The Promises of Comparative Research

By Anne H. Gauthier

Abstract

This paper analyzes recent developments in comparative research. It argues that the availability of new cross-national datasets, together with recent methodological developments, mark the beginning of a new era in comparative research. The paper also critically assesses the research goals of comparative research in relation to their theoretical underpinnings and analytical strategies. The paper concludes with a discussion of promising avenues of research, including the cross-national analysis of life-trajectories and the impact of policies on age-graded transitions.

JEL Classification: C 1, J 18

1. Introduction¹

In reviewing the development in comparative research since the 1960s, Scheuch (1989) concluded that 'the wheel of cross-cultural methodology keeps on being reinvented' (p. 147). This paper takes an opposite view, arguing instead that the availability of new cross-national datasets, and the development of new statistical methods of analysis (and their related software) have given a new impetus to comparative research. In particular, this paper points to recent methodological developments that were not fully apparent in the reviews of comparative research published in the 1970s and 1980s (see for example Lijphart 1971, Elder 1976, Jackman 1985). This paper also extends some of the issues raised in recent reviews of comparative research, notably in Bollen, Entwisle, and Alderson's (1993), Mjoset et al.

¹ This is a revised version of a paper originally written at the invitation of the European Panel Analysis Group (EPAG) as a contribution to their study of 'The Dynamics of Social Change'. The EPAG study is supported by the Commission of the European Communities under its Fifth Framework Program. I want to thank the EPAG, and especially Richard Berthoud and Jonathan Gershuny (both from the University of Essex), for having giving me the opportunity to reflect on the state of crossnational research. I also want to thank my research assistants at the University of Calgary, Gail Armitage, Cara Fedick, and Cori Pawlak for their most valuable help in the preparation of this paper. I am also grateful to the anonymous referees for identifying some omissions from the coverage.

(1997), and Atkinson and Brandolini (2001). The paper also contributes to the recent literature on macro and micro linkages in social science (Huber 1990; Imbens and Lancaster 1994; Liska 1990).

This paper has three main objectives. First, it aims at providing a review of comparative research from a theoretical and methodological perspective, especially its recent developments. Second, it aims at critically assessing the current comparative research, by stressing its implicit assumptions and limitations. Finally, the paper also aims at identifying the most promising avenues of comparative research and at pointing out key substantive questions that will benefit from a comparative perspective.

From the onset, two points should be made clear. First, in this paper I have adopted a very broad approach and included comparative studies from a wide number of research areas, including family studies, social mobility, income dynamics, welfare, and employment. My aim is not to thoroughly review each of these research areas, but instead to illustrate some of the theoretical and methodological issues addressed in this paper with concrete examples. It has, however, to be acknowledged that several examples were taken from the field of family sociology and demography, a field with which I am most familiar. This 'bias' should however not detract readers from the fact that the theoretical and methodological issues raised in the paper are relevant to numerous research areas in social science. A second point that should be made clear is that the paper takes a very specific view of comparative research, focusing mainly on cross-national analyses, and mainly on the so-called variable-oriented approach. The relative merit of the variable- versus case-oriented approaches has been discussed elsewhere, and it is not my intention to contribute further to this debate (see for example, Goldthorpe 1997). Instead, my aim is to discuss the theoretical and methodological underpinnings of cross-national analyses, to point to a number of shortcomings, while also indicating promising avenues of research. And while I argue that comparative research has entered a new era, I am also critical of the fact that scholars publishing in this field are not always explicit about their goals and theories and often do not justify their methodological choice (including their choice of countries). While data availability (or lack of data) often dictates the countries that can be analyzed, it remains that the choice of countries, and the choice of level of analysis, have to be theoretically justified.

The paper is divided into four main sections. In Section 2, I review the history of comparative research, and discuss the availability of cross-national datasets. In Section 3, I turn to the goals of comparative research and their theoretical underpinnings. In particular, I discuss the role of theory in comparative research, and discuss also the various theoretical models that

have been guiding comparative analyses. In Section 4, I then review various methodological approaches that have been used in comparative studies, and examine the relevance of countries as either unit of analysis or explanatory variable. Section 5 concludes the paper by examining promising avenues of research, mainly on the basis of cross-national longitudinal data.

2. History of comparative research

Before examining recent developments in comparative research, I first briefly review the history of this field of research. This review allows me to not only place recent developments in their proper historical context, but serves also as a starting point to challenge Scheuch's (1968) assertion about the re-invention of the wheel in comparative research.

Durkheim (1938) argued that 'comparative sociology is not a particular branch of sociology; it is sociology itself' (p. 139). In fact, comparative research was at the basis of several of the early social science inquiries. Durkheim, Marx, Weber, and de Tocqueville all used the comparative method to examine the relationships between social structure and individual behavior, to compare modes of production, to study the universality of some social phenomena, and/or to examine the distinctiveness of some societies. The work of Sorokin (1927) on social mobility and Thompson (1929) on demographic trends also relied heavily on the comparative method. Following this pioneer work, comparative studies continued to appear regularly in the literature, especially in the field of social mobility, demographic trends, and anthropology. The work by George Murdock (1949) on social structure, David Glass (1940) on population trends, and Lipset and Bendix (1959) on social mobility attest to this continuing interest in comparative research.

