

THE PROMISES OF COMPARATIVE RESEARCH

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INTRODUCTION

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). For sure, the problem of equivalence in cross-national research, and the problem of diffusion and dependence of observations are still relevant today, and so is the debate over case-oriented versus variable-oriented approaches. But, as argued in this paper, the availability of new cross-national longitudinal datasets, together with new techniques of analyses, such as multilevel analysis, have opened a new chapter in comparative research.

This paper has three main objectives. First, it aims at providing a review of comparative research from a theoretical and methodological perspective, especially recent developments in terms of datasets and methodologies. Second, it aims at critically assessing the current comparative research, by stressing its implicit assumptions and limitations. By the same token, it also aims at integrating recent research developments into the comparative approach: developments that have, so far, appeared only in single-country studies. Finally, the paper also aims at identifying the most promising avenues of

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comparative research and at pointing out key substantive questions that will benefit from a comparative perspective.

In this paper, I have adopted a very comprehensive approach and included comparative studies from a wide number of research areas, including family studies, social mobility, income dynamics, welfare, employment, and time use. My aim is not to thoroughly review each of these fields, but instead to illustrate some of the theoretical and methodological points addressed in this paper with relevant examples. It has, however, to be acknowledged that while being comprehensive, 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 have 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 (and careful) 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 1, I review the history of comparative research, and discuss the availability of new cross-national datasets. In Section 2, I turn to the goals of comparative research and its 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 3, 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 4 concludes the paper by examining promising avenues of research, mainly on the basis of cross-national longitudinal data.

Before turning to Section 1, it should be mentioned that the comprehensive breadth of this paper is obviously limited by language problems. For this review, I relied entirely on studies published in English, and therefore overlooked contributions published in other languages.

HISTORY OF 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 relationship between social structure and individual behavior, to compare modes of production, to study the universality of some social phenomena, or to examine the distinctiveness of some societies.^{2,3} 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 compilation of legislation and various indicators about the conditions of workers and their families in various countries. 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).

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

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 schemes in its *Labor Gazette* in 1923, and the American Social Security Administration published its *Outline of Foreign Social Insurance and Assistance Laws* in 1940. 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 time, in spite of very limited survey data and a lack of modern computerized means of carrying 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, size of military, communications, media, wealth, economics, education, family and social relations, distribution of wealth and income, and religion (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

³ Even earlier examples of comparative research may be found, including Malthus' *An Essay on the Principle of Population* (1776) and Adam Smith's *An Inquiry into the Nature and Causes of the Wealth of Nations* (1798).

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 (Szalai, Petrella, Rokkan, Scheuch 1977) including a project on time use and one on juvenile delinquency. 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 (Nowak 1977, Szalai 1977, Glaser 1977), on the problem of equivalence in cross-national survey research (Scheuch 1968), on the analysis of cross-national data (Teune 1977, Allerbeck 1977), and on the role of theory in cross-national research (Wiatr 1977). This methodological work still forms the basis of today's comparative research, and as such, lends support to the argument that the methodological wheel of cross-national research keeps on being reinvented. However, what I argue later in the paper is that the multiplication of cross-nationally comparable surveys, together with new methodological developments, have given a new impetus to comparative research and have given rise to methodological innovations.

In Table 1, I list the major cross-national datasets that have been made available since the 1970s. This list is not exhaustive, but covers some of the most important projects. It is organized into three major categories: i. Aggregate indicators, such as databases of welfare, health, crime, and education indicators; ii. Individual-level surveys carried out independently in different countries and subsequently recoded and harmonized into a common set of variables, such as the Luxembourg Income Study, the Panel Comparability Project, and the Comparative Analysis of Social Mobility in Industrial Nations; and iii. Identical individual-level surveys conducted in different countries, such as the Fertility and Family Surveys, the European Community Household Panel, and the World Value Survey. The last two categories include both cross-sectional and longitudinal surveys. Needless to say, the effort behind each of these initiatives has been formidable, and so has been their contribution to comparative research. It would however be impossible, within the scope of this paper, to assess the contribution of each of these

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.

projects to the field of comparative research. Instead, in the following sections, I discuss the theoretical underpinnings of cross-national research and its methodological approach, using examples based on some of the datasets listed in Table 1. I discuss the limitations attached to specific methodologies and raise some points, which in my opinion, have not been fully aired in the literature. Thus, this paper extends some of the issues raised in recent reviews of comparative research, notably in Bollen, Entwistle, and Alderson's (1993) review of macro-comparative research methods, and in the 1997 special issue of *Comparative Social Research* devoted to 'Methodological issues in comparative social science'. The paper also contributes to the recent literature on macro and micro linkages in social science (Huber 1990; Imbens and Lancaster 1994; Liska 1990).

