Chapter 1. Overview

Elizabeth Beasley

This chapter provides a high-level overview of the themes discussed in more detail in the individual chapters of this report. For each issue addressed in this report, the chapter spells out the reasons for their importance, the measurement challenges they raise, and the steps that should be taken to improve statistics in these fields.

Elizabeth Beasley is currently a Researcher at CEPREMAP, Paris. The author wishes to thank Marco Mira d'Ercole and Patrick Love for their inputs, as well as all HLEG members for their comments on the previous draft of this chapter.

The opinions expressed and arguments employed in the contributions below are those of the author(s) and do not necessarily reflect the official views of the OECD or of the governments of its member countries.

1.1. Introduction

The Commission on the Measurement of Economic Performance and Social Progress – also known as the Stiglitz-Sen-Fitoussi Commission – concluded its work in 2009 with the hope that the report would start a debate over the adequacy of current ways of measuring economic performance and social progress and motivate further research on developing better metrics.

The Commission's 12 recommendations (Box 1.1) have been met with a high level of enthusiasm from the statistical community, civil society, international organisations, governments, and researchers. Their efforts are transforming the landscape of measurement.

As noted in the Foreword, the present report does not replace the 2009 report. It focuses on a selection of the topics covered in the Stiglitz, Sen and Fitoussi report, rather than carrying out a complete review. In addition, several new topics are discussed in this report that did not feature in the Stiglitz, Sen and Fitoussi report, in part because of the way the world has changed since 2009. For example, the financial crisis highlighted the importance of economic (in)security, and thus the need to develop metrics of it. In evaluating economic performance, such metrics need to be considered alongside more conventional indicators.

The overall message of these chapters is one of tempered optimism: there has been rapid progress in several areas, bolstered by input from multiple stakeholders, while other areas continue to face conceptual or practical hurdles. Our understanding of subjective well-being, for example, has greatly evolved, as has our ability to measure some types of inequality.

The environment and sustainability were central to the Stiglitz, Sen and Fitoussi report, and despite the fallout from the financial crisis and the Great Recession that followed, the international community negotiated major agreements in both of these domains. In 2015, it signed the COP21 (Paris Agreement) on climate and the UN 2030 Agenda (United Nations, 2015), consisting of the 17 Sustainable Development Goals (SDGs) and their 169 targets. The latter agreement in particular demonstrates the extent to which the "Beyond GDP" message of Stiglitz, Sen and Fitoussi has been incorporated into the international policy agenda. The SDGs, which are applicable to all countries, try to capture multiple dimensions of social and economic progress.

Key messages from each of the chapters included in this report are summarised below.

Box 1.1. The recommendations of the Commission on the Measurement of Economic Performance and Social Progress (2009)

- Recommendation 1: When evaluating material well-being, look at income and consumption rather than
 production, as conflating GDP and economic wellbeing can lead to misleading indications about how well-off
 people are and entail the wrong policy decisions.
- Recommendation 2: Emphasise the household perspective, as citizens' material living standards are better followed through measures of household income and consumption.
- Recommendation 3: Consider income and consumption jointly with wealth, which requires information on balance sheets and proper valuation of these stocks.
- Recommendation 4: Give more prominence to the distribution of income, consumption and wealth, which
 requires that measures of average income, consumption and wealth should be accompanied by indicators of
 their distribution.
- Recommendation 5: Broaden income measures to non-market activities, such as the services people received from other family members as well as leisure time.
- Recommendation 6: Quality of life depends on people's objective conditions and capabilities, such as
 people's health, education, personal activities and environmental conditions but also their social
 connections, political voice and insecurity.
- Recommendation 7: Quality-of-life indicators in all the dimensions covered should assess inequalities in a comprehensive way, taking into account linkages and correlations.
- Recommendation 8: Surveys should be designed to assess the links between various quality of-life domains for each person, and this information should be used when designing policies.
- Recommendation 9: Statistical offices should provide the information needed to aggregate across quality-oflife dimensions, allowing the construction of different indexes.
- Recommendation 10: Measures of both objective and subjective well-being provide key information about people's quality of life, and Statistical offices should incorporate questions to capture people's life evaluations, hedonic experiences and priorities in their own survey.
- Recommendation 11: Sustainability assessment requires a well-identified dashboard of indicators, whose elements should be interpretable as variations of some underlying "stocks".
- Recommendation 12: The environmental aspects of sustainability deserve a separate follow-up based on a well-chosen set of physical indicators.