In the early decades of the twentieth century, however, it is mainly international institutions that appear to have devoted much effort to the comparisons of countries, and especially to the cross-national compilation of legislation related to the protection of workers and their families. As early as 1919, the League of Nations published a cross-national report on the employment of women and children, and the International Labour Organization published a series of cross-national reports on family allowances (1924), maternity laws (1932, 1939), and various social welfare legislation (1933, 1936). Even national governments devoted some attention to cross-national trends during the early decades of the twentieth century. The British government published a cross-national review of family allowance

² Readers interested in the contribution of the early social scientists to comparative research are referred to Smelser (1976) and Vallier (1971).

schemes in its *Labour Gazette* in 1923, and the United States Social Security Administration published its *Outline of Foreign Social Insurance and Assistance Laws* in 1940.³ The establishment of the International Sociological Association in 1949, and its research committee on social stratification and mobility in 1950, further stimulated cross-national research.⁴ Thus, while some authors have argued that the dominance of the USA in social sciences in the early decades of the twentieth century had eclipsed the visibility of cross-national research (Inkeles and Sasaki, 1996), it remains that fundamental (and now classic) work was carried out during that period, in spite of very limited survey data and a lack of modern computerized means to carry out empirical analyses.

Comparative research was then given a further impetus in the 1960s with the holding of a major international conference on comparative research in 1963, under the auspices of UNESCO, and with the creation of the Vienna Center for Comparative Research, also in 1963. Several important books on comparative research were published during this period, including Rokkan (1966a, 1966b, 1968), Rokkan, Verba, Viet and Almasy (1969), and Vallier (1971). It is also in the 1960s that was published the World Handbook of Political and Social Indicators (the so-called Yale's project), which is a compilation of aggregate-level indicators from a wide variety of areas, including basic economic and political rights, human resources, demography, health, governance, family and social relations, etc. (Russett, Alker Jr., Deutsch, Lasswell 1964).

It is however the launch of a series of cross-national surveys that marked a new era in comparative research. For while comparative research had so far been based on aggregate-level data, or on recoded micro-level data from comparable surveys (such as the early social mobility work by Miller 1960), the new cross-national surveys innovated in using identical questionnaires in various countries. Altogether, during the first 10 years of operation of the Vienna Center (referred to above), nine major cross-national projects were carried out including a project on time use and one on juvenile delinquency (Szalai, Petrella, Rokkan, Scheuch 1977). These projects covered a wide range of countries, the largest ones covering up to 16 countries. In addition to the data itself, these projects generated a large literature on the process, strategy, organization, and execution of cross-national survey research, the

³ This first publication of the American Social Security Administration was significant as it marked the beginning of a series that still exists today, 'Social Security Programs throughout the World', published every two years. This series is one of the richest sources of data for historical studies of the welfare states.

⁴ In his review of comparative social mobility published in 1960, S.M. Miller refers to the special role played by the International Sociological Association in stimulating cross-national work.

problem of equivalence in cross-national survey research, the analysis of cross-national data, and the role of theory in cross-national research (Szalai et al. 1977; Scheuch 1968). This methodological work still forms the basis of today's comparative research.

Since the 1960s, the number of cross-national datasets, their geographical scope, and their substantive areas, have significantly been expanded. The list now includes surveys on a wide variety of topics including income, family, health, etc. Table 1 in appendix lists the major cross-national datasets that are currently available. This list is not exhaustive, but covers some of the most important projects. For analytical purposes, the list is organized into three major categories:

- Database of aggregate indicators, such as databases of welfare, health, and education indicators. There has been a rapid development of such databases in recent years, mainly from international organizations. The datasets tend to be available on-line and/or on CD-Rom. As will be seen later, such databases have a wide number of applications, allowing researchers to rank countries with respect to key macro-indicators, to study trends in such indicators (for example in the degree of income inequality), to analyze relationships between macro-indicators, or to add macro-level contextual information to micro-level studies. And while the rapid developments of these databases have opened up many avenues of research, users should be leery of cross-national and historical differences in the definitions of indicators and their sources of data (see Atkinson and Brandolini 2001 for a thorough discussion of these issues).
- Individual/post-harmonized data, that is, individual-level surveys carried out independently in different countries and subsequently recoded and harmonized into a common set of variables. This includes the Luxembourg Income Study, the Panel Comparability Project, the Cross-National Equivalent File, and the Comparative Analysis of Social Mobility in Industrial Nations. The challenges posed by this post-harmonization of data are formidable considering that the surveys were not modeled after each other, and that the data was oftentimes collected for different purposes. The results are however a rich source of individual-level data that allow researchers to replicate analyses in different countries and test the generality of findings. As the previous type of cross-national dataset, this one is not exempt either of problems of discontinuities over time in the definition and sources of the data, and in problems of cross-national comparability. The post-harmonization exercise is however aimed at minimizing these problems.
- Individual/pre-harmonized data, that is, identical individual-level surveys carried out in different countries (although some variations may be

