7. Expectations can and should be considered as both national and individual attributes. A major goal of the research being proposed here is to assess the relative importance of these different factors on the reproductive choices of individuals (women or couples). Micro data is necessary for this.

8. Ultimately, having children (or getting married) is a statement of the confidence that a couple has in the present and future (Friedman, et al, 1994). The willingness to have children should be influenced by social and political stability, the reproductive behavior of other people (kin or non-kin) who share the same social networks, the diffusion of economic expectations both for the society and for the individual, adult health, expected and actual marital stability, the prevailing ideas existing in society affecting the role models set up for individuals, political, religious or cultural preferences, the nuclear and the extended family and the values they uphold, and the degree to which traditional norms of behavior are understood and implemented in the lives of individual families. Reproduction is also influenced by the availability of safe contraception, health during childhood, education levels of the couple and where people live. Finally, specific national characteristics often related to recent historical experience may have played an important role in the way the baby boom was lived. This was particularly evident in Spain where a recent civil war, a military dictatorship, a conservative society and the beginnings of prolonged economic growth were all factors of potentially key importance.
9. Reproductive behavior cannot be understood adequately without the prevailing social, economic, cultural and political contexts. Here the input of historians, history and historical research are essential as historians are best equipped to understand these dimensions of society.
10. There is much to be learned from systematic comparisons of reproductive change in the developed and the developing (on this, see, for example, Dyson and Murphy, 1985; also Dyson and Murphy, 1986). Should this be the case, the apparent non-response of fertility to rapid improvements in mortality in the developing world would have to be attributed, at least in part, to the baby boom in these nations rather than to low levels of development or, more specifically, to insufficient contraceptive use (Reher, 2004). If successful our entire understanding of what has been called the 'demographic explosion' will require important adjustments.

The baby boom can and should be seen as part of larger social and demographic processes occurring both before and after, and spanning relatively long periods of time. Deepening our understanding of the constraints on reproduction before and during the baby boom is a major goal of this research initiative. There is great benefit to be derived from seeing the baby boom and the post baby boom jointly. To what extent are the conditions of the so-called Second Demographic Transition influenced by the way they underwent their own baby boom? This conjecture, while plausible, has never been addressed in specific way. Whether or not this also happened in the developing world is a research issue that also requires attention.

Specific research goals

There are a number of research issues and goals that will be addressed specifically in the course of this project. Some of these apply specifically to Spain and others are pertinent for the international comparative dimensions of the project. In this section they are stated succinctly.

1. The precise beginning and end of the baby boom will be estimated for Spain and in countries with available time series. The duration will be defined as the time between the onset of a sustained rise in fertility (or in births) and the moment in which fertility (or births) return to pre-baby boom levels. This duration is expected to differ considerably for different societies. The size of the baby boom bulge in births will be estimated comparatively. The goal here is to generate comparable data for a large number of countries in the developing and the developed world.
2. Country or regional divergences will be analyzed within multivariate models that include socioeconomic, political and demographic variables in order to test relevant ideas regarding the causes of the baby boom. These models will make use of aggregate time-variant indicators.
3. Wherever possible, the baby boom will be seen in terms of the pre-boom period of relatively low fertility throughout much of the world. This analysis will be restricted for the most part (but not entirely) to the developed world where historical data is more widely available. Here the baby boom will be seen as a reaction to the low-levels of interwar fertility. The baby boom will be seen within the wider Demographic Transition. Parallel models with available micro census data will be used.
4. The challenges and opportunities posed by the baby bulge will be analyzed with available data. Special attention will be paid to the way the baby boom affected educational systems, the labor market, and the dynamics of aging in different societies. Models will also be specified to look at the relative 'success' or 'failure' of societies, and especially Spain, in dealing with these challenges. Defining 'success' is very difficult and an important challenge. Related to this point, the bulge of births during the baby boom will be seen in terms of the subsequent development.
5. The experience of the so-called 'Second Demographic Transition', with its concomitant transformation of the role of the family, the individual and society and a sharp decline of fertility, will be interpreted as a reaction - at least in part- to the high fertility of the boom period.
6. Micro data will be used to generate indicators of reproduction and health. Estimates will be made of the fertility (marital and overall) and health

