

SOCIAL SECURITY STATISTICS FROM THE GLOBAL PERSPECTIVE: ILO EXPERIENCE

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I. Introduction: Measuring decent work and its social protection dimension

Social security has always been an important element of the mandate and the activities of the ILO. Extending social security coverage and enhancing its effectiveness is one of the strategic objectives of the ILO's "decent work" agenda.¹

"Decent work" is a multidimensional concept: it promotes policies, which ensure that all men and women have secured opportunities to "decent" employment and income, enjoy fundamental rights at work, have access to social protection whenever necessary, and have their "voice" heard through the institutions of democracy and social dialogue.

Development of labour statistics has also always been an important part of the ILO's mandate. It was always understood that high quality national labour statistics are a precondition for sound social policies good governance. Furthermore, the importance of internationally comparable statistical data was also strongly recognized. For an organisation like the ILO, compiling and publishing internationally comparable statistical indicators, which measure to what extent different goals promoted by the organisation are actually achieved in member countries, is actually one of the few available ways to effectively promote best, desirable practices in a given field.

While the ILO has a long history of gathering and publishing data on social security expenditure and financing (Cost of Social Security Inquiry initiated already in 1949), it has never succeeded, despite the efforts, in developing internationally accepted standards of social security/social protection statistics, like it did in other areas of labour statistics. Lack of such commonly accepted standards undermines to a large extent the efforts to compile comparable sets of data and indicators. Additionally, there is growing demand for information beyond that related purely to expenditure and financing of social security: there is growing demand for information on how many have actual access to different forms of protection and what are the levels of protection enjoyed by people in different countries.

The paper presents the most recent efforts of the ILO to meet the above demands by developing new tools and methods in social security statistics. The work is at the same time part of the wider effort in the ILO aiming at establishing a basic set of decent work indicators² and potentially building also aggregated indices combining those indicators (into i.e. "decent work index")³.

¹ Cf. ILO (1999): Decent Work: Report of the Director General, International Labour Conference, 87th Session, Geneva.

² See: D. Ghai (2002): Decent work: Concepts, models and indicators, Discussion paper 139, International Institute for Labour Studies, Geneva, 2002 and R. Anker, I. Chemyshev, Ph. Egger, F. Mehran, and J. Ritter (2002): *Measuring Decent Work with Statistical Indicators*, ILO Policy Integration Department, Statistical Development and Analysis Group, Working Paper No. 2, Geneva.

³ See: G. Standing (2002), From People's Security Surveys to a Decent Work Index, *International Labour Review*, Vol. 141, No. 4 and F. Bonnet (2002): *WHITHER SOCIAL SECURITY? A Response Through Indicators*, IFP-SES, ILO, Geneva.

II. Social protection indicators: measuring coverage and effectiveness

Social security plays an essential role as an instrument to prevent and reduce poverty through income replacement and support and through providing benefits in kind like health care.. However, our knowledge about how social security systems actually work in different socio-economic environments and their effects is surprisingly limited. This deficit becomes all the more obvious when renewed policy concerns about poverty reduction and the extension of social security coverage emerge - as is currently the case. Both, the limited knowledge about the efficiency of social security and increasing political awareness indicate that the need for a sound database as a basis for policy development is increasing.

The ILO has initiated a major new focus in the area of social security statistics, and has launched on an exploratory basis a series of **Social Protection Expenditure and Performance Reviews (SPERs)**.⁴ For a number of selected countries (starting with Benin, Chile, Nepal, the Philippines, Poland, Slovakia, South Africa, Thailand), the SPERs provide an in-depth account of various aspects of social security. Based on existing statistics and new statistical methods, the SPERs provide information about the structure and level of total social expenditure, the extent of coverage and exclusion, the levels of protection and its quality. The SPER framework includes also a number of indicators of performance with respect to a social security system's effectiveness, efficiency, population coverage, the adequacy of benefit levels and the distributional impact of public social expenditure.

Assessing the performance of social security systems is of major importance for policy makers. Our potential to monitor actual performance of national systems is however usually limited by the availability of statistical data necessary to estimate different indicators. It is also equally important that the data are comparable internationally: this enables to benchmark the performance of national systems against experience of another countries.

