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European Data Watch

This section will offer descriptions as well as discussions of data sources that may be of interest to social scientists engaged in empirical research or teaching courses that include empirical investigations performed by students. The purpose is to describe the information in the data source, to give examples of questions tackled with the data and to tell how to access the data for research and teaching. We will start with data from German speaking countries that allow international comparative research. While most of the data will be at the micro level (individuals, households, or firms), more aggregate data and meta data (for regions, industries, or nations) will be included, too. Suggestions for data sources to be described in future columns (or comments on past columns) should be send to: Joachim Wagner, University of Lueneburg, Institute of Economics, Campus 4.210, 21332 Lueneburg, Germany, or e-mailed to ⟨wagner@uni-lueneburg.de⟩.

The Swiss Environmental Survey 1994

By Axel Franzen

1. Introduction

Concern for the quality of the natural environment has been on the political agenda in most industrialized countries for several decades. Even though public attention to environmental problems has decreased in the last few years and other problems – economic recession, unemployment and of course terrorism –currently receive more attention, public and political concern for the environment will also remain high in the future. This ongoing concern is reflected in increased research efforts. The bulk of it takes place within the natural sciences but the topic also receives increasing attention within the social sciences. For good reason: environmental problems are caused by human behavior, by individuals' resource consumption, mobility behavior and by their demand for housing space to name just a few. Thus, any kind of policy action that aims to reduce CO_2 emissions, save resources,

and protect forests, swamps, endangered species or the Alps needs to redirect human behavior. How this can be accomplished, which incentives lead to which outcomes, which laws and regulations will be accepted and obeyed is the subject of scientific social research. Many of these questions are empirical questions and answering them requires relevant data sources.

As within almost any field, informative data sources are rare. The International Social Survey Program (ISSP) which conducts random sample surveys in almost 30 countries focused in 1993 on environmental topics and repeated the survey in 2000. Also the Eurobarometer, a random sample survey conducted in all countries of the European union regularly contains a few questions on environmental issues. Both data sources are valuable for empirical research, particularly because they are conducted repeatedly in various countries and thus enable international comparison. However, the information available in these data sets is limited. The ISSP is a written survey combined with national face-to-face or telephone surveys that focus on various other topics. It is (and has to be) rather short. The Eurobarometer is predominately meant to survey the opinion of Europeans towards aspects of European integration and therefore has very little room for questions dealing with the environment.

Much richer sources of information are provided by surveys that focus exclusively on environmental issues. Such a survey is the Swiss Environmental Survey 1994 which will here be described in detail.

2. The Swiss Environmental Survey

The Swiss Environmental Survey consists of 3019 telephone interviews of Swiss citizens who were 18 years or older and who resided permanently in Switzerland during the period of data collection. Households' addresses and phone numbers were randomly drawn from the national telephone register. The telephone register lists households. If more than one individual above 18 lived in the household the interview was conducted with the person who had the most recent birthday. This procedure ensures random selection within the household. The survey was conducted between October 1993 and February 1994. The telephone interview contained roughly 170 questions and took on average 45 minutes. Participants of the telephone interview were asked to return a follow up written questionnaire. This written questionnaire contains all questions of the 1993 ISSP survey on environmental attitudes and in addition items from a European supplement of the ISSP, the REAP-questionnaire. Overall, the written questionnaire contained about 75 questions. Switzerland is tri-lingual. Thus, the telephone interviews as well as the written questionnaire were conducted in German

(77.5%), French (18.4%), and Italian (4.1%). The telephone part of the survey had a response rate of 52.6%. 88.3% of those who completed the telephone interview returned the written questionnaire. The data from the telephone interviews and the written questionnaires were combined into one data set.

The Swiss Environmental Survey was financed by the Swiss National Science Foundation. The survey was conducted under the supervision of Andreas Diekmann and Axel Franzen (Sociology Department of the University of Bern) within the research project entitled „Investigations of Environmental Attitudes and Behavior with the Swiss Environmental Survey". Parts of the telephone survey were constructed in cooperation with other research teams in Switzerland, in particular with Hanspeter Kriesi and Danielle Bütschi (Political Science Department of the University of Geneva), Klaus Foppa and Carmen Tanner (Psychology Department of the University of Bern), Heinz Gutscher and Hans-Joachim Mosler (Social-Psychology Department of the University of Zurich) and Urs Dahinden (Federal Institut of Technology in Zurich). This interdisciplinary cooperation is also reflected in the topics included in the survey. Much of the survey deals with the measurement of environmental attitudes, the perception of environmental problems, respondents knowledge of environmental problems, their acceptance of possible political actions and their environmental behavior. In particular, the survey contains detailed questions on how respondents commute to their workplace or educational institution, in case they have not yet entered the labor market. The survey also includes detailed socio-demographic information.