found across countries). This includes the Fertility and Family Surveys, the European Community Household Panel, and the World Value Survey. As the previous one, this type of data allows researchers to study microlevel relationships and to test their degree of generalization in a wide number of countries (or question the reasons why the results cannot be generalized). The pre-harmonization of data is appealing as it suggests a very high degree of cross-national comparability. Users should however once again be leery of possible cross-national differences in the survey instruments used or in cross-cultural differences in the meaning of specific questions. Some of the datasets falling into this category have a very wide geographical coverage, thus offering unique research opportunities. The World Value Survey is among such surveys, and currently covers almost 80 percent of the world's population.⁵

What type of research is done with such cross-national databases, and what are its theoretical underpinnings and analytical strategies? These are the questions to which I now turn to. Using examples based on some of the datasets listed in Table 1, I provide a review of the theories and methods of comparative research, discuss some of their limitations, and raise some points that have not been fully aired in the literature.

3. Research goals and theoretical underpinnings

Commenting on the discussions held at the 1972 international conference on comparative research, Wiatr (1977) stated that the role of theory in crossnational survey research was 'one of the most controversial subjects' (p. 347). He argued that while some cross-national projects compare societal variations in order to 'establish a body of multinational survey data', others aim instead at 'verify[ing] a statistical relationship ... and complet[ing] results obtained by a monographic [one-unit] study' (pp. 358–60). He further argued that while some scholars have suggested 'postponing theorizing' or 'building up a theory in the course of cross-national survey research' (p. 367), others have placed theory up front in stressing the goal of testing theories and competing hypotheses. This disagreement about the role of theory in comparative research is still present today and is echoed in the discussions surrounding the respective merit of deductive versus inductive research (see for example, Ragin 1994).

In order to reconcile these various arguments, one has to acknowledge that comparative research is not a monolithic field: it pursues different goals, and theory consequently occupies a place that varies according to

⁵ For details, refer to the World Value Survey's website: http://wvs.isr.umich.edu/.

each goal. To be more precise, comparative research can be said to pursue three main major goals:

Comparative research can aim at *mapping cross-national variation* in one particular phenomenon or social process. This may be for the purpose of documenting the magnitude of its variation, or to rank countries with respect to this particular phenomenon or social process. This is mainly a descriptive goal that may or may not be theoretically-driven. For instance, theory may suggest that all industrialized countries are expected to have similar levels of social mobility, and the comparative research aims at testing this hypothesis. Alternatively, theory may be brought in at a later stage, for example to explain the outlying position of a particular country.

Comparative research can aim at examining the relationship between macro-level characteristics of societies. For example, one may be interested in the countries' level of fertility and its relationship with the countries' economic development, level of education, labor force participation in the formal sector, and family planning effort. The starting point is usually that there is one set of relationships between these macro-level countries' attributes that is applicable to all countries. For instance, it would be hypothesized that the relationship between a country's level of fertility and the other macro-level determinants is the same in all countries. Countries, as unit of analysis, are thus used to quantify these relationships. This approach also allows for more complex hypotheses if the relationships, at the macrolevel, are posited to vary across countries. In such a comparative research, theory would be expected to be at the forefront of the analysis in specifying which attributes of countries matter, in justifying the selection of countries, and in theorizing about whether the theoretical model is expected to apply to all countries or only to a sub-set of them.

Comparative research can also aim at examining the *relationships between micro-level* characteristics and test whether or not these relationships are the same in all countries. Again, theory would be at the forefront of the analysis in specifying which individual attributes matter, and in justifying the selection of countries. In addition, theory would contribute hypotheses about reasons why the micro-level relationships would or would not be the same in all countries.

While these three goals of comparative research make clear the respective role of theory, it has to be added that in some fields the relevant macro-level theory or micro-macro level theory may be lacking and may therefore prevent the type of theory-driven research described above. In such cases, the analysis may instead aim at providing empirical results that may start preparing the ground for such a theory. For example, Harkness and Waldfogel (1999), in their analysis of family gender gap in seven countries, concluded

that contrary to what was expected, cross-national variations in gender gap could not be explained by differential selection into employment or by cross-national differences in wage structure. Instead, they called for further consideration of macro-level factors such as family policy: 'future research should examine the impact of family policies such as maternity leave and child care on the family gap in pay' (p.iv).