histories of informants. Rudimentary estimates of fertility will also be generated for informants' parents, siblings, children and closest friends. Estimates will be made of intergenerational patterns of social and economic change (occupation, education, etc.), as well as of other factors potentially affecting reproductive decisions (for example, wage labor, prevailing cultural constraints, technologies). Partial health histories of reproductively active women will also be constructed so as to enable the research team to examine the important health/reproduction interactions so central to reproductive change in the past (Reher and Sanz-Gimeno, 2007).

7. A central goal of this project will be to identify those women who are leaders in the adoption of innovative attitudes towards reproduction as well as those who are followers. This will be done both for the period of increasing fertility (1940s and 1950s) and for the beginnings of fertility decline (1960s and 1970s). On this, see Reher et al (2008).
8. The role of marriage for reproduction will not be neglected in this research initiative. Models will be specified to explain marriage patterns at different stages of the baby boom.
9. A general historical reconstruction of Spain and other participating teams will be undertaken in order to evaluate as precisely as possible issues including: (a) the prevailing cultural contexts regarding reproduction and family formation during and just after the baby boom; (b) the existence and efficacy of policy regarding reproduction during the boom, including the regulation of contraception, divorce, abortion and other measures; (c) the existence of more general policies designed to encourage or discourage reproduction; (d) a historical evaluation of general social attitudes towards the family and reproduction, women's labor force participation, and other related issues; (e) the existence of social and political optimism and/or pessimism; (f) a history of political stability, governance and the ability of government to influence societies and people's lives; (g) the role of other institutions in society (e.g., the Church); (h) a history of values. These issues will be examined for the countries included in the survey as well as for the world as a whole. The historical background of countries undergoing the baby boom is essential for understanding the process properly. If this effort is successful, a similar methodology will be applied to other societies in the future.

Micro data will be analyzed for individual countries as well as comparatively across the sample of countries. This is a future goal of this research initiative that warrants mention here.

Data, methods and research strategies

Basic research strategy.