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 cross-national survey research was 'one of the most controversial subjects' (p. 347). 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' (Waitr 1977: 358—60). And while some scholars have suggested 'postponing theorizing' or 'building up a theory in the course of cross-national survey research' (Wiatr 1977: 367), others have placed theory up front in stressing the goal of testing theories and competing hypotheses. In particular, Rokkan (1966b) argues that the main goal of comparative research is 'testing macro-hypotheses concerning the interrelations of structural elements of total systems, and conducting micro-replications in other national and cultural settings to test a proposition already validated in one setting' (pp.19-20 cited in Antal, Dierkes, Weiler 1978: 13). 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 the context of this paper, I want to move away from this discussion, and to instead focus on the explicit or implicit theories driving comparative research. More precisely, I want to address the issue of cross-national similarities or dissimilarities. Two general theories are relevant here: ‘structuralism’ and ‘culturalism’. While the structuralist theory suggests that similarities are to be expected across countries sharing similar ‘structures’ (for example, a similar level of industrialization or similar industrial occupational system), the culturalist theory instead suggests that cross-national dissimilarities are to be expected as a result of intrinsic country-specific characteristics. In their cross-national comparisons of occupational prestige, Inkeles and Rossi (1956) contrast supporters of these two theories as follows:

The extreme “structuralist” would presumably insist that the modern industrial occupational system is a highly coherent system, relatively impervious to influence by traditional culture patterns.... By contrast, an extreme “culturalist” might insist that within each country or culture the distinctive local value system would result in substantial --- and, indeed, sometimes extreme --- differences in the evaluation of particular jobs in the standardized modern occupational system (p. 329).

In other words, while the structuralist thesis assumes that social structure has a uniform effect on individuals, regardless of other national characteristics, the culturalist thesis assumes that culture (societal values) modifies the effect of social structure on individuals and therefore results in country-specificities.

This contrast between structuralism and culturalism has been omnipresent in cross-national analysis of social mobility and social welfare (among others), especially in comparisons of the USA and Europe. For example, Lipset and Rogoff (1954) concluded that, contrary to what seems common knowledge, the rates of occupational mobility in America and industrially advanced European countries did not significantly differ, thus providing evidence in support of the structuralist thesis. Their conclusion was however

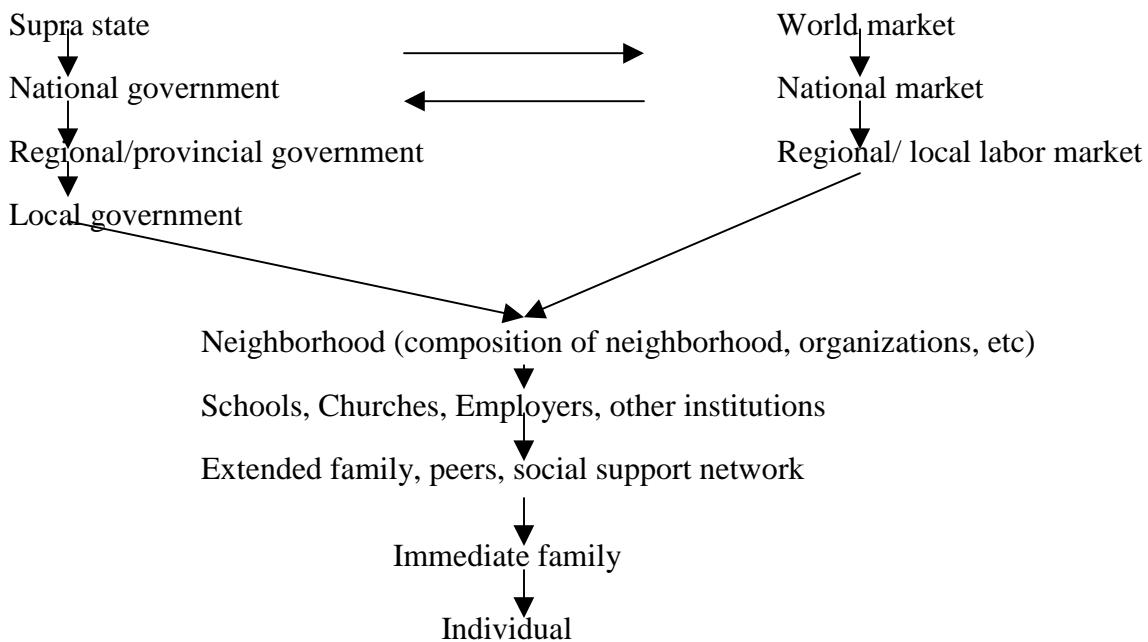
rapidly refuted by Mayer (1955) on the basis of definitions and measurement of social mobility.

