

## **The Luxembourg Income Study**

The Luxembourg Income Study (LIS), a research center and microdata archive, was founded in 1983 by Timothy Smeeding, Lee Rainwater, Gaston Schaber and a team of multi-disciplinary researchers in Europe. With support from the Luxembourg government, LIS and its staff became an independent non-profit institution in 2002. LIS is organized as a consortium of countries with financing from the national science foundations and other funders in the participating countries and from the Luxembourg government. LIS is now directed by Janet Gornick, a political economist and sociologist based in the United States, and Markus Jantti, an economist in Finland.

LIS has four goals:

- 1) to harmonize cross-national data, thus relieving researchers of this task, relying on an expert staff that carries out the harmonization work and provides support services for users;
- 2) to provide a method allowing researchers to access these data under privacy restrictions required by the countries providing the data;
- 3) to create a system that quickly allows research requests to be received and results returned to users at remote locations; and
- 4) to promote comparative research on the economic and social wellbeing of populations across countries.

LIS now includes data from thirty countries from Europe, North America, Australasia, the Middle East and Asia. The database contains over 150 datasets, organized into five time periods (known as waves) spanning the years 1968 to 2002. (A list of countries and years for which data

are available is located at <http://www.lisproject.org>.) The data can be accessed in multiple ways. Researchers can write programs (in SPSS, SAS, or STATA) and send them via electronic mail directly to the LIS server; results are returned to the researcher, with average processing time under two minutes. There is also a web-based tabulator that allows users to construct tables, using key words, and the LIS website provides a set of country-level indicators (known as Key Figures), including measures of inequality and poverty for each LIS dataset.

Extensive documentation for each dataset details technical aspects of the original survey, a record of the harmonization process, and institutional information on tax and transfer programs corresponding to the microdata variables. The LIS website also houses a comparative welfare states database, and a family policy database; both contain an array of country-level policy indicators. These policy databases are widely used by LIS's microdata researchers, who often seek to link policy variables to micro-level outcomes.

Reports based on LIS data have appeared in books, journal articles and dissertations, and are often featured in the popular media. Each completed study is published in the LIS Working Paper series, which currently numbers more than 450 papers. The LIS website offers a Working Papers search engine, a complete set of abstracts, and most of the papers in full text.

LIS has recently expanded by adding a wealth data project. The Luxembourg Wealth Study (LWS) established a network of producers of microdata on household wealth and has, like LIS, harmonized the country-specific data into a common template, including comparable measures of net worth and its components. The LWS project will help to set guidelines for wealth data producers, as the LIS project has with income data. The wealth data are available for public access, via remote access, as of late 2007.

LIS conducts annual training workshops that introduce researchers to the database and to cross-national research on wages, income, employment, and social policy. Since 1988, over 500 scholars have attended the workshops. LIS publishes a newsletter twice yearly, which is mailed to over 1400 scholars in thirty-five countries.

## **Uses and Results**

The LIS microdatasets include income, employment, and demographic variables at the person- and household-level. Since LIS's inception, these microdatasets have been used by over 1000 researchers in many countries to analyze economic and social policies and their effects on outcomes including poverty, income inequality, employment status, wage patterns, gender inequality, family formation, child-wellbeing, health status, immigration, political behavior and public opinion.

One of the most fruitful uses of LIS is for the study of income distributions across the richest countries of the world. Figure 1, derived from LIS's Key Figures, summarizes income distributions in the LIS countries, using four measures of inequality (ratios of 10<sup>th</sup> and 90<sup>th</sup> centiles to the median; the 90-10 "decile ratio", and the Gini coefficient). This figure shows clearly that income distributions vary dramatically across countries, with variation seen at both the bottom and the top of the distributions. The figure also reveals loose clusters of countries, with lower levels of inequality in the Nordic countries, moderate levels in most of the continental European countries, and higher levels in southern Europe and in the English-speaking countries of Australia, Canada, Ireland, the United Kingdom and, most especially, the United States. Notably, the former communist countries of eastern Europe report remarkably varied levels of income inequality.

**\*\*\*INSERT FIGURE 1 HERE \*\*\***

LIS-based research has catalyzed changes in national policies—for example, British policy toward children, based on the work of Jonathan Bradshaw (Bradshaw and Chen 1997)—and has informed the United Nations, the OECD, and other major bodies about poverty, inequality, and employment outcomes across countries. Results based on LIS have been published in and lauded by *Science* (Butz and Torrey 2006), *The Lancet* (Lynch et al. 2001) and the major academic journals in the fields of economics, political science, sociology, comparative public policy, and social measurement. A twenty-year anniversary volume, published by *The Socio-Economic Review* in 2004, further summarizes and explains the accomplishments of LIS (Smeeding 2004).

### **The Future**

In 2006, LIS completed a comprehensive internal review of its data template and harmonization rules in order to improve the quality of the LIS data and to identify ways to increase cross-country comparability in response to changes in the last two decades in the participating countries' social policies and survey content. This review also led to a restructuring of the pension and family benefits data, an expansion of the person-level data, and a substantial increase in the number of labor market variables included in LIS. These revisions will enable the many researchers who use LIS primarily for employment research to go further in their comparative analyses.