Source: Stiglitz, J.E., A. Sen and J.-P. Fitoussi (2009), *Report by the Commission on the Measurement of Economic and Social Progress*, http://ec.europa.eu/eurostat/documents/118025/118123/Fitoussi+Commission+report.

1.2. Sustainable Development Goals and the measurement of economic and social progress

As Ravi Kanbur, Ebrahim Patel and Joseph Stiglitz argue in Chapter 2, the process leading to the SDGs reveals the tension between the desire for completeness and thoroughness, on one side, and the need for clarity on the other side. This was a central tension discussed in the Stiglitz, Sen and Fitoussi report. Obviously, the more detailed information and the greater data is disaggregated, the more complete picture one has of what is going on. The 169 SDG targets and 232 indicators provide a useful platform and have the virtue that they are agreed to internationally. But their implementation will need to be sensitive to national needs and priorities, as well as limited resources. Accountability and sovereignty lead to the recommendation that this streamlining and selection of indicators takes place in the context of a national dialogue informed by international frameworks. The international dimension is important because there is a tradeoff with comparability across countries; countries themselves need to be mindful of comparability as, to know how well one is doing, one wants to know how well other similarly situated countries are performing.

In order to pursue the agenda of the SDGs, and the larger agenda of measuring social and economic progress, National Statistical Offices must have the governance and financial resources necessary to provide an independent and credible statistics to nourish the national policy dialogue and enable accountability. In low-income countries, statisticians have to have the means to resist not only the political pressures any National Statistical Office (NSO) is subject to, but also pressures coming from powerful international organisations that may inadvertently harm the autonomy of NSOs by imposing an agenda that takes insufficient account of national needs and capacities.

When considering global and transnational issues, such as world inequality and poverty or climate change, harmonisation of measurement over countries is of key importance. International organisations have a large and important role to play to support such harmonisation, and the international community should commit resources to supporting the production of those national statistics that are critical for assessing global issues.

1.3. Measuring the distribution of household income, consumption and wealth

Stiglitz, Sen and Fitoussi emphasised the importance of inequality. Even if average income per capita was increasing, a majority of citizens could be experiencing a decline. One of the original motivations for the Commission was the concern, expressed by President Sarkozy, that our indicators were presenting a picture that was inconsistent with individual's own perceptions. The government could boast that GDP was increasing, yet most individuals could feel worse off.

In Chapter 3, Nora Lustig addresses the challenges posed by measuring vertical inequalities in household income, consumption and wealth. The issue is important from a normative standpoint in relation to social justice, but there are instrumental reasons to care about these inequalities too. Inequality in the distribution of household resources has come to the fore of the political debate in recent years, partly as it has become more extreme and partly as the economic, social and political costs have become clearer.

While there have been notable improvements in the availability of data (including more extensive use of administrative data), substantial challenges remain in measuring inequality in economic circumstances through the joint analysis of income, consumption and wealth. These analyses are often based on databases relying on household surveys: micro-based datasets, which calculate inequality measures directly from these surveys; secondary sources datasets, which combine inequality indicators from a variety of other sources; datasets that generate inequality measures through a variety of imputation and statistical inference methods instead of relying

directly on unit-record datasets; and WID.world, described below. Unfortunately, different international databases show not only different levels of inequality but also, for some countries (especially in sub-Saharan Africa), diverging trends.

These different datasets all suffer from the fact that household surveys suffer from under-coverage and underreporting of incomes at both ends of the distribution. The underreported top incomes are sometimes referred to as "the missing rich" problem. The factors embedded in the data collection process that may explain the missing rich problem in household surveys are many, ranging from underreporting of their income or a refusal to answer by very rich people, to the fact that very few rich people are likely to be included in the sampling frame of the survey. Approaches to address the missing rich problem can be classified into three broad groups: using alternate data (such as using tax records instead of surveys); within survey, making inferences about the missing data using parametric and nonparametric methods; and correcting survey data (or inequality estimates) by combining surveys and administrative data.

The bottom incomes are not being covered sufficiently either, for example the homeless or others with no fixed address. And many low-income people often report levels of consumption expenditures well in excess of their declared income, suggesting that they are consuming out of savings or experiencing a temporary drop in income or that they may be simply underreporting their material living standards. This underscores the importance of joint analysis of income, consumption, and wealth; such an analysis would enable us to ascertain the extent to which the poor are "eating up" their assets.