The search for similarities and dissimilarities across countries still characterizes today's comparative research, but the theoretical model that is guiding this search has been considerably expanded. In most contemporary comparative analysis, social structure has been expanded into its different components. Institutions such as the government, the market, and the family have been brought into theoretical frameworks. These components are assumed to have both independent and interactive influences on individuals and on the measured outcomes. For example, migration within the European Union may be influenced by the labor market in the country of origin and the country of destination. But 'social structure', as a determinant of migration, goes much beyond national labor markets and encompasses local labor markets, policies concerning the rights of migrant workers, policies concerning the 'across-country transferability' of social security benefits, as well as personal and family contacts that may facilitate finding a job or settling down in a new environment, etc. (Ackers 1998).

This multidimensionality of social structure is well captured in social ecology models. For instance, Bronfenbrenner (1986) identifies micro-, meso-, and exo-systems to explain child development. The micro system refers to the characteristics of the child and his/her immediate family, meso-system refers to the interaction between the family and its immediate environment, including the school, day care, and the child's peer group, and the exo-system refers to the outer environment including the workplace and the community. Drawing from this framework, Figure 1 presents a modified model that identifies different levels of potential determinants, ranging from the individual's immediate family to the supra-state (for example the European Union) and the world market. And while not all components in Figure 1 may be relevant for a particular outcome, such a model nevertheless encourages the researcher to think beyond the 'traditional' determinants of any particular outcome. One of my favorite examples to illustrate this move away from traditional determinants is found in Steinberg, Darling, and Fletcher's (1995) analysis of authoritative parenting and adolescent adjustment. In

this paper, the authors comment on Uli Bronfenbrenner's snappy criticisms that they had failed to study adolescents 'in context', that is, that they had failed to examine the various levels of factors that may influence adolescent developments.

Figure 1. Social ecology framework



Source: adapted from Furstenberg (1999).

Social ecology models and their related theories have been highly influential in the field of sociology and demography in recent years. They have been used in studies of teenage pregnancy, educational achievement, crime and delinquency, and child development (see below). The influence of schools on children's achievement and on children's likelihood of completing high school has, for example, been central to the work of Coleman (1987) in the USA and of Garner and Raudenbush (1991) in Great Britain. By transmitting a distinct set of values, by involving parents in their children's education, and by providing children with a coherent framework, some schools appear to be more successful than

others in increasing the likelihood of high school completion. This role of schools is part of Coleman's (1988) concept of social capital.

Another element that has received a lot of attention in the social science literature in recent years is the potential role of neighborhood on individual-level behavior and outcome. Characteristics of the neighborhoods such as its infrastructure, safety, job opportunities, poverty rate, income composition, etc. have been posited to have a determining influence on young people's behavior, in terms of sexual activity (Brewster 1994), teenage pregnancy (Hogan and Kitagawa 1985), child development (Brooks-Gunn et al. 1993), political participation (Giles and Dantico 1982), life satisfaction (Fernandez and Kulik 1981), 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 (1997a, 1997b), Furstenberg and Hughes (1997), Mayer and Jencks (1989), and Tienda (1991) for excellent discussions of neighborhood effects. What is, however, worth pointing out in the context of this paper is that while social ecology models have guided analyses in single-country studies (mainly in the USA), they have not (yet) found their way into multi-country analyses. I will come back to this issue later in this paper.

In the following section I turn to methods of analysis used in comparative research. In particular, I draw attention to the fact that the multidimensionality of social structure and the potential effects of macro- and meso- determinants on individuals have not been fully integrated in comparative analyses. As such, there is currently a mismatch between theories and methodologies.