During 2007, LIS anticipates adding new datasets for all of the participating LIS countries; the newest wave of data (LIS's sixth wave) will include datasets from approximately 2004. In addition, LIS anticipates adding three new countries in 2007: Portugal, New Zealand

and Turkey. LIS will continue to work to bring in datasets from Korea, Japan and other Asian countries.

LIS's income surveys have mostly come from high-income countries, as classified by the World Bank. Of the thirty countries now participating, twenty-one are high-income; nine are upper-middle-income (Czech Republic, Estonia, Hungary, Mexico, Poland, Romania, Russia, Slovak Republic, Taiwan). One of LIS's main priorities, over the next five years, is to substantially increase the inclusion of middle-income countries. LIS intends to add microdata, at multiple points in time, from ten middle-income countries, including, for example, Brazil, Bulgaria, Chile, China, Indonesia, and South Africa.

## References

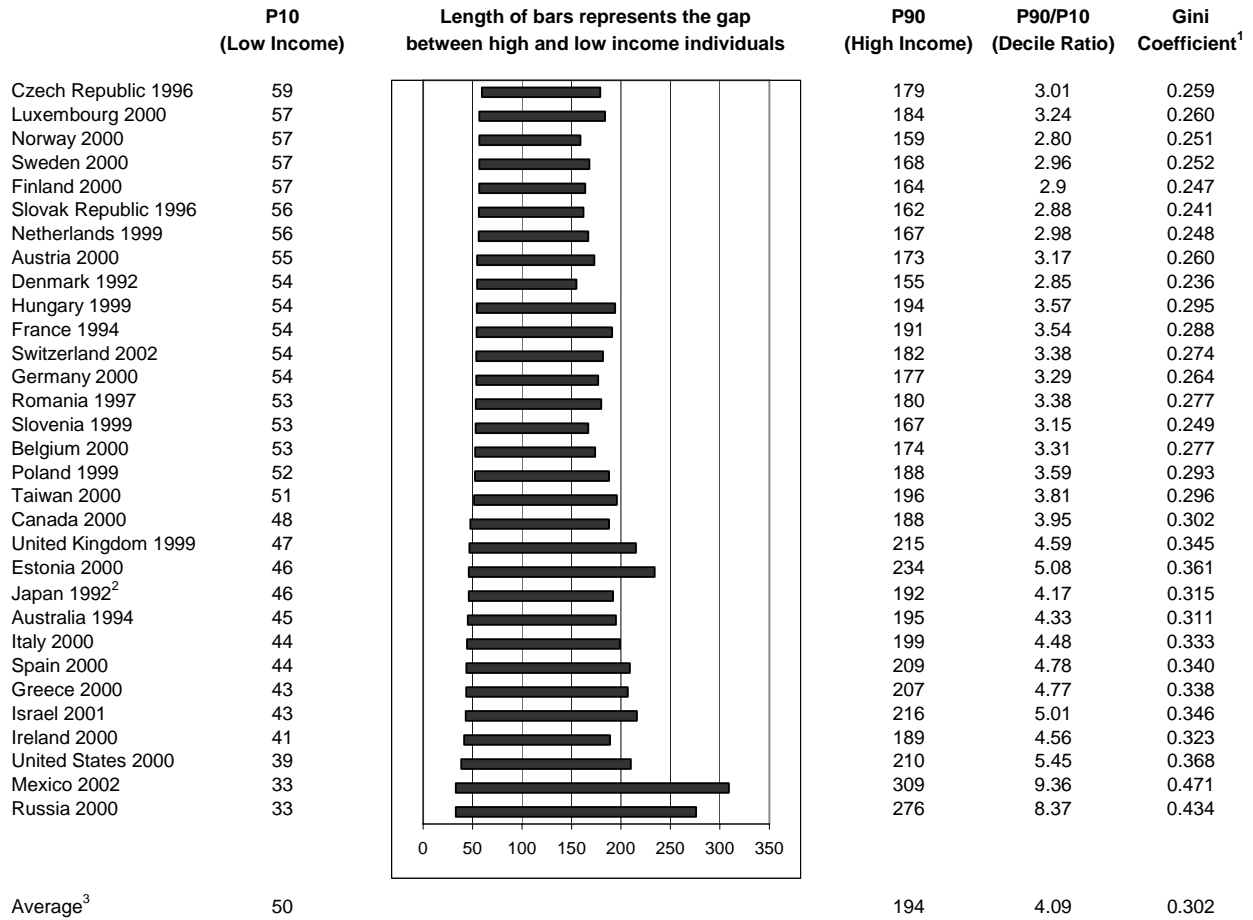
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**Figure 1. Social Distance and Social Exclusion**  
 (numbers given are percent of median in each nation and Gini coefficient)



Source: Authors' calculations from the Luxembourg Income Study (<http://www.lisproject.org/keyfigures.htm>).

Notes: <sup>1</sup>Gini coefficients are based on incomes which are bottom coded at one percent of disposable income and top coded at ten times the median disposable income.

<sup>2</sup>Japanese gini coefficient as calculated in Gottschalk and Smeeding (2000) from 1993 Japanese Survey of Income Redistribution.

<sup>3</sup>Simple average.