Already in 1957, the Resolution Concerning the Development of Social Security Statistics, adopted by the Ninth International Conference of Labour Statisticians stressed the importance of comprehensive and consistent statistical data on social security. The preamble of the resolution underlines that "comprehensive and up-to-date statistics on the nature and extent of social protection afforded are an essential prerequisite for the formulation of policy, the execution of programmes and the appraisal of progress realised in the field of social security". It goes on to state that "social security records in most countries are not used to the full extent of their potentialities". Although considerable progress has been made in the meantime, this statement is still valid today. In particular, there is a significant gap in statistical data that would allow cross-national comparisons, notably for developing countries.

For five decades (1949-1999), the ILO conducted a major survey on social protection throughout the world, the **Inquiry into the Cost of Social Security**. Based on the framework of ILO Convention No. 102 (1952) concerning Minimum Standards of Social Security, and ILO Recommendations Nos. 67 (1944) and 69 (1944), this survey collected data on receipts and expenditures of social security schemes. In order to take account of the wider range of social protection, the methodology and framework of the inquiry was expanded in 1997 to include additional functions and coverage indicators. In addition to the regular publication series, the data collected from 1990-1996 through this inquiry can be consulted on the Cost of Social Security website⁵. In collaboration with the ILO, the EURODATA Research Archive at the Mannheim Centre for European Social Research (MZES), Mannheim/Germany, produced a CD-ROM that assembles data from 1949-1993 for most of the Western and Central European countries.⁶ The data collected has been a unique source of comparative data for professionals in the field and for major reports on social protection, such as the **World Labour Report 2000**⁷. Due to the lack of resources, the inquiry was terminated in 1999. Since then, there are no statistics on core indicators on social security on a global scale.

Now, the ILO is embarking on a fresh effort to improve the statistical knowledge base on social security and to create a new global database on social security. This database sets out to integrate existing statistical concepts and data as far as possible, and fill the remaining gaps by own data collection procedures. The database shall

⁴ For further information, see Cichon et al. (forthcoming 2004): Financing Social Protection, Ch. 7, Geneva: ILO.

⁵ <http://www.ilo.org/public/english/protection/socfas/research/oss/ossindex.htm>

⁶ The data are also available online at <http://www.mzes.uni-mannheim.de/eurodata/oss19491993/>.

⁷ Cf. ILO (2000) Income security and social protection in a changing world, World Labour Report. Geneva .

serve as a quantitative basis enabling the ILO, its constituents and the wider public to analyse and compare macro income and expenditure, performance and coverage trends of national social protection systems. The ILO is currently conducting a pilot study to test the concept of the new database in six countries.

The database covers the four key areas of social protection (across all countries, developed and developing):

1. Range of contingencies covered (scope of coverage)
2. Financing and expenditure
3. Coverage of the population: beneficiaries and protected persons (extent of coverage)
4. Benefit levels (level of coverage)

So far, the statistical basis across these four dimensions is patchy and incomplete, especially for internationally comparable data. For many important aspects on social security, data are hardly available, and they are often difficult to relate to each other given the fragmented landscape of statistical concepts and definitions. Particularly developing countries are inadequately reflected in comparative databases. These deficits prevent analysts and policy makers alike to evaluate and to improve the quality of social protection. Again, these deficits underscore the necessity of a database displaying the features mentioned above.

Four Key Areas Covered by the Database

The following paragraphs take stock of databases currently available covering the four key areas of social protection and the remaining gaps, lay out a methodological concept on how the statistical knowledge base could be improved, and briefly present the approach chosen for the pilot study of the new ILO Social Security Inquiry.

Range of Contingencies

Information on the range of contingencies covered by social security schemes is collected by the International Social Security Association in its SSPTW/SSW database. This database includes social insurance and other schemes covering old age, disability and survivors; sickness and maternity; work injury; unemployment; and family allowances. But it does not cover social assistance schemes addressing general neediness, health care services and private schemes, such as complementary pension schemes. Information on the latter schemes is contained in the database on complementary and private pensions that currently includes 40 countries.⁴ The new ILO Social Security Inquiry attempts to compile information on all the existing schemes providing benefits for all the ESSPROS social protection functions. Additionally, the ILO inquiry will also take into account schemes providing benefits in cash and in kind related to basic education, as these schemes in developing countries play the role equivalent to social protection.