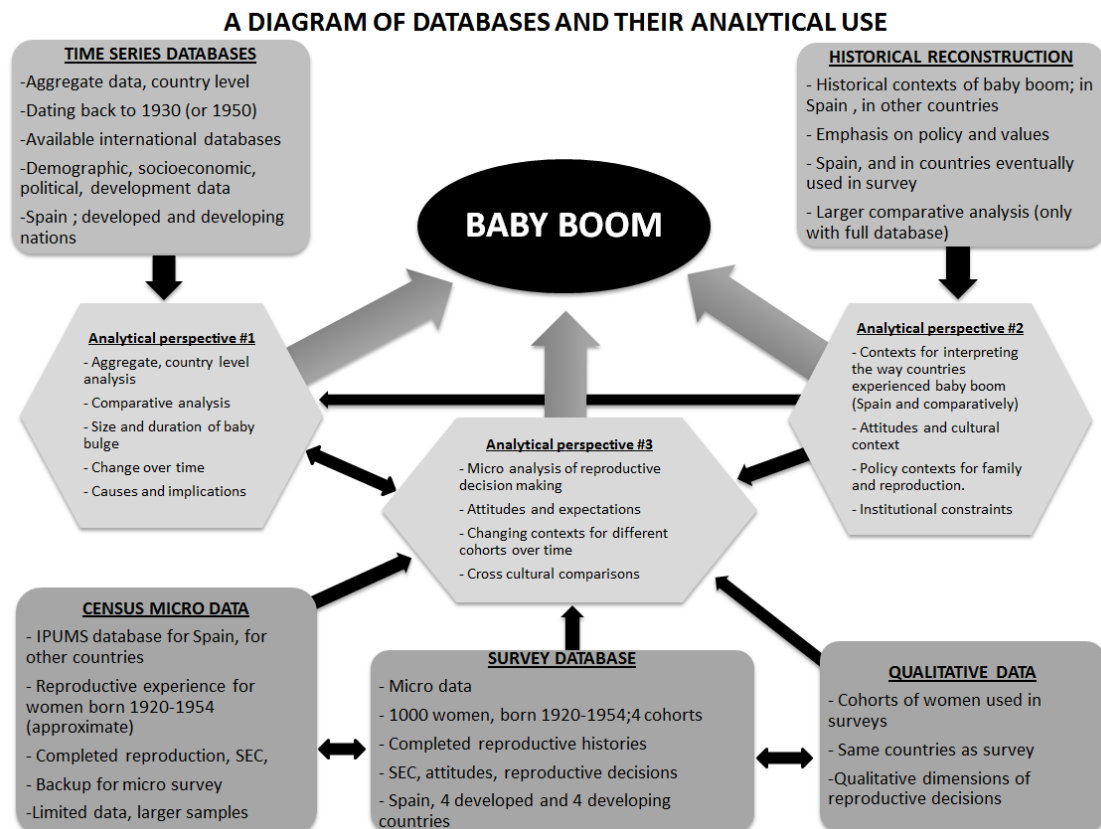
What is outlined here is a basic research strategy for an international research effort. At present, funding has only been secured for Spain which is taking the lead in the project. In the coming months there will be a general project meeting to decide on the best funding strategies, though it is clear that Spain will take the initial lead, followed hopefully by China. To date a wide array of countries and research teams have expressed an interest in participating in the project. These include teams from Argentina (CENEP), Belgium-Netherlands (NIDI+ University of Leuven), China (Fudan University), Costa Rica (Universidad de Costa Rica), India (Research Unit on International Migration, Kerala), Lebanon (American University of Beirut), UK (Cambridge University+LSE) and USA (University of Massachusetts). Securing adequate funding continues to be a major challenge for the research teams involved.

Data collection

Data collection will reflect the different levels of analysis to be used in this project. See **Diagram** (below) for a succinct description of the different databases and the way they will contribute to our understanding of the baby boom. This Diagram has been designed to represent not only the research project on Spain but also fundamental aspects of the entire comparative research initiative. For this reason, in some respects it transcends the confines of this specific research project in Spain. It is important to bear in mind that the funding requested here is for the Spanish project as well as to lay the groundwork for an international research initiative. Many of the points specified below in the Diagram and in this section go far beyond the goals of the Spanish project. They have been included, however, because it is here that the true relevance of the Spanish initiative as the starting point for a larger comparative effort can be seen. This section should be read at a dual level, one for the Spanish project itself and one in order to appreciate the long-term goals of this initiative.

- a) Time series databases. These databases will contain aggregate time series data for Spain and for samples of countries. These types of data will enable the research team to undertake types of analysis that are not possible with micro data. These databases include: (1) Database #1. Country-level data are generated for a large sample of countries. The indicators included here will be both demographic and socio-economic. The goal is to assemble a very large database that will be useful for portraying the basic patterns of fertility change between 1950 and 1990. These data will be taken from existing data bases and will include a very large sample of countries. (2) Database #2. Country-level data for a selection of countries in both the developed and the developing world.