There are also large differences in the nature of datasets between advanced and developing countries, and the extent to which the data provided correspond to appropriate definitions of income or consumption. For advanced economies, economic inequality is typically measured based on equivalised income (where adjustments are made for family size) while in the rest of the world, per capita consumption or income is used. While in principle the income variable that should be the focus of attention is disposable income – what individuals can spend, after paying their taxes and receiving any transfer –, the income concept used in developing countries' data is often not clear. Likewise, while many argue that income or consumption should include consumption of own production (goods and services produced within the household) and imputed rent of owner occupied housing (the rent that individuals would have had to pay if they were renting their house), in practice this is not the case in general.

Moreover, the analysis of the "true" level of economic inequality is typically hindered by the fact that standard measures of income exclude free in-kind services (especially, education and healthcare) provided by governments and non-profit institutions. Valuing social transfers in-kind raises both conceptual and measurement challenges. There are difficulties in ascertaining the appropriate range of services to be considered; the monetary valuation of the services provided; and their allocation to various beneficiaries. In practice, the most frequently used approach is to value in-kind transfers at the production costs incurred by the government in producing them. This approach, however, does not take into account variations in needs across income or age groups, nor does it consider service quality, and may not reflect the actual valuation by beneficiaries. Imputation to individual users is particularly complex in the case of health care. The allocation of benefits is done following either the "actual consumption approach" or the "insurance value approach" – which assigns the same per capita spending to everybody sharing the same characteristic such as age or gender, irrespectively of their actual use of these services. The choice of methods has a large influence on the results obtained.

The impacts of consumption taxes and subsidies on household resources are often neglected too. While it is acknowledged that household consumption possibilities are reduced/increased by consumption taxes/production subsidies passed on to the prices that households pay for goods and services, taking this impact into account has

not been part of the conventions typically used for analysing disparities in households' economic well-being.

In addition, there are many technical issues affecting the comparability of data, which in turn affect the ability to make cross country comparisons. Databases differ on whether adjustments (and which ones) are made to the microdata to correct for underreporting, to eliminate outliers, or to address missing responses. Inconsistencies mean that different datasets frequently produce different results about the level of inequality and whether there is convergence in levels of inequality among countries, and this is so even when the same metric is employed.

Timeliness is another problem, with estimates of economic inequalities in many countries lagging behind GDP data by years.

A further issue is that, with exceptions, household surveys collect data on only income or only consumption, which significantly limits the possibility of undertaking the joint analysis of both variables and rigorous cross-country comparisons. Even when measures exist on the distribution of household income, consumption and wealth, very few countries collect data in ways that would allow the joint distribution of household income, consumption and wealth to be analysed in a coherent way; doing so was one of the key recommendations of the Stiglitz-Sen-Fitoussi report.

An additional challenge is that, for most countries in the world, totals for household income and consumption from surveys do not match the equivalent totals from national accounts; not even their growth rates match. (This is a topic discussed more extensively in Chapter 6).

As in other areas of the measurement of economic performance, greater international efforts should be devoted to assess the availability and quality of data on wealth distribution, and to ensure that the data collected provides information that is comparable across countries and over time. 1 Accurate measurement of economic inequality will require a political commitment. Governments, international organisations and the academic community need to be committed to transparency and to make information publicly available in ways that facilitate the measurement and analysis of economic inequality while protecting the identity of respondents to preserve confidentiality.

1.4. Horizontal inequalities

Inequality in income, consumption, and wealth among individuals, sometimes called "vertical inequality", ignores systematic inequities among population groups, leaves out non-income dimensions of inequality, and assumes that each individual in a household receives the mean income of that household. In Chapter 4, Carmen Diana Deere, Ravi Kanbur and Frances Stewart discuss the importance of "horizontal inequalities", inequalities among groups with shared characteristics in both income and non-income dimensions, intra-household inequality, and the gender wealth gap. The three issues are important in their own right, but they also link with each other in important ways. For example, a key aspect of intra-household inequality is inequality between men and women within the household and this relates to the broader question of horizontal inequality in society.