Information about social security schemes and the administering institutions is not only crucial to evaluate the scope of social protection in each country and identify gaps in social protection, but is also of practical importance for the collection of data for the new social security database. Some of the data need to be collected directly from the institutions that manage the social protection schemes, especially data pertaining to the coverage of the population and benefit levels. The experience with the Inquiry into the Cost of Social Security demonstrates that some national ministries of labour have had some difficulties in collecting the required statistics from different institutions, namely data on coverage. Data therefore are collected directly with the administering institutions. This is done in close cooperation with the International Social Security Association.

The inventory of social security schemes should also determine whether there is a central body in the country (e.g. supervisory authority, national association of social security schemes) that collects reliable statistics from each social security institution. Especially for countries with a large number of social security schemes and administering institutions for each branch, these bodies could be used as a clearinghouse; this would facilitate the collection of data for the social security database.

⁴ International Social Security Association (ISSA) and the International Network of Pension Regulators and Supervisors (INPRS) (2002): *Complementary and Private Pensions 2002* (CD-ROM), Geneva: ISSA/INPRS.

Financing and Expenditure

Following the suspension of the ILO's regular Inquiry into the Cost of Social Security, there is no comprehensive and detailed source of data on social security expenditure on a global scale. Nevertheless, information about the financing and expenditure of social security is essential. Examples for central indicators are:

- Public social security expenditure as a percentage of GDP (total, health services, old age pensions);
- Public expenditure on needs-based cash income support as a percentage of GDP;

For industrialised countries, comparable data on the financing and expenditure of social protection are collected and made available by the OECD and Eurostat.⁹ For all other countries, the only available data source is the IMF's Government Finance Statistics.¹⁰ With the 2001 revision of the Government Finance Statistics Manual, the database distinguishes a range of expenditure and finance categories that would partially bridge this gap. To date, however, it is not yet clear how many countries will report their financing and expenditure data with the requested functional disaggregation. Financing data are only available on an aggregate level, and expenditure data follow other subcategories than those normally used by the ILO (branches versus functional classification). In order to achieve the highest possible level of statistical consistency and cost-effectiveness, the ILO is cooperating closely with the Eurostat, the IMF and the OECD. If a sufficient degree of consistency with these frameworks is achieved, data could eventually be extracted directly from respective databases allowing the ILO to concentrate on collecting data from regions not covered by the others.

Other open questions pertain to the treatment of mandatory private expenditure for social protection and tax expenditure. First, given its focus on governments, the IMF framework concentrates on public expenditure, but does not consider private social expenditure. Private expenditure can substitute public expenditure; this is most obvious in the case of mandatory private old age pensions that often are associated with strong government regulation, favourable tax treatment and minimum return guarantees. In spite of this involvement of the state, expenditure of such schemes would be classified as "private". When comparing countries that have organised their social security schemes in different ways, this obviously leads to a systematic bias. It is therefore desirable to include private social expenditure if it is mandatory; this criterion is used as a proxy to determine a substitutive relationship between public and private expenditure. While this practice is in accordance with the ESSPROS concept and the OECD's SOCX database, it has not been followed by the IMF Government Finance Statistics framework. Second, it would also be desirable to include tax expenditure for social security, as this instrument can also substitute direct expenditure. However, although some efforts have been made to estimate the effects of tax policies on social expenditure, the methodology is not yet fully developed and none of the available data sources takes account of these considerations. For the new social security database, it would be necessary to keep these issues in mind, but it is not feasible to systematically include tax expenditure in the methodological framework at this stage.

Coverage

The evidence on social security coverage presented in the World Labour Report 2000 demonstrates both the importance and the potential of meaningful statistics of coverage for policy formulation and evaluation. The extension of social protection on excluded groups of the population has been identified as one of the main policy priorities of the ILO.¹¹ Coverage of the population includes two basic indicators: the number of persons who receive social security benefits at a specific point in time (beneficiaries), and the number of persons who are protected against a risk or contingency (protected persons), both ideally distinguishing between persons protected in their own right and dependants.

Examples for fundamental indicators in this field are in particular

- the proportion of the elderly that benefit from a pension
- the proportion of the labour force that have access to social security in case of unemployment, sickness, maternity, disability and old age

⁹ The OECD's Social Expenditure Database (SOCX) covers all OECD countries. The Eurostat's ESSPROS system of social protection statistics covers the countries of the European Union, Norway, Switzerland and Iceland plus some of the accession countries in Central and Eastern Europe.

¹⁰ IMF (2001): *Government Finance Statistics Manual 2001*, Washington, D. C.