The countries included in this database should reflect very different stages of the demographic transition. We are particularly interested in countries where there are available data from as far back as 1930 or, ideally, even earlier. The precise number of countries in this database will be limited by the available data (perhaps as many as 20-25). These data will include time series of basic demographic indicators (fertility, mortality, nuptiality, age structures, growth rates, etc) as well as other social and economic variables.



b) A survey will be carried out among women with completed reproductive histories. This survey will be undertaken initially for Spain, though it is hoped that eventually it will be applied to sites of other countries eventually participating in the initiative. The long-term goal here is to be able to analyze the survey results both separately (by country over time) and jointly. The survey will be administered to 1000 women in Spain and elsewhere. The women interviewed will be divided into four groups more or less equally according to year of birth (before 1930, 1930-1939, 1940-1949 and 1950-1954). This will enable researchers to assess the reproductive dynamics of women participating in different stages of the baby boom, from the onset to the aftermath. Our goal here is to assess how different cohorts experienced the baby boom itself. We hope to include interviews of three categories of women: those with full reproductive histories, those who never married, and those whose reproductive process was interrupted either by divorce, illness or death.

Eventually it is our hope that the survey will be undertaken in a selection of both developed and developing countries, including Spain, Argentina, Belgium, China, Costa Rica, Lebanon, India, the Netherlands, the UK and the USA.

The survey will contain questions on the following aspects of reproductive life: socioeconomic background variables (both for informant and for parents); marriage; full reproductive histories (all pregnancies); rudimentary knowledge of the reproductive history of parents, siblings and 'friends'; reproductive health (age at menarche and menopause, personal health factors of the subject and her children, etc.); the dimensions of reproductive choice (attitudes towards childbearing, attempts to limit the number of births, birth control, concerns over family size -all of these questions should be asked generally as well as how they changed over time); goals and values for life when young (marriage, family large and small, wage labor [goal or obligation], the importance of a profession, education, personal autonomy, service, etc.); whether or not family limitation was ever discussed with spouse, family or friends; the influence of friends on attitudes; access to television or the press; political sympathies; religion or ethnic adscription (where pertinent); origin; residence during childbearing.

With regard to the data on reproductive and health histories, contraceptive use and techniques, and socioeconomic background variables, in many respects this survey is not unlike the World Fertility Survey carried out in the 1970s and 1980s. The survey proposed within the context of this project is unique at different levels. (1) Women will be asked about the reproductive experience of the entire extended family group and that of the immediate social network, as well as on other less immediate cultural and ideational constraints contextualizing reproductive decisions. These data go far beyond what exists in most other fertility surveys. (2) It will include women whose reproductive histories transpired before (partially), during and after the baby boom will provide a unique perspective on the dynamics of change over time. In this sense, the analytical time scale included in these surveys is far beyond that used by the World Fertility Survey which concentrated only on women of reproductive age and, by implication, setting women who experienced the baby boom out of reach for the most part. (3) Using only women with completed reproductive histories enables us to assess the extent to which strategies may have changed over the course of reproduction in a much clearer way than other surveys which only include women currently in a position to have children and at differing stages of reproductive life. (4) In most WFS questionnaires, only married women were included. Here we expect to interview women independent of their marital status so as to be able to assess the role of both marriage and

marital stability for the pace of reproduction in different societies and population subgroups. In any case, certain aspects of the first round of the WFS surveys can help contextualize some of the results stemming from this research project. Those corresponding to developing countries can be found at: <http://opr.princeton.edu/archive/wfs/> and for the United States from the 1950s at: <http://opr.princeton.edu/archive/>.

For the earliest cohorts, it may be difficult to base this survey on a strictly random sample, though for younger women this would be ideal. The earliest cohort is one of keen interest because they continued to have reproductive dynamics at least partially typical of the pre-baby boom period. Apart from the analytical perspective it affords, it is of special interest because soon there won't be people from this period alive who are able to be reliable informants. In fact, since many of those interviewed will be near 90 years of age, it will be necessary to make sure that their recalled memories are reliable before actually interviewing them. The most recent cohorts are also of keen interest because they participate almost entirely during the period of rapidly declining fertility and thus can be considered the first of the post-baby boom mothers. The analytical strategy proposed here will enable researchers to adopt a 'before, during and after' approach for the baby boom, thus enabling them to deal with the issue of how, how much and why reproductive decision making changed over time.