RESEARCH GOALS AND ANALYTICAL STRATEGIES

Analytical strategies are obviously not value-free. The analytical strategy adopted in comparative research reflects specific assumptions about the role of countries defined in

terms of unit of analysis, naturally occurring experiments, or general social context. In this section, I focus on analytical strategies as a way of discussing the meaning or ‘place’ that countries occupy in comparative analysis, and as a way of discussing the importance devoted (or not devoted) to various other levels of determinants. In so doing, I examine the goals of comparative research and discuss the methods that researchers have used to assess the impact of macro-structures on aggregate- or individual-level outcomes. I examine three broad analytical strategies: strategies based on aggregate-level data, individual-level data, and multilevel data. 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.⁵

Aggregate-level research strategies

Under the heading of aggregate-level research strategies, I include descriptive analyses of key aggregate indicators aimed at comparing similarities and dissimilarities among countries in terms of specific macro-level characteristics, and multivariate analyses of relationships between macro characteristics. Examples of descriptive analyses of aggregate indicators are numerous, including the cross-national comparison of levels of decommmodification in social welfare regimes (Esping-Anderson 1990), social expenditures in advanced industrialized societies (Pampel and Williamson 1988), and health systems (WHO 2000). But the fields of application are much wider. Descriptive analyses of key aggregate indicators are also found in the field of children’s health (Currie et al. 2000), children’s performance on mathematics tests (TIMSS 1997), child poverty (Rainwater and Smeeding 1995), and national family planning programs (Ross and Mauldin 1996). Such comparative analyses are based on either aggregate data or individual-level data that has been aggregated at the country level, and rely on either

⁵ For a comprehensive discussion of some of the fundamental problems in cross-national research, readers are referred to Ragin (1994), Goldthorpe (1997), Szalai et al. (1977), and Berting, Geyer, and Jurkovich (1979).

single indicators or on composite indices. 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), the high support for families provided in Sweden and Finland, as compared to the United States (Gauthier 1999), and the very high level of disability-free life expectancy in Japan (Anderson 1998). As such, these country rankings may be used to monitor changes over time, to promote policies, or to derive typologies of countries. Aggregate indicators may also be used as dependent or independent variable in multivariate analyses (see below). The emphasis on country-level characteristics, as opposed to regional-level characteristics, is obvious in this type of analysis. But while it provides a useful summary of country-level characteristics, such an emphasis may 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, Coder 2000), 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 within European countries, 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 intra-country heterogeneity.⁶

The concept of countries as unit of analysis is also central to multivariate analyses of aggregate data. In this type of analysis the idea is not so much to rank countries, but to shed light on the associations between variables. For example, Gauthier and Hatzius (1997) developed an index of family benefits and analyzed its effect on fertility (at the

⁶ 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.

aggregate level), and Pampel and Williamson (1988) developed an index of social expenditures and analyzed its determinants using other indicators such as the level of corporatism, etc. Again, examples of such types of comparative analyses are numerous including the cross-national analysis of suicide rates (Girard 1993; Fernquist and Cutright 1998), child homicide (Fiala and Lafree 1988; Briggs and Cutright 1994), adult homicide (Cutright and Briggs 1995), men's labor force participation (Pampel and Weiss, 1983), and social security programs (Cutright 1965). The assumption driving such analyses is that a single multivariate model (or theoretical explanation) should apply to all countries. Unlike some other analytical strategies discussed later in this paper, the aim is not to test whether findings in one country can be generalized to other countries, but instead to develop a single model based on the pooled data from various countries. Countries are thus used to increase the level of variance in the main variable of interest (and the number of degrees of freedom) in order to make possible the analysis of its covariates. It is precisely this type of analytical strategy that has fueled the debate on case- versus variable-oriented approaches (referred to in the introduction). Without venturing into this debate, it should be said that while the aggregate-level research strategy has led to some excellent studies of the relationships between various components of the macro-structure of societies, it has failed to consider possible cross-national differences in the degree of within-country variation. In other words, this research strategy tends to emphasize the analysis of measures of central tendency (usually the mean) at the expense of measures of dispersion, and as such raises the problem of ecological fallacy.⁷

But this type of research strategy also raises some other issues, namely the treatment of outliers and the reliance on country dummies. As in all statistical analyses, outliers are a potential threat to the statistical validity of results. But while a small percentage of outliers may not significantly affect the results when using very large samples (typically, at the individual-level), outliers may easily affect the results when dealing with small samples of aggregate data. And while measurement error or a lack of cross-national comparability may be at stake, outliers may also indicate omitted variables. In this

⁷ Ecological fallacy occurs when it is inferred that patterns of association between variables, observed at the aggregate level, are also found at the individual level among individuals within those areas (see: <http://www.ucc.ie/ucc/research/crc/draftGISdip/maup-group5/tstd006.htm>).

respect, Przeworski and Teune (1970) suggest investigating which variable(s) account(s) for the outlying position of a specific country: ‘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 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.⁸ 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 a whole set of other determinants). Thus, while the pooling of country data allows social scientists to analyze relationships between macro-characteristics, 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 fact, as will be discussed below, the use of country dummies and the resulting ‘invisibility’ of outliers are not restricted to multivariate analyses of aggregate data but are also found in multivariate analyses of individual-level data.