¹¹ Cf. e.g. ILO (2003): *Working Out of Poverty: Report of the Director General, International Labour Conference, 91th Session, Geneva.*

- the proportion of the population that would have access to basic income support schemes if in need
- the proportion of the population that has access to health care

However, the current data situation with regard to this key element is insufficient. Although coverage statistics have been dealt with extensively in the Resolution Concerning the Development of Social Security Statistics and in subsequent efforts to set up some minimum requirements for social security statistics¹², it is difficult to find comparable national level data for most countries. The last wave of the ILO Inquiry into the Cost of Social Security (1994-96) has gone some way in setting up a conceptual framework and to collecting data. However, this survey did not yield the expected results. Only a limited number of countries replied and the data set suffered from poor quality.

The complexity of legal regulations and the large diversity in national approaches with respect to organizing social security measures, make the application of a uniform statistical concept indeed difficult. While the number of beneficiaries normally can be established relatively easily on the basis of administrative records, the number of protected persons is more difficult to determine. In social insurance schemes, this would include persons currently contributing to the scheme, persons that are currently not contributing but are eligible for benefits on the basis of previous contributions or other reasons, and their dependents. While the first group can normally be found in administrative records, the second and third ones can be more difficult to establish. The same is true for persons protected by non-contributory schemes. In these cases, the number of protected persons can only be established through surveys or on the basis of the legal situation and the actual operation of social security schemes. The latter is important because it may well be that a scheme legally covers the entire population, but that large groups of the population are de facto excluded by the way it is administered. How coverage would be calculated in case of a substantial disparity between legal and de facto coverage levels remains to be determined.

Process data generated by the administrative procedures of social security institutions certainly are a valuable source of assessing the numbers and the characteristics of those covered by a particular social security scheme. These data are generally deemed to be of a relatively high quality and do not require additional data collection procedures. However, the data have to be collected directly from the social security institutions, as these are rarely available in the aggregated form. Especially in countries with poorly coordinated social security institutions, this is not an easy task. If individuals are or have been involved with more than one social security institution, this may lead to double counting. For example, if several pension schemes exist (for workers in different sectors of the economy, or for employees in the public sector), employment mobility of workers between sectors during their working life may result in them being listed in more than one pension scheme. If there is no mechanism to correct for double counting during the aggregation process, the aggregated data from individual social security schemes will produce too high coverage figures.

Because of the limitations of process data, additional data sources would need to be tapped in the future. A promising complementary source of coverage data are labour force surveys. As these are conducted regularly in many countries, they usually use a large sample of the population; they are well suited to collect information on membership in social security schemes, including occupational pension and health care schemes. Especially for countries where social insurance schemes and occupational schemes are very fragmented and multiple membership is common, they are well suited to assess coverage levels. In some countries, labour force surveys already contain questions on social security, but this could possibly be further developed and standardised. In particular, it would be helpful to align these questions to a standard conceptual framework that would allow using the collected information also for cross-national comparisons.

As a starting point, coverage statistics collected in the pilot study mainly focus on periodic cash benefits. The scope of this inquiry can eventually be extended to lump-sum payments and one-off grants as well as benefits in kind. A separate effort is needed to develop appropriate indicators to monitor coverage of health care schemes and access to non-cash health benefits; this could be done in cooperation with the World Health Organisation (WHO).

¹² "Scheme of Statistical Tables for the Practical Application of a Minimum Programme of Social Security Statistics", *International Review on Actuarial and Statistical Problems of Social Security* No. 8, 1962.

Levels of Social Protection

Together with coverage, the level of benefits and their adequacy is an important aspect of the quality of social protection. So far, however, comparable statistical data on the levels of social protection are rather sparse. Benefit levels as laid out in the social security legislation are collected by the International Social Security Association and published in the SSPTW/SSW database. Given the complexity of social security benefits, these legal benefit levels often sketch an incomplete picture of average benefit levels. An attempt to reflect benefit levels in a more comprehensive way has been undertaken by the OECD. Focusing on work-related social security benefits, the OECD regularly collects data on benefit levels in their series "Benefits and work incentives".¹³ In this context, the OECD assesses average (legal) benefit levels for a small number of typical households (single person, couples with and without children at different earnings levels) and calculates wage replacement rates. Some years ago, Eurostat produced statistics on (legal) replacement rates of pensions¹⁴, but this exercise has not been repeated so far. Recently, OECD has presented data on the levels and composition of pension income in a number of industrialised countries based on data from income surveys.¹⁵

Examples of fundamental indicators for the levels of social protection are

- Average amount of pensions in payment as a proportion of the poverty line or average income (adjusted for household size)
- Average amount of basic income support payment per month per recipient as a proportion of the average individual poverty gap

This information should be supplemented by information on the benefit levels as specified in the legislation (as appropriate, "standard" benefit level, minimum and maximum benefit levels or benefit formula). This information can either be collected as a part of this survey or draw on the data available in other databases, such as the ISSA's SSW/SSPTW database.