While these inequalities are of great policy relevance, notably because of their implications for justice and social stability, there are no systematic efforts to collect the necessary data and publish the appropriate indicators. This is due, in part, to the conceptual and practical challenges that their measurement entails. However, much more could be done to standardise the practice of collecting the relevant information and broadening the diagnostic indicators used for social progress assessments.

People are members of many groups (age, gender, ethnicity, religion, etc.) so multi-dimensionality is an essential feature of horizontal inequality and its measurement. Three prime dimensions are socioeconomic, political and cultural recognition, each with an array of elements. For example, socioeconomic inequalities include inequalities in access to basic services and inequalities in economic resources, including income, assets, employment and so on. In the political dimension, it is a matter of representation in government, the upper levels of the bureaucracy, the military, the police and local administrations. On the cultural side, relevant inequalities include those in recognition, use of and respect for language, religion and cultural practices.

The measurement of horizontal inequalities raises the question of which group classification to adopt. And given that group size varies, it may be desirable to weight any aggregate measure by the size of each group.

An inequality measure that is silent as to the relationship of inequality to the overall structure of a society (for example, economic inequality between ethnic groups or between men and women) is of limited value, since a concern about inequality is rooted in a concern for justice and overall societal health.

In addition, when intra-household inequality is ignored, overall inequality will be underestimated. Quantifying intra-household inequality is a first step towards getting a more accurate measure of the overall level of inequality in society and of the responsiveness of poverty reduction to economic growth. It can also be an important part of an investigation of inequality across gender and across age groups, both of which are aspects of horizontal inequality. But, as we have seen, so far as the headline money-metric measures of inequality are concerned, most household surveys collect information only at the household level, so that understatement of inequality is endemic to official statistics.

It is unlikely that all official household surveys can be turned to collecting individual-level information. But there are alternatives. Structural econometrics methods can be used to estimate intra-household inequality parameters by modelling distribution at the household level. Systematic investigation of other indicators available at the individual level in some surveys (for example, individual earnings, or individual anthropometrics) could be analysed to develop a sense of the understatement of overall inequality in situations where individual information is not available. Finally, small specialised surveys can also be mounted.

The level of detail of traditional surveys is usually not sufficient to explore certain types of inequalities. A case in point is that of within-household inequalities in terms of wealth. When data on asset ownership is collected in household surveys for example, it has tended to be at the household rather than the individual level, constraining gender analysis; some assets may also be held in joint ownership, and in some cases this may not be well-defined and depend on the specific legal provisions of each country. Methodological constraints are one of the reasons that progress on measuring individual level wealth has been slow, such as whether reliable data on the valuation of assets can be elicited from respondents. Other issues include who should be interviewed in an asset survey, how ownership should be defined, how the value of assets should be measured, and whether all assets need be included in wealth estimates.

Several questions could be added to household surveys to help in this respect, such as understanding the relevant marital regime and collecting data on who in the household owns its immovable property.

1.5. Inequality of opportunity

One key dimension of inequality is inequality of opportunity. While the Stiglitz, Sen and Fitoussi report emphasised the difficulties in measuring inequalities of income and wealth, those presented by inequality of opportunity are far greater.

In Chapter 5, François Bourguignon looks at how the circumstances involuntarily inherited or faced by individuals (such as gender or ethnicity, or the income or education of one's parents) affect their economic chances, their opportunities and achievements. Inequality of opportunity is often presented as the truly unfair part of the inequality of income, as opposed to that part of income inequality that results from free individual decisions. Apart from this basic question of fairness, inequality of opportunity matters because it is a key determinant of inequality of income and also because it may reduce the aggregate efficiency of an economy, or the average outcome, by weakening incentives. People who get off to a bad start in life due to circumstances beyond their control, or are discriminated in the economic system because of particular personal traits, may see little point in trying hard since they will be left behind anyway. Likewise those who are favoured have less incentive too, since they know they are more likely to succeed. Moreover, inequalities of opportunity imply that many individuals will not be able to live up to their potential.

Measuring the inequality of opportunity is practically and conceptually challenging. It will never be possible to observe differences among individuals across all the circumstances that may shape their economic success independently of their will. Besides, the distinction between what is not under the control of individuals, i.e. circumstances, and what is, often referred to as "efforts", may often be extremely ambiguous. However, it is possible to measure some observable dimensions of inequality of opportunity and, most importantly, their impact on inequality of outcomes. Data on specific outcomes, some circumstances and, possibly, some types of efforts are available in household surveys or from administrative sources. It is also possible to measure directly some dimensions of inequality of opportunity, independently of their impact on economic outcomes, for example cognitive ability or health status. The most obvious example of inequality of opportunity in a specific dimension is inter-generational mobility of earnings, i.e. the relationship between the earnings of the parent and those of the child.