The importance of researching which macro-level attributes may account for the outlying positions of countries or for the unexplained cross-national differences was stressed some 30 years ago by Przeworski and Teune (1970). They argued: 'When we find that societies differ with regard to a particular characteristic, we can ask what it is about these societies that causes this difference. If the factor first considered does not answer this question satisfactorily, it is possible to consider other factors, gradually replacing the notion that "nations differ" by statements formulated in terms of specific variables' (pp. 29-30). Unfortunately, this call has not been systematically followed in the literature. Outliers are routinely accounted for by a series of country dummies (in pooled time-series and cross-national design), and these country dummies are often not even reported and discussed. From a statistical perspective, the use of country dummies is certainly well justified as it improves the statistical 'fit' of regression models. From a substantive perspective, however, country dummies tell us nothing about the reasons why some countries are statistically different from others (after controlling for other determinants). Too often only lip service is paid to outliers and the related residual cross-national differences. As such, the use of country dummies runs completely counter to Przeworski and Teune's (1970) call for replacing the proper names of countries by relevant variables.

In theorizing about the respective role of macro- and micro-level factors, one level that is often omitted in the literature is the intermediate one. According to Bronfenbrenner (1986) while the micro-level refers to the characteristics of an individual and his/her immediate family, the meso-level refers to the interaction between the individual and his/her immediate environment, including the school, day care, and network of friends, and the exo-level comprises characteristics of the individuals' neighborhoods. Increasingly, research in North America and Britain has included such intermediate levels in its theoretical and empirical models. Examples include the analysis of the influence of schools on children's achievement and on children's likelihood of completing high school (Coleman 1987; Garner and Raudenbush 1991), and the influence of neighborhoods on adolescent's sexual activity (Brewster 1994; Hogan and Kitagawa 1985), child development (Brooks-Gunn et al. 1993), political participation (Giles and Dantico 1982), and crime and delinquency (Sampson 1985). It is beyond the scope of this paper to fully discuss the mechanisms by which institutions such as schools,

or social and economic units such as neighborhoods, can influence individual behavior. The interested reader is referred to Brooks-Gunn, Duncan, and Alber (1997), Furstenberg and Hughes (1997), Mayer and Jencks (1989), and Tienda (1991) for excellent discussions of neighborhood effects. What is, however, worth pointing out is that while such multi-level theoretical models have guided the empirical analysis in the context of single-country studies, they have not (yet) found their way into multi-country analyses. I will come back to this issue later in this paper.

4. Research goals and analytical strategies

Following the above discussion, I now turn to the different analytical strategies adopted in comparative research. For each of the research goals identified above, I examine the analytical strategies adopted by comparative researchers. There are obviously numerous methodological problems that are common to these analytical strategies, including the problem of small sample sizes (the so-called small 'N' problem), and the problem of cross-national equivalence. These problems have been fully discussed elsewhere and are referred to here only when central to the main argument. It should also be noted that I confine the discussion mainly to methodologies rather than to statistical techniques used to analyze particular research design. I refer to specific statistical techniques or statistical software only in the case of recent developments.

4.1 Mapping out variations

The goal of mapping out variations is usually done using aggregate-level data. As explained earlier, the aim is to map out cross-national variations with regard to a specific variable and to compare similarities and dissimilarities among countries. Examples of descriptive analyses of aggregate indicators are numerous, including the cross-national comparison of levels of decommodification in social welfare regimes (Esping-Anderson 1990), social expenditures in advanced industrialized societies (Pampel and Williamson 1988), and child poverty (Rainwater and Smeeding 1995). Such comparative analyses are based on either aggregate data or individual-level data that has been aggregated at the country level. The mapping out of cross-national variations may furthermore be done on the basis of single indicators or composite indices.

⁶ For a comprehensive discussion of some of the fundamental problems in crossnational research, readers are referred to Ragin (1994), Goldthorpe (1997), Szalai et al. (1977), and Berting, Geyer, and Jurkovich (1979).

In general, these studies tend to emphasize the dissimilarities across countries. Data is often presented in terms of country ranking, and oftentimes the idea is to attract attention to the best, or to the worst, ranking countries. For example, cross-national comparisons have highlighted the very high level of teenage pregnancy in the United States, as compared to other industrialized countries (Alan Guttmacher Institute 2000) or the high support for families provided in Sweden and Finland, as compared to the United States (Gauthier 1999). As such, these country rankings may be used to monitor changes over time, to promote policies, or to derive typologies of countries.

4.2 Analyzing the relationships between the macro-level attributes of countries

In this type of analysis the aim is not to rank countries, but to shed light on the relationships between macro-level characteristics of societies. For example, Gauthier and Hatzius (1997) examine the relationship between the countries' fertility level and their level of state support for families, and Pampel and Williamson (1988) examine the relationship between the countries' level of social expenditures and various other country-level characteristics such as the level of corporatism, etc. Again, examples of such types of comparative analyses are numerous ranging from the cross-national analysis of suicide rates (Fernquist and Cutright 1998) to the analysis of men's labor force participation (Pampel and Weiss 1983).