As absolute benefit levels do not speak for themselves, it is necessary to relate them to a reference value as "yardstick" for a relative indicator. This reference value should be easily accessible for all countries and sufficiently consistent, reliable and comparable. The ILO Conventions 102 and 128 use the concept of "standard beneficiary" and specify minimum benefit levels for standard beneficiaries for each contingency. The OECD bases its calculations of replacement rates on average earnings of male skilled manual employees ("average production worker", APW) that today is the most comprehensive and elaborated framework for the evaluation of replacement rates in a cross-national context. The OECD computes both net and gross replacement rates for benefit income as a proportion of APW earnings and two-thirds of APW earnings in different household circumstances. Four family types are considered for each wage level: single, married couple, married couple with two children and a lone parent with two children. Because the OECD study focuses mainly on short-term benefits and their impact on work incentives, benefit levels are evaluated at several points in time: in the first month of benefit receipt, and for subsequent years.

It is however questionable whether a global social security database can possibly follow a similarly complex framework of analysis. The larger number and greater heterogeneity of countries may require a more straightforward approach. Such an approach could be based on average income or consumption per capita. Although this indicator would not constitute a replacement rate in a strict sense, it would offer a sufficiently dependable yardstick for cross-national comparisons of benefit levels.

In addition to this basic approach, existing national statistics on possible additional reference values should be collected in order to construct supplementary reference values and replacement rates. This includes average income and consumption per capita, average earnings of male production workers (APW), average earnings of protected persons or the whole labour force, insured earnings and average of median equivalent disposable income.

¹³ See most recently OECD (2002): *Benefits and Wages – OECD Indicators*, Paris: OECD.

¹⁴ Eurostat (1993): *Old Age Replacement Ratios: Relation between Pensions and Income from Employment at the Moment of Retirement*, Luxembourg: Eurostat.

¹⁵ OECD (2001): *Ageing and Income: Financial Resources and Retirement in 9 OECD Countries*, Paris: OECD.

III. Conclusions

Having conducted the Cost of Social Security Inquiries during five decades (1949-1999), the ILO can draw upon its rich experience in setting up the new social security database. For the new global social security database, however, the methodology needs to be further developed and refined. After taking stock of existing data sources, it is necessary to define an integrated methodological concept and to define a method of data collection. A new questionnaire is now being tested in a small number of countries at a different levels of development. Six countries have been chosen for this exercise, Brazil, Cyprus, Finland, Ghana, the Philippines and Poland. Data collection is underway in these countries, and the results of this pilot study will soon show the feasibility of this concept and the need for revision. One particular concern is the compatibility of the concept with existing statistical systems such as ESSPROS. In order to review the validity of the concept, the relevance of the dataset and the effectiveness of data collection, the ILO will then seek the advice of a group of international experts before embarking on further steps. Eventually, a global social security database will contribute to further improving the knowledge on the quality of social security around the world.

In view of the growing need for reliable indicators on social protection in a global perspective, the ILO proposes to review and, if necessary, to further develop the international standards of statistics on social security/social protection as laid down in the Resolution Concerning the Development of Social Security Statistics adopted by the Ninth International Conference of Labour Statisticians in 1957. A thorough review of the Resolution should indicate propositions concerning parts in the Resolution which would need to be updated in view of recent developments and measures, which could be taken to promote a better implementation of the Resolution. Aiming at a stronger integration of labour and social security statistics, it could also be considered to eventually include social security in the ILO Convention on Labour Statistics in the long run¹⁶.

¹⁶ The issues discussed in the paper are also presented in the ILO report to 17th International Conference of Labour Statisticians (24 November-3 December 2003). See: <http://www.ilo.org/public/english/bureau/stat/techmeet/16thicls/index.htm#seventeen>