Individual-level research strategies

Unlike the previous approach, individual-level research strategies are carried out at the micro-level. Studies relying on this type of research strategy aim at describing cross-national similarities or dissimilarities, generalizing results cross-nationally by testing whether results obtained on the basis of one country can be replicated in other countries,

⁸ Country dummies appear in so-called fixed effect models. For more details on this type of statistical analysis, see: Beck and Katz (1995) and Hannan and Young (1977). See also the on-line document from Nielsen (1999).

or testing a general model by pooling data from various countries. For example, Iacovou (2000) uses micro-data from the European Community Household Panel in order to describe patterns of living arrangements among elderly people. Savolainen et al. (forthcoming) 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. And Blanchflower and Oswald (1997) use micro-data from 14 countries to test the hypotheses that the well-being of young people has declined since the 1970s.

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 results are compared across countries. Examples of such parallel analyses include the cross-national analysis of gender gap (Gornick and Jacobs 1998), the analysis of men's and women's consciousness of gender inequality (Davis and Robinson 1991), and the analysis of kinship and social networks (Hollinger and Haller 1990). In a descriptive context, this 'parallel' technique allows the researcher to describe similarities and dissimilarities across countries in the main variable of interest, for instance, in the patterns of living arrangements of young adults (Iacovou 1998). In a multivariate context, this parallel technique allows researchers to examine the similarities and dissimilarities across countries in terms of relationships between variables. For example, Blau and Kahn (1992) analyze the determinants of gender earnings gap, and Ishida, Muller, and Ridge (1995) analyze the relationship between social class and education. One interesting point to raise here is that such analyses typically involve only a small number of cases, 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). A careful selection of countries can, in fact, bring a very interesting theoretical dimension to an analysis. For example, Gornick and Jacobs (1998) justify their choice of seven countries by the fact that they cover different social welfare regimes, and that these welfare regimes are in turn expected to affect the main variable of interest, gender gap. What is furthermore interesting in this last example is that public policies are not measured directly, but

indirectly, through the comparison of different countries. I will come back to this aspect of cross-national research later in this paper.

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 fixes the regression coefficients across countries. This second methodology shares, therefore, some similarities with the multivariate analysis of aggregate data described above. 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.

In multi-country analyses of individual level data, the emphasis is obviously on micro-level relationships. As pointed out in the theoretical section, there has been, however, an increasing call for the inclusion of macro-level variables in micro-data analyses, including the characteristics of schools and neighborhoods. Unfortunately, so far this development has been mainly confined to single-country studies. The Blanchflower (2000) study referred to above is an exception in that a macro-indicator (the countries' unemployment rate) is added to the micro-level model. As will be discussed below the inclusion of both macro-level and micro-level variable is usually confined to single-country analyses and is rarely used in cross-national analyses. Having said this, several scholars have called for the integration of macro-level variables, or contextual variables. 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).

Multilevel research strategies

Multilevel analysis is an attempt at integrating micro- 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. The first major example of multilevel analysis consisted in a reanalysis of the educational achievement of children exposed to different teaching styles in Britain (see Aitkin, Anderson, Hinde 1981).^{9,10} In recent years, two main groups have taken the lead in developing software, and in contributing to the methodological literature, in this field: The Longitudinal and Multilevel Methods Project (LAMMP) at Michigan State University¹¹, and the Multilevel Models Project at the Institute of Education in London.¹² 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.¹³

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 out earlier, multilevel analysis has not yet been extensively used in cross-national research. Second, not all studies using multilevel data have relied on hierarchical models. Ordinary least square regression is still often used despite the fact that it results

⁹ For further details, see: <http://www.ioe.ac.uk/multilevel/mlintro.html>

¹⁰ 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 residue of poorly specified individual level relationships.

¹¹ See: <http://www-personal.engin.umich.edu/~gibsong>

¹² See: <http://www.ioe.ac.uk/multilevel/>

¹³ For more details, see: <http://www2.chass.ncsu.edu/garson/pa765/multilevel.htm>, Bryk and Raudenbush (1992) and Hox (1995).