The emphasis on country-level characteristics, as opposed to regional-level characteristics, is obvious in this type of analysis. Such an emphasis may however overlook substantial within-country differences. For instance, the addition of a regional dimension to the cross-national analysis of child poverty revealed considerable within-country heterogeneity (Rainwater, Smeeding and Coder 2001), and so did the addition of a regional dimension in the cross-national analysis of fertility declines in Europe at the end of the nineteenth century (Watkins 1991; Knodel and van de Walle 1979). In this last example, the regional analysis led not only to the conclusion that there were very wide within-country variations, but led also to the conclusion that local cultural context and local settings played a large role in the onset of fertility decline. Unfortunately, international institutions and cross-national compendia of social and economic indicators rarely publish data by region, and thus prevent researchers from exploring this source of intracountry heterogeneity.⁷

 $^{^7}$ A promising avenue is the Eurostat regional database (see for example Eurostat 2000. Regions – $Statistical\ Yearbook$). However, 'regions' constitute very large geographical areas and may not accurately describe local markets and local conditions.

4.3 Analyzing the relationships between the micro-level characteristics of individuals and the macro-micro links

Unlike the previous approach, this research goal calls for the analysis of individual-level data. Studies typically aim at generalizing results obtained on the basis of a single country, or at testing the effect of macro-level characteristics on individual-level behavior. For example, Savolainen et al. (2001) use micro-data to test whether results obtained for the USA concerning the negative effect of children on parents' mental health is also found in Finland, where more extensive state support for families is provided.

Two methodologies are used when carrying out such multi-country analyses of individual level data. Probably the most common one is to carry out parallel analyses, that is, one for each country. The same variables are analyzed in all countries and each country analysis is carried out separately. Examples of such parallel analyses include the cross-national analysis of gender gap (Gornick and Jacobs 1998), and the analysis of kinship and social networks (Hollinger and Haller 1990). In a multivariate context, this parallel technique allows researchers to examine the similarities and dissimilarities across countries in terms of relationships between micro-level variables. One interesting point to raise here is that such multi-country analyses of individual-level data typically involve only a small number of countries, partly for reasons of data availability, but also for reasons of space (it would obviously be impossible to describe in detail results, say, from 50 countries). And as pointed out earlier, the selection of countries itself should be theoretically justified.

The second methodology consists of pooling data from various countries and carrying out a single statistical analysis. While the first methodology allows the regression coefficients to freely vary across countries, this second methodology does not and instead imposes common regression coefficients across countries (this restriction may be relaxed with the addition of interaction terms between the countries and selected variables). This second methodology shares, therefore, some similarities with the multivariate analysis of aggregate data described earlier. Again examples cover a wide range of areas, including an analysis of marital status and happiness (Stack and Eshleman 1998), and an analysis of occupational sex segregation (Nermo 2000). In some cases, studies have even pooled time series and cross-national micro-data. This is, for example, the case in Blanchflower's (2000) analysis of self-employment in which a total of 45 surveys from 19 countries are pooled. Oftentimes in that type of analysis, a series of country dummies is added in the regression model in order to account for unspecified country-specific attributes that may influence the dependent variable. As discussed earlier, this use of country dummies does not help to explain why a

particular country appears to be different from others. Instead, the outlying position of countries calls for the addition of carefully chosen macro-level variables in the regression models.

4.4 Multilevel research strategies

Multilevel analysis is an attempt at integrating micro-, meso- and macro-level variables and at recognizing the possible role of different levels of determinants on individual outcome or behavior. Although the possible impact of social structure and other hierarchical structures on individual behavior has long been acknowledged, it is only since the early 1980s that appropriate modeling techniques and software have become available. A now classic example of multilevel analysis consisted in the reanalysis of the educational achievement of children exposed to different teaching styles in Britain (see Aitkin, Anderson, Hinde 1981).^{8,9}

In recent years, two main groups have taken the lead in developing multilevel software, and in contributing to the related methodological literature: The Longitudinal and Multilevel Methods Project (LAMMP) at the University of Michigan¹⁰, and the Center for Multilevel Modelling at the Institute of Education in London.¹¹ The multilevel method of analysis is designed to handle hierarchical and clustered data and relies on maximum likelihood techniques. While it is possible to estimate multilevel models using traditional regression techniques, the results are affected by biased standard errors of the parameters.¹²

I referred, at the end of the theoretical section, to areas for which multilevel analysis has been used, including political participation, teenage pregnancy, and crime and deviance (all within the context of neighborhood effects). Three important points should be made here. First, most studies using multilevel analysis are based on a single-country design. As pointed

⁸ On the basis of traditional multiple regression techniques, the initial study concluded that children exposed to formal styles of teaching had higher levels of educational achievement. The re-analysis of the same data using multilevel techniques concluded instead that the styles of teaching had no effect on children's educational achievement. This different conclusion was reached after properly modeling the grouping of children into classes, something not done with traditional regression techniques (for details, see Center for Multilevel Modelling 2001).

⁹ Interestingly, back in the 1970s, the concept of multilevel determinants, or contextual analysis, received much criticism. For example, Hauser (1974) has argued that contextual effects are in fact the result of poorly specified individual level relationships.