If progress has been made lately in measuring some aspects of the inequality of opportunity and in making international comparisons, monitoring them over time at the country level is still infrequent and often imprecise. Few consensual estimates are available about whether inter-generational mobility has increased, remained the same or decreased in recent decades. Progress has been made in monitoring mean educational achievements in many countries, most notably under the OECD PISA initiative, but no systematic reporting or discussion takes place on the evolution of their dispersion. Also, if the mean earnings gap across gender is reported regularly in most advanced economies, the same cannot always be said of the earnings gap adjusted for changes in the educational attainment of women and men (a measure which suggests that most of the narrowing in the gender wage gap observed in recent years mainly reflects higher education of women, rather than lower gender gaps between women and men of similar education); or the gap across ethnic groups or between natives and first- and second-generation migrants. Yet, in most countries, data to evaluate these and other indicators on a regular basis either are available, or could often be made available at little cost.

The data required to improve the situation and monitor observable dimensions of inequality of opportunity in a systematic way include data on family background, wealth, and students' skills. Three basic statistics should receive priority attention and should be harmonised as much as possible across countries and over time: inequality of economic outcomes (earnings, income) arising from parental background and its share in total inequality of outcome; variance analysis of scores in PISA and analogous surveys at earlier ages, including pre-school, the share

of that variance explained by parental/social background, or the gaps in scores between students from different families; and gender inequality in earnings, unadjusted and adjusted for differences in education, age/job experience, types of occupation, etc.

1.6. Distributional national accounts

In Chapter 6, Facundo Alvaredo, Lucas Chancel, Thomas Piketty, Emmanuel Saez and Gabriel Zucman discuss the limits of the System of National Accounts (SNA) for looking at disparities within the household sector. The focus of the SNA has been on the main sectors in the economy, only distinguishing results for the household sector as a whole. Partly as a result, the discrepancies between income levels and growth rates displayed in national accounts and the ones displayed in micro statistics and underlying distributional data have been growing in all dimensions: income, consumption, wealth. Scholars have been aware of the discrepancies for some time (see, for instance, Anand, Segal and Stiglitz, 2010), and have proposed ideas to explain the reasons behind them, but systematic and co-ordinated action to put national accounts and micro-economic data in a consistent framework started only in 2011, when the OECD and Eurostat launched a joint Expert Group to carry out a feasibility study on compiling distributional measures of household income, consumption and saving within the framework of national accounts, on the basis of micro data.

The *World Inequality Database* (WID.world) project presents a renovated approach to the measurement of economic inequality consistent with macro aggregates, aiming to rebuild the bridges between distributional data available from micro sources and national accounts aggregates in a systematic way through Distributional National Accounts (DINA). In some cases, this may require revising central aspects of key national accounts concepts and estimates. The two main data sources used in DINA income series are income tax data and national accounts, as in earlier versions of the approach. However, these two core data sources are now used in a more systematic and consistent manner, with fully harmonised definitions and methods, and together with other sources such as household income and wealth surveys, inheritance, estate and wealth tax data, as well as wealth measures for those at the top of the distribution provided by "rich lists" compiled by the press.

The DINA initiative aims to provide annual estimates of the distribution of income and wealth using concepts that are consistent with the macro-economic national accounts. In this way, the analysis of GDP growth and economic inequality can be carried over in a coherent framework. The long-run goal of DINA is to release income and wealth synthetic micro-files for many countries on an annual basis. Such data can play a critical role in the public debate, and can be used as a resource for further analysis by various actors in civil society and the academic, business and political communities.

A comparison between the United States, China and France (broadly representative of Western Europe) illustrates how DINA can be used to analyse the distribution of economic growth across income groups. National income per adult increased in the three countries between 1978 and 2015: by 811% in China, 59% in the United States, and 39% in France.2 In China, the top earners experienced very high growth rates, but average growth was so large that the average income of the bottom 50% also grew markedly, by around 400%. In contrast, the bottom 50% of adults in the United States experienced a small drop. In France, very high incomes grew more than average, but their numbers are too small to affect the overall average, while the bottom 50% income group enjoyed the same growth as average growth (39%).