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.¹⁴ In the United States, several surveys have been geocoded, thus making it possible to link individual-level surveys with census data. Examples are numerous and include the National Longitudinal Survey of Youth¹⁵ and the National Longitudinal Survey of Labor Market Experience Youth Cohort. In view of the growing interest in meso- and macro-level effects, some recent surveys have explicitly included questions about the quality of schools and neighborhoods. For example, this is 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, so far this trend seems to have been confined mainly to North America and Britain, and as a result, 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 Entwistle 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 this type of analysis seems to have been very limited so far, it will likely find more applications, especially in view of the increasing availability of cross-national datasets.

¹⁴ For a discussion of the adequacy or inadequacy of census tracts, see Brooks-Gunn, et al. (1993) and Furstenberg and Hughes (1997).

¹⁵ See: <http://stats.bls.gov/nlsdata.htm>.

PROMISING AVENUES OF RESEARCH

In this last section of the paper, I first want to discuss the promising avenues of research offered by cross-national longitudinal data, and second, 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 was in part deliberate (I wanted to keep longitudinal examples for this last section), but this also reflected the fact that the large majority of comparative datasets are cross-sectional. In recent years, two cross-nationally comparable panel datasets have become available (PACO and ECHP), and a third one is currently being developed (CHEP):

- PACO (Panel Comparability project) is a set of harmonized longitudinal surveys that includes the US Panel Study of Income Dynamics, the German Socio-economic panel, the British Household Panel Survey, and other panel surveys from Belgium, France, Hungary, Luxembourg, Poland, Spain, and Sweden.¹⁶
- ECHP (European Community Household Panel) is a recent panel survey that has been launched in all member states of the European Union in 1994 using the same core questionnaire.
- CHEP (Consortium of Household Panels for European Socio-Economic Research) includes most of the above panel surveys, with data from 14 European Union countries, Poland, Hungary, Canada and the United States. The comparative micro-level database will also be linked to macro and institutional data.

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 dynamic analyses of key variables.¹⁷

¹⁶ The French and Spanish surveys are regional ones.

¹⁷ For a more complete discussion of panel surveys and retrospective surveys, see Lillard and Waite, 1990.

Longitudinal surveys have received great 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 studies using such data are numerous including the analysis of patterns of women's labor force transitions in connection with childbirth (Gustafsson et al. 1996), patterns of income mobility (Fabig 1998; Crews and Burkhauser 1997), patterns of social exclusion (Robson, Dex, Wilkinson and Salido 1998), the analysis of women's first union formation in the USA, Canada, and Sweden (Goldscheider, Turcotte and Kopp 2000), and the cross-national analysis of retirement patterns (Jimenez-Martin, Labeaga, Granado 1999). But although examples of cross-national analysis may be found, analyses of cohort and life-course dynamics are still very sparse in the comparative literature. The availability of recent datasets has thus created new and very promising avenues of research. Two such avenues are prominent. First, there is the dynamic analysis the individual's domains of life, namely, an individual's health, living arrangement, education, work, income, and wealth, and the relationships between these different domains of life. Examples include the dynamic analysis of individuals' disability and daily limitations, and their relationships with patterns of work, retirement, and time use; the dynamic analysis of poverty and income trajectory, and their relationships with family formation, living arrangement, and migration history; and the dynamic analysis of social mobility and employment history, and their relationships with family background, family formation, and wealth. The challenging issue here is the understanding of the intricacies of personal trajectories, and the short or long-term impact of key events or circumstances. For example, what is the impact of teenage childbearing on subsequent sexual and cohabiting partnerships, and subsequent employment trajectory? What is the impact of childhood poverty on educational achievement, subsequent health, and subsequent prospects for social mobility? And what is the impact of caring responsibilities on employment and income trajectories? While these questions have been asked in a single-country context, comparative research offers the opportunities to ask the extent to which the impact of these various events or circumstances are similar or dissimilar across countries, and the extent to which the experiences of different cohorts are becoming cross-nationally more, or less, alike.