¹⁰ For details, see the LAMMP's web site: http://www-personal.engin.umich.edu/~gibsong.

¹¹ For details, see the Center's web site: http://www.ioe.ac.uk/multilevel/.

¹² For more details, Bryk and Raudenbush (1992).

out earlier, multilevel analysis has not yet been used extensively in cross-national research. Second, not all studies using multilevel data have relied on hierarchical models. Ordinary least squares regression is still often used despite the fact that it results in biased standard errors of the parameters. And third, it is also worth pointing out that most conventional datasets are not well designed for the analysis of multilevel determinants since they only contain individual-level data. The solution used by numerous scholars has been to add macro-level information to individual-level surveys by matching the respondent's geographical area of residence with aggregate data from the census. In such studies, the census tract is usually used even though it constitutes a limited proxy for neighborhoods. 13 In the United States, several surveys have been geo-coded, thus making it possible to link individual-level surveys with census data. Examples are numerous and include the National Longitudinal Survey of Youth and the National Longitudinal Survey of Labor Market Experience Youth Cohort. In view of the growing interest in meso-level effects, some recent surveys have collected data on the quality of schools and neighborhoods. This is, for example, the case with the American National Survey of Children and the Canadian National Longitudinal Survey of Children and Youth. Without any doubt, that type of data offers great research opportunities. Unfortunately, this trend seems to have been confined so far mainly to single-country studies.

There are, in fact, very few examples of cross-national multilevel analyses. The study of fertility and family planning by Entwisle and Mason (1985), based on data from 15 countries is an exception. The authors use a REML/Bayes method (a restricted maximum likelihood estimation combined with Bayes techniques) to estimate the role of macro-level factors, such as socioeconomic development and national family planning program effort, on women's fertility. Another example includes Wong and Mason's (1991) analysis of the effect of ethnicity (as contextual effect) on fertility using data from 36 less developed countries. And while there have been so far few applications of this type of analysis to comparative research, as argued below, it constitutes a promising avenue of research, especially when combined with a life-course approach.

5. Promising avenues of research

In this last section of the paper, I want to discuss the substantive research areas that may highly benefit from a comparative perspective. Most of the examples provided above were based on cross-sectional data. This reflects

¹³ For a discussion of the adequacy or inadequacy of census tracts, see Brooks-Gunn, et al. (1993) and Furstenberg and Hughes (1997).

the fact that the large majority of comparative datasets are cross-sectional. In recent years, some cross-nationally comparable panel datasets have become available, including the Panel Comparability Project (PACO), the European Community Household Panel (ECHP), and the Cross National Equivalent File, and another one (CHER) is currently being developed (see details in Table 1 in Appendix). In addition to these panel surveys, some cross-sectional surveys have collected retrospective information on various life dimensions such as work, fertility, partnership, and migration histories. This includes the World Fertility Survey, the Demographic and Health Survey, and the Fertility and Family Survey. Like panel surveys, these retrospective histories have also allowed the dynamic analyses of key variables. ¹⁴

Longitudinal surveys have received much attention in the literature in recent years in view of the possibilities that they offer in terms of cohort and life course analyses. Examples of cross-national studies using such data are still limited but include topics such as the patterns of women's labor force transitions in connection with childbirth (Gustafsson et al. 1996) and the dynamic analysis of patterns of social exclusion (Robson, Dex, Wilkinson and Salido 1998).

The analysis of longitudinal data, from a comparative perspective, is in fact one of the most promising avenues of research as it combines a dynamic analysis of life trajectory under different national contexts. For instance, the single-country literature has revealed the increasing variability, 'individualization', and segmentation of life courses (Rindfuss, Rosenfeld and Swicegood 1987; Shanahan 2000). Traditional markers of the transition to adulthood, such as leaving school, leaving parental home, entering the labor market, entering a sexual partnership, and entering parenthood, no longer follow a clear sequence and have lost their traditional age gradation. Furthermore, they have also become reversible, such as leaving/returning to parental home, and leaving/returning to school. Similarly, the traditional transition to older ages has been redefined with the emergence of gradual, rather than abrupt, transition to retirement, by the lengthening of disability-free post-retirement years, and by the opportunities that income, wealth, and good health offer to older adults (Smeeding 1993). Not only is longitudinal data essential to understand these processes and the lifecourse of different cohorts, longitudinal cross-national data is also essential to compare the experiences of different cohorts across countries. As summarized by Mayer and Schoepflin (1989):

'How are life courses in advanced societies shaped and regulated? How are the agegraded transitions between life-domains socially organized? How do life courses

 $^{^{14}}$ For a more complete discussion of panel surveys and retrospective surveys, see Lillard and Waite (1990).

differ in contemporary societies from those in earlier societies? Which forces are shaping the allocation of life-time between life domains such as education, family activities, and employment?' (p. 188).