At the very early stages of the project, a meeting of the entire research team will be held in order to discuss the content of the survey instrument and methodological issues involved in an ambitious survey of this nature. Our hope here is that the instrument will be useful not only for its initial application in Spain (and China) but also to countries that eventually participate in this ambitious research initiative. Preliminary survey instruments will be tested in order to ascertain their adequacy (pilot surveys). The largest of these tests will be carried out in the host country (Spain). Wherever possible, sample frames will be generated with the help of local statistical offices or by other means, though for the earliest cohorts this may prove to be difficult. In this case, subjects may be recruited at pensioners' meeting places or perhaps -though less desirable- at retirement homes. Since these will be retrospective surveys, it will be impossible to control fully for the effects of selective mortality among different population subgroups. Despite this, however, we feel that the potential wealth of the information provided by elderly women, especially for those from the earliest birth cohorts, far surpasses any potential statistical bias in the sample. There are two important challenges related to securing useful responses in a survey of this nature. (1) The ability of women, especially older women, to recall their reproductive histories accurately (recall bias), must be ascertained. This

can be done with preliminary questions designed to check the reliability of their recall abilities. (2) Strategies will be designed to limit the effect of post hoc rationalization affecting questions about attitudes, values and expectations.

The survey in Spain will be outsourced because setting up the sample frame and the undertaking the actual fieldwork is normally done more efficiently and less-expensively by professionals with experience in this type of activity. The actual conduct of the survey itself will be carried out under the supervision of the research team and with the assistance of team members. Data input and checking will be carried out by the company contracted for the survey, once again with the assistance of members of the research team. Data analysis, on the other hand, will be carried out entirely by the Spanish research team.

- c) Integrated public use samples based on available micro census data exist for several of the countries selected in (a and b). Where these data do exist, they are available at the IPUMS web site (<https://international.ipums.org/international/>). These data will enable the research team to replicate the reproductive histories of the four different cohorts of women used in (b). Data common on most census returns are present in these databases (children ever-born, surviving children -often but not always present-, marital status, socioeconomic levels, education, etc.). The research team will conduct a thorough analysis of these data for each of the selected countries. This analysis will provide a useful complementary perspective on the results derived from (a) and (b). In the case of Spain, this source of data will be supplemented with a thorough analysis of the microdata contained in the *Encuesta Sociodemográfica* [Sociodemographic Survey] that was administered to over 157,100 informants in 1991. This survey contains ample data on reproductive histories of women of different ages, many of whom experienced their main childbearing ages during the baby boom (Requena, 1998; 2004; 2006).
- d) At country sites where the requisite data exist, longitudinal microdata containing reproductive histories will be used to assess the dynamics of fertility change and the contexts whereby fertility became higher (or lower). Among the current partners in this effort, data of this type only exist for the Netherlands (Historical database). In the future links will be sought with teams in Sweden, Canada, and the United States.
- e) This project will also make use of qualitative data. Following upon the survey itself, in-depth interviews will be conducted with a small sample of women in each country (perhaps 20-30 at each site). The issues addressed in these interviews will be related to the goals, values and opportunities women had at the onset of their reproductive life, the extent to which

family limitation was used and whether or not it was negotiated with their husbands, the forces that influenced their choices in life (marriage, reproduction), and how they perceived the way other women of their cohort and other cohorts behaved with respect to reproduction and the family.

- f) A historical data base will be set up that reconstructs the basic social and cultural dynamics of those societies where the survey is carried out, as well as at a comparative and global level. These sorts of data will provide the appropriate contexts for interpreting the results derived from the different quantitative data at our disposal. Of particular interest are comparative histories of the following subjects: public policy regarding the family and reproduction; social values; political trends, stability and the efficacy of governance; the importance of religious and other beliefs; education; female labor force participation and its different constraints; gender relations; family systems and how they functioned; and openness to influences coming from abroad (cultural or otherwise). This database will be generated for Spain and it is hoped that eventually it will be developed in many of the different sites.