The second promising avenue of research is the dynamic analysis of key age-graded transitions, namely the transition to adulthood, the transition to mid-life years, and the transition to older ages. The single-country literature has pointed out the increasing variability, ‘individualization’, and segmentation of life courses (Rindfuss, Rosenfeld, 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, have no longer a clear sequence, have lost their traditional age gradation, and have even 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 life-courses of different cohorts, longitudinal cross-national data is 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 age-graded transitions between life-domains socially organized? How do life courses 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, 2000; Billari et al. 2000; 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 link between public policies and individual life courses 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.¹⁸

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),¹⁹ longitudinal surveys do not routinely collect information on eligibility to, and receipt of, social security and other social benefits.²⁰ 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 usually do not collect the type of data that allows one to directly test this assumption. In a world where everybody would be eligible to benefits regardless of citizenship, employment history, and social security contribution, and in a world where everybody would claim such benefits, such a lack of data would not be a problem. The empirical literature, however, proves otherwise, including a high proportion of non-eligible individuals, and a high proportion of non-claimants (Miller and Sanders, 1997; Charette and Meng, 1994).²¹ For example, McRae (1991) has shown that among women who were employed while being pregnant in Britain in 1987-88, a significant proportion of them ended up not being eligible for maternity benefits, while another significant proportion were eligible but did not claim maternity benefits. As such, there is a potential disconnection between theory and data.

¹⁸ The only exception is 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).

¹⁹ ‘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).

²⁰ An interesting development in this respect is the cross-national modeling of tax and social security benefits in the European Union. The ‘Euromod’ will allow the estimation of the effects of changes in the tax/benefits systems on income inequalities (see: <http://www.econ.cam.ac.uk/dae/mu/emod.htm>).

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 levels of 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-income, or unemployed people. Local governments, local markets, communities, and employers may also be offering 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 (Hofferth et al. 1991; 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. And yet, considering the current efforts devoted by the European Commission to promote family friendly practices among employers, such a dimension should not be ignored (see the work of the European Network ‘Family and Work’).²²

Several questions follow: to what extent do local or employer benefits and services introduce inequalities within countries? To what extent are such types of benefits and services observed across all industrialized countries or only in some of them? How are such local or private benefits combined with national benefits, and how does this private-public mix affect the life course of individuals? How does it affect individuals’ transitions at different stages of their life? And how does it affect the dynamics of family formation, employment, and income? 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.

²¹ One should also add to this list a small proportion of fraudulent claimants.

²² European Network ‘Family and Work’: http://europa.eu.int/comm/employment_social/family-net/en/frameset.htm

CONCLUSION

In this paper I have almost gone full circle in starting with examples from the social mobility field, in order to illustrate early comparative studies, and in ending the paper by drawing attention to the importance of longitudinal studies. And I have definitively gone full circle in raising the importance of theory in comparative research, early in this paper, and by ending 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 PACO and 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 push further the analysis of the dynamics of life courses, and especially to answer the question of the extent to which life course experiences vary across advanced industrialized societies, and the extent to which these life course experiences are converging or diverging across countries. 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 approaches 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. 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’ choices, opportunities, and decisions. 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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Table 1. Selected cross-national datasets¹

Type	Name	Topics	Coverage	Years
Aggregate data	Comparative welfare states dataset	Welfare statistics	19 countries	1960--94
	International crime (victim) survey	Crime statistics	56 countries	1989, 1992, 1996/7
	OECD education database	Education statistics	OECD countries	1995--6
	OECD health database	Health statistics (1200 indicators)	OECD countries (29)	1960--97
	OECD social expenditure database	Social expenditures	OECD countries (except Hungary and Poland)	1980--96
	Unesco education database	Education statistics	World	1970--97
	United Nations Surveys on crime trends and the operations of criminal justice systems	Crime statistics	World	First survey (1970), sixth survey (1995-97)
	WHO health database	Basic health indicators	World	1980--97
	World handbook of political and social indicators	Various indicators	155 countries	1948--82
Individual/ harmonized data	Comparative Analysis of Social Mobility in Industrial Nations (CASMIN)	Social class, education, household composition	12 countries	1970-95
	Luxembourg Employment Study (LES)	Employment status	16 countries	1990s
	Luxembourg Income Study (LIS)	Sources of income, household composition	26 countries	1960s- (up to 4 waves)
	Multinational Time Use Study (MTUS)	Time-use	20 countries	1960s, 1970s, 1980s, 1990s
	PACO (Panel Comparability) Project	Income, demography, labor force, education, housing, etc.	10 countries	1968---
	CHER (Consortium of Household Panels for European Socio-Economic Research)	Income, demography, labor force, education, as well as macro-level and institutional data	18 countries	1968---
Individual/ cross-national surveys	Comparative study of electoral systems (CSES)	Political identification, attitudes towards the	Currently 12 countries	1996-2000, 2000-2003