Cross-national differences are, in fact, large. Despite trends towards globalization, the life course of young adults, and of older adults, has been found to vary significantly across countries (Iacovou 1998; Smeeding 1993). Are these country differences related to social norms, economic opportunities, and/or public policies? To what extent can public policies act as a buffer in case of events such as teenage pregnancy, divorce, widowhood, and unemployment, to what extent can public policies reduce rigidities imposed by the labor market, and to what extent can public policies provide equal opportunities? Despite a flourishing welfare state literature, the study of the theoretical and empirical links between public policies, on the one hand, and individual life courses, on the other, is still in its infancy. And while some scholars have argued that state activity and state intervention 'have a large effect on shaping individual lives and the social structure of the life course' (Mayer and Schoepflin 1989: 189), very few empirical studies have directly addressed this question. 15

Empirically, however, such a line of inquiry is not without difficulty. While a cross-national design allows researchers to indirectly estimate state activity and state intervention (in the tradition of quasi-experiment, or naturally-occurring experiment), ¹⁶ numerous longitudinal surveys do not include information on eligibility to, and receipt of, social security and other social benefits. This is for example the case with the Fertility and Family Surveys. This is an important point. For while cross-national comparisons, such as women's labor force transitions in connection with childbirth (Gustafsson et al. 1996), are built on the assumption that cross-national differences in social and family policies influence individuals' life trajectory, surveys may not contain the information that would allow one to directly test this assumption. As such, there is a potential disconnection between theory and data – at least, in some surveys.

But, there is also one additional dimension that seems to have so far escaped the comparative literature of life courses and life transitions, namely the role of intermediate actors and determinants, especially the potential role of local governments, local markets, communities, and employers. National governments are not the only ones to offer support to parents, low-in-

¹⁵ There are exceptions, including examples from the cross-national social mobility literature for which the analysis of the link between individual trajectories and social structure has been central (see for example Erikson and Goldthorpe 1992).

¹⁶ 'Cross-national research is needed and conducted because it is the closest approximation to the controlled laboratory experiment of the natural scientists which is available to social scientists' (Lisle, 1987: 475).

come, or unemployed people. Local governments, local markets, communities, and employers also offer benefits and services. For example, numerous large corporations in the United States and Canada offer their employees support in connection with family responsibility, childcare, or care of an elderly person (Blau and Ehrenberg 1997). Such benefits and services may undoubtedly affect the employment trajectory of individuals in allowing them to combine more easily work and family responsibilities. Unfortunately, very few empirical studies have examined this dimension either from a single-country perspective, or a multi-country one. The question is: how does this private-public mix affect the life course of individuals? And is this combination of public and private benefits contributing to the convergence or divergence of the life course of recent and older cohorts across countries? In my opinion, this is another promising area of comparative research, but probably one of the most difficult to tackle considering the nature of the available data.

In short, the recent release of cross-national longitudinal datasets opens up several promising avenues of research, especially with regard to the link between individuals' life trajectories and the countries' public policies. This is an under-analyzed area of research in social science, and one that calls for the integration of a multi-level theoretical framework and a multi-level analytical strategy to adequately model individuals' life course.

6. Conclusion

In this paper I have come full circle in starting the paper with a discussion of the importance of theory in comparative research, and by ending it with a discussion of the role of theory in explaining the links between public policies and individual life courses. My aim throughout this paper has, in fact, been to argue that the availability of new datasets such as ECHP, theoretical advancements showing the importance of multilevel determinants on individual outcome, and methodological developments in terms of life-course analysis and multilevel analysis, can all be combined to take comparative research to new levels. In particular, the availability of new longitudinal datasets could address the question of the extent to which life course experiences vary across advanced industrialized societies, the extent to which these life course experiences are converging or diverging across countries, and the extent to which life trajectories are influenced by public policies. It is on this basis that I have argued against the conclusion that 'the wheel of cross-cultural methodology keeps on being reinvented' (Scheuch 1989: 147), and instead argued that comparative research has entered a new era. At the same time, I have also argued that we need to move beyond traditional ap-

proaches of comparative research in order to examine dynamically the links between individuals' domains of life, and to think about the multi-dimensionality of life-course (and the multi-dimensionality of its determinants).

Throughout this paper I have obviously stayed away from the debate surrounding the case- and variable-oriented approaches, and I have not addressed the question of the optimal number of cases (i.e. countries). Obviously, I have taken a clear stance in focusing on variable-based analyses, but my contribution has been to emphasize the importance of thinking multi-dimensionally, at the country-level, but also at the meso- and individual levels. Only such a multilevel/multi-dimensional approach can allow one to start understanding within- and between-country differences in individuals' decisions, opportunities, and constraints. Finally, to quote Melvin Kohn (1987) in his address as president of the American Sociological Association: 'Cross-national research is always a gamble; one might as well gamble where the payoff is commensurate with the risk' (p. 45) – I would argue that this payoff is tremendous considering the new opportunities offered by cross-national research.