Data analysis

Use will be made of diverse analytical techniques in dealing with these data, including descriptive analysis, time series analysis, multivariate analysis and qualitative analysis. Explanatory models will be developed for the number of children ever born, for the incidence of marriage and marital instability and for marital fertility. At a later stage, models will be specified to address the determinants of having (or not having) an additional child. This last perspective is particularly important for contemporary society because it is this type of decision that is essential for couples. This project will also include qualitative analysis.

The survey in Spain: design and initial findings

Currently, one of the most advanced aspects of this project is the survey to be carried out in Spain. At this stage, a survey instrument has been designed and tested by means of a pilot study. At present, the fieldwork will take place during the months of January and February of 2012. We expect that some of the preliminary results will be ready for presentation at the Stockholm meeting. What follows is a brief description of the survey and the survey instrument.

Universe. The survey will be administered to between 800 and 1000 women who are currently above 60 years of age. This should include women whose reproductive life took place before (in part), during and after (again, in part).

The peak periods of the boom, as measured by TFRs begins in the early or middle years of the 1950s and ends abruptly after 1977. The sample will be taken from the entire country.

Locating informants. Locating women who are able to respond to a rather complex survey instrument is a major challenge to the research team. There is, of course, no way of controlling for possible selection bias due to differential mortality no to different patterns of memory loss. Memory loss will pose an especially acute challenge for the research effort and must be dealt with in a reliable (and imaginative) way. Currently we are considering the possibility of a dual strategy for locating informants. For women 60-75 years of age, a random national sample will be taken. For women above 75, we are considering the possibility of locating informants with the aid of local social workers who monitor the current health of these women whether or not they live in private households. The social workers are also uniquely positioned to know the quality of potential informants' memories. If this dual strategy is followed, in the resulting database responses will weighted for different sociodemographic characteristics of these women in the population as a whole (taken mainly from the 1991 *Encuesta Sociodemográfica* as well as from different census microdata).

Interviewing techniques. The responses to the survey questions will be input directly into hand-held computers (CAPI).

Survey instrument. The instrument is designed to elicit full reproductive histories from respondents. It has 7 different sections: (1) Sociodemographic information (including age, origin, current residence, household structure, education, age at leaving parental home, etc.). (2) Marriage and partner history (including details on husband/partner's education, occupation, starting date and duration of the union, survival status). (3) Reproductive history (including whether or not the informant had children, birth and survival data for each children, breastfeeding, current education and occupational status, current partner and number of offspring, use and type of contraceptives, reasons for not using contraceptives, when these were used). (4) Reproductive health history (including age at menarche and menopause, natural menopause, different health experienced during reproductive period and how that affected childbearing, health problems affecting partner, incidence and timing of miscarriages and abortions). (5) Employment history (whether or not ever employed, if not why not, type of work, starting and ending date, occupation, occupational status, when and how job ended. (6) Family history (including education and occupation of parents, and details on each sibling (when born, death in childhood, currently alive, age at leaving parental household, partner status, education and occupation, number of offspring, educational attainment of partner). (7) Opinions, values and

attitudes (including political and religious attitudes at 20 years of age and currently, similar questions regarding main partner).

Pilot study and basic conclusions. A small pilot study consisting of 10 interviews of women aged 60-97 was carried out. The average duration of the interviews was approximately 50 minutes. Generally, the questions in the instrument were not difficult to answer, though at times women had to be coaxed to get at the different dates. Some recommendations were made for the conduct of the survey, the most important of which was that the interviewer be able to elicit dates in alternate ways (say, by asking, “how old were you when...” or other ways of approximating dates).

Current status. The survey instrument is being sent out to the international team and it is hoped that it can be fine-tuned in the light of suggestions that are made. At that stage it will become the model for surveys carried out in the participating countries. The fieldwork for the Spanish survey is slated for January and February, 2012.

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