Type	Name	Topics	Coverage	Years
Demographic and Health Surveys		government, etc. Family planning, maternal and child health, child survival, reproductive health, fertility history	70 countries	1984/9, 1988/93, 1992/9
Eurobarometer surveys		Immigrants, youth, drug, health, foreign relations, international trade, environment, regional identity, poverty, education, etc.	12-15 countries. Since 1990, 13 Central and Eastern European countries are covered by a special survey.	1970--- (2-5 times per year)
European Community Household Panel (ECHP)		Income, living conditions, housing, health and work, household composition	15 countries	1994---
Fertility and family surveys		Fertility, migration, contraception, partnership, values	20 countries	1992-5
Health behavior of school-aged children		Children's physical, social and emotional well-being. Family, school and peer settings and relationships.	Currently 32 countries	1983/4, 1987/8, 2001/2
International Social Survey Programme (ISSP)		Theme varies yearly: government, social network, social inequality, family, work, religion, environment, national identity	31 countries	1985 – (yearly)
Third International Mathematics and Science Study (TIMSS)		Teacher, student, school questionnaire. Attitudes, beliefs, organization, performance, curriculum, etc.	Initially 12 countries, 41 countries in 1995 survey	1960, 1970, 1981/2, 1983/6, 1995, 1999
World Bank Living standard measurement surveys		Income, consumption, health, education, migration	21 countries	1985--
World Fertility Surveys		Fertility, family planning, infant and child mortality	60 countries	1972 - 84
World Value Surveys		Environment, social network, technology, family,	65 countries	1981, 1990/1, 1995/6, 1999/2000

Type	Name	Topics	Coverage	Years
		gender, children, government, religion, national pride, etc.		

Notes:

- 1- Information on these surveys may be found at the following web sites: (arranged by alphabetical order). These web sites were all valid at the time of writing this article. Some changes may have occurred subsequently.
- o Comparative Analysis of Social Mobility in Industrial Nations (Casmin): <http://hicks.nuff.ox.ac.uk/Users/yaish/npsm/documents.htm>
 - o Comparative study of electoral systems (CSES): <http://www.umich.edu/~nes/cses/cses.htm>
 - o Comparative welfare states dataset: <http://www.lis.ceps.lu/compwsp.htm>
 - o Consortium of Household Panels for European Socio-Economic Research (CHER): no web site available.
 - o Demographic and Health Surveys: <http://www.macrostint.com/dhs/>
 - o Eurobarometer surveys: <http://europa.eu.int/en/comm/dg10/infcom/epo/eb.html>
 - o European Community Household Panel (ECHP): <http://www-rcade.dur.ac.uk/echp/>
 - o Fertility and family surveys: http://www.unece.org/deap/pau/f_home1.htm
 - o Health behavior of school-aged children: <http://www.ruhbc.ed.ac.uk/hbsc/>
 - o International crime (victim) survey: <http://ruljis.leidenuniv.nl/group/jfcr/www/icvs/Index.htm>
 - o International Social Survey Programme (ISSP): <http://www.issp.org/>
 - o Luxembourg Employment Study (LES): <http://www.lis.ceps.lu/LES/les.htm>
 - o Luxembourg Income Study (LIS): <http://www.lis.ceps.lu/access.htm>
 - o Multinational Time Use Study (MTUS): <http://www.iser.essex.ac.uk/mtus/index.html>
 - o OECD education statistics: the latest version is available on CD-Rom (at cost), the previous version is available on-line: http://www.oecd.org/els/stats/edu_db/edu_db.htm
 - o OECD Health statistics: is available on Cd-Rom (at cost): <http://www.oecd.org/els/health/software99.htm>
 - o OECD social expenditure database: available on CD-Rom (at cost): <http://electrade.gfi.fr/cgi-bin/OECDBookShop.storefront/EN/product/811998143C3>
 - o The PACO (Panel Comparability) Project: <http://www.ceps.lu/paco/pacopres.htm>
 - o Third International Mathematics and Science Study (TIMSS): <http://nces.ed.gov/timss/>
 - o UNESCO education database: <http://unescostat.unesco.org/en/stats/stats0.htm>
 - o United Nations Surveys on crime trends and the operations of criminal justice systems: <http://www.uncjin.org/stats/WCTS/wcts.html>
 - o WHO health database: <http://www-nt.who.int/whosis/statistics/reported/reported.cfm?path=statistics,basic,reported&language=english>
 - o World Bank Living standard measurement surveys: <http://www.worldbank.org/html/prdph/lsm/lsmshome.html#top>
 - o World fertility surveys: No web site available
 - o World Handbook of political and social indicators: available from ICPSR <http://www.icpsr.umich.edu/cgi/archive.prl?num=7761>
 - o World value surveys: <http://wvs.isr.umich.edu/>