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Appendiy

Table 1: Selected cross-national datasets

1A- Databases of aggregate data¹

Name	Coverage	Years	Web site ²
Comparative welfare states dataset	19 countries	1960–94	http://www.lis.ceps.lu/compwsp.htm
ILO Key Indicators of the Labour Market	World	1980-	http://www.ilo.org/public/english/employment/ strat/kilm/index.htm#
OECD education database	OECD countries	1995-	http://www.oecd.org (no free on-line access)
OECD health database	OECD countries	1998-	http://ww.oecd.org (no free on-line access)
OECD social expenditure database	OECD countries	1980–96	http://www.oecd.org (no free on-line access)
UNESCO education database	World	1970–97	http://unescostat.unesco.org/en/stats/stats0.htm
UN Demographic Yearbook Historical Supplements	229 countries	1948–97	http://www.un.org/Pus/whatsnew/b99208.htm
UN Human Development Database	175 countries	1998	http://www.un.org/Pubs/whatsnew/e98084.htm
UN Women's Indicators and Statistics	206 countries	1970–97	http://www.un.org/Pubs/whatsnew/e00013.htm
WHO health database	World	1980–97	http://www-nt.who.int/whosis/statistics/me- nu.cfm
World Bank World Development Indicators 207 countries	207 countries	1960–99	http://www.worldbank.org/data/wd2001/ cdrom.htm
World handbook of political and social indicators	155 countries	1948–82	http://www.icpsr.umich.edu/cgi/archive.prl?- num=7761

Where ILO: International Labour Office, OECD: Organization for Economic Cooperation and Development; UNESCO: United Nations Educational, Scientific and Cultural Organization; UN: United Nations; WHO: World Health Organization.

1B- Individual/post-harmonized data

	Name	Coverage	Years	Web site ²
	CHER (Consortium of Household Panels for 18 countries European Socio-Economic Research)	or 18 countries	1968-	http://www.ceps.lu/Cher/Cherpres.htm
	Comparative Analysis of Social Mobility in 12 countries Industrial Nations (CASMIN)	n 12 countries	1970 - 95	http://hicks.nuff.ox.ac.uk/Users/yaish/npsm/doc- uments.htm
	Cross-national equivalent file	4 countries	1984–97	http://www.human.cornell.edu/pam/gseop/equiv- fil.cfm
	Luxembourg Employment Study (LES)	16 countries	1990s	http://www.lis.ceps.lu/LES/les.htm
	Luxembourg Income Study (LIS)	26 countries	1960s-	http://www.lis.ceps.lu/access.htm
	Multinational Time Use Study (MTUS)	20 countries	1960s-	http://www.iser.essex.ac.uk/mtus/index.php
Sah	PACO (Panel Comparability) Project	10 countries	1968-	http://www.ceps.lu/paco/pacopres.htm

1C- Individual / pre-harmonized data

Name	Coverage	Years	Web site ³
Comparative study of electoral systems (CSES)	12 countries	1996-2000, 2000-2003	http://www.umich.edu/~nes/cses/cses.htm
Demographic and Health Surveys (DHS)	70 countries	1984/9, 1988/ 93, 1992/9	http://www.macroint.com/dhs/
Eurobarometer surveys³	12 to 28 countries 1970–	1970-	http://europa.eu.int/en/comm/dg10/infcom/epo/ eb.html
European Community Household Panel (ECHP)	15 countries	1994–	http://www-rcade.dur.ac.uk/echp/
Fertility and family surveys (FFS)	20 countries	1992 - 5	http://www.unece.org/deap/pau/f_home1.htm
Health behavior of school-aged children	32 countries	1983/4, 1987/8, 2001/2	1983/4, 1987/8, http://www.ruhbc.ed.ac.uk/hbsc/ 2001/2
International Social Survey Programme (ISSP)	31 countries	1985 –	http://www.issp.org/
Programme for International Student Assessment (PISA)	32 countries	2000-	http://www.pisa.oecd.org/
Third International Mathematics and Science Study (TIMSS)	12 to 41 countries	1960, 1970, 1981/2, 1983/6, 1995, 1999	http://nces.ed.gov/timss/
World Bank Living standard measurement surveys	21 countries	1985–	http://www.worldbank.org/html/prdph/lsms/ lsmshome.html
World Fertility Surveys (WFS)	60 countries	1972 - 84	N/A
World Value Surveys (WVS)	65 countries	1981, 1990/1, 1995/6, 1999/ 2000	http://wvs.isr.umich.edu/
Notes: ¹ There are numerous other database organizations, with an emphasis on databases changes may have occurred subsequently. 3- Sinc	s of aggregate data. T. containing long historic e 1990, 13 Central and E	his list is restricted al series. – These v astern European cou	Notes: ¹ There are numerous other databases of aggregate data. This list is restricted to some of the main databases developed by international organizations, with an emphasis on databases containing long historical series. ⁻ These web sites were valid at the time of writing this article. Some changes may have occurred subsequently. 3- Since 1990, 13 Central and Eastern European countries are covered by a special survey.