3. Selected Studies that use the Swiss Environmental Survey

The Swiss Environmental Survey has been used in several publications. The level of environmental concern, knowledge and behavior of the Swiss population is described and analyzed in Diekmann & Franzen (1997a, 1997b). One of the major results of the study is that individuals' level of environmental concern is only moderately correlated with actual ecological behavior. Thus, respondents with higher levels of concern recycle more often e.g. paper or aluminum and pay more attention to ecological aspects when shopping. However, when it comes to more cost relevant behavior like saving energy or using public transportation instead of driving a car, no difference with respect to the level of environmental concern was found. This result supports the „low-cost" hypothesis: the correlation between environmental concern and ecological behavior depends on the costs of the alternatives. For behavior with low cost alternatives (e.g. recycling instead of not recycling it) environmental concern matters. But if alternatives become cost

intensive (e.g. using public transportation instead of a private car) environmental concern does not matter.

Other publications focus on international comparisons of environmental concern (Diekmann & Franzen 1999, 2002). Using data from the ISSP 1993, Diekmann & Franzen showed that those countries with high levels of GNP also have a higher level of global environmental concern, while the perception of local environmental problems is negatively correlated with per-capita GNP. Thus, it appears that preferences for a better natural environment emerge similar to the demand for luxury goods: the demand rises with increasing wealth.

A detailed analysis of the decision to use public transportation versus private cars in commuting to the workplace or in leisure time travel is contained in Franzen (1997a, see also Franzen 1997b, 1998). Most of the analyses show that individuals' mobility behavior has very little to do with their environmental concern. The use of public transportation depends mainly on the relative travel time, convenience and the perceived monetary costs. Thus, public transportation is used by those who live only a short walking distance away from the next bus or train stop, who have to change modes of transportation only very little in order to reach the workplace and where prices for bus or train tickets are perceived to be low (see also Bütschi, Kriesi & Scheiwiller 1996). International comparisons reveal also, that car drivers' demand for mobility depends on the cost of gasoline. Thus, the per capita kilometers driven by car is low in countries with high gasoline prices and high in countries with low gasoline prices (Franzen 1997a, Diekmann & Franzen 1998). However, all of this research does not conclude that environmental concern never has any influence. Franzen (1997a) shows that individuals with high environmental concern have a higher probability of accepting political measurements (e.g. ecological taxing and regulations) in order to protect the environment. Hence, environmental concern matters when it comes to the acceptance of political programs but matters very little when it comes to behavior in daily life. A similar result was also obtained by Truffer et al. (1998), who report that a majority of Swiss citizens would favor a transition from gasoline cars to electric vehicles. However, electric vehicles have only a marginal market share. Kriesi (1998, 1999, 2001) used the Swiss Environmental Survey in combination with several follow-up panel waves to study the change and development of public opinion towards environmental policies.

4. Data Access

In addition to the publications described there are still a lot of issues for which the Swiss Environmental Survey can be used. The data set is easily available from the Swiss information and data archive service for the social

sciences (SIDOS) 13, ruelle Vaucher CH, 2000 Neuchâtel, Switzerland (www.sidos.ch). The data set is stored in an SPSS file, but can also easily be transferred to other statistical programs. The survey is accompanied by a detailed code book (Diekmann & Franzen 1995) which includes variable lists, variable labels, the question wording of the telephone interview as well as of the written questionnaire, frequency distributions, comments on how the data were collected, on weights and comparisons with other relevant data sources. In addition to further scientific investigations the data set can also be recommended to students who engage in any applied research method classes. Although, the Swiss Environmental Survey focuses on environmental issues, the data set contains a great deal of socio-demographic information that provides the opportunity of investigating other topics such as earning regressions, analyses of divorce and marriages (Diekmann & Schmidheiny 2001), fertility behavior, the analysis of individuals' membership in environmental organizations or individuals work ethic (Dürrenberger et al. 1995). Furthermore, the Swiss Environmental Survey has been used for methodological studies. Thus, Hill & Kriesi (2001a, 2001b) used the survey in combination with several follow-up studies to investigate opinion stability in survey research.

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