Statistics on the distribution of wealth are highly imperfect, but they show substantial variations in their size and trends across countries, suggesting that country-specific policies and institutions matter considerably. High GDP growth rates in emerging countries reduce between-country inequality, but this in itself does not guarantee acceptable within-country inequality levels and ensure the social sustainability of globalisation. Access to more and better data (administrative records, surveys, more detailed and explicit national accounts, etc.) is critical to monitor global inequality dynamics, as this is a key building block both to properly understand the present as well as the forces which will dominate in the future, and to design potential policy responses.

1.7. Understanding subjective well-being

Stiglitz, Sen and Fitoussi argued that traditional metrics need to be supplemented with indicators of subjective well-being, i.e. measures of how people perceive their own well-being and experience their life. Advances in psychology have led to the development of replicable indicators that are systematically related to other aspects of economic performance and social conditions, and which themselves could be at least partially explained by other objective indicators. In Chapter 7 Alan Krueger and Arthur A. Stone discuss the potential of subjective well-being as an indicator of the "health" of a community and the individuals that compose it. There is an increasing consensus that broader measures of societal progress should take into account how people feel about and experience their own lives, alongside information about their objective conditions. At a social level, subjective well-being measures are powerful indicators that can signal wider problems in people's lives, capture prevailing sentiment and predict their behaviour.

The availability of survey data on subjective well-being, including panel data, has increased rapidly since the 2009 Stiglitz, Sen and Fitoussi report. National Statistical Offices are increasingly including subjective well-being questions in their surveys, and a majority of OECD countries now collect at least some subjective well-being data. Continued methodological progress would be facilitated by the collection and dissemination of long time-series in large, high-quality datasets. Collection of such data will also facilitate the generation of policy-relevant insights.

Advances have been made on many of the methodological and interpretive issues that caused concern about using subjective well-being measures in 2009. While a deep examination of these issues is important to improving the measurement of subjective well-being, it is equally important to avoid setting a uniquely high standard for subjective well-being in contrast to other indicators, such as income, consumption or wealth inequality, which can also be difficult to calculate or are similarly derived from self-reported measures that are equally sensitive to survey methodology. We have come to accept these other measures, and gloss over their methodological problems, simply because they have been used for so long.

There have also been other advances, such as the wider implementation of time-use surveys for collecting detailed information on subjective well-being connected to daily activities.

Applications of subjective well-being have also begun to appear, for example in assessing the impact of the crisis. Other innovative but early work is experimenting with the incorporation of subjective well-being into standard cost-benefit analysis. Several harmonised international datasets now exist, allowing comparison of subjective well-being levels over time.

An area with great potential for development is examining different types of subjective well-being. Existing research generally focuses on life evaluation (how satisfied one is with one's life) but less on emotion (happiness or depression) and eudemonia (meaning and purpose in one's life). While these types of subjective well-being are related, they are not the same, and each yields different insights that can be helpful for policies and research.

Better understanding the direction of causality between subjective well-being and people's objective circumstances (e.g. does better health increase happiness, or does happiness help people engage in healthier behaviours?) is one of the issues that need to be explored further for a more complete understanding of subjective well-being. It is difficult to reach strong conclusions about causality based on much of the subjective well-being research that is currently available, which relies mainly on observational and self-reported data. Heterogeneity across individuals also needs to be addressed: just as focusing on the simple average income gives an incomplete picture, so too does focusing on the average level of subjective well-being. For example, life-cycle patterns of income are important to understand, and the same applies for subjective well-being. One wants to understand inequalities in subjective well-being, what drives them, and how they are related to inequalities in income.

Although data collection on subjective well-being has expanded enormously, there remain two important areas where there is still a lack of data, and where the inclusion of subjective well-being questions in surveys is likely be relatively low cost. The first is to expand high-quality data collection on subjective well-being to less developed countries, for example, by including a life satisfaction and experiential well-being module in household surveys. Second, in order to increase our understanding of experiential well-being, subjective well-being measures should be included in official time-use surveys.

1.8. Economic security

People's economic security has both observed (objective) and perceived (subjective) dimensions. In Chapter 8, Jacob S. Hacker reminds us that even before the financial crisis, citizens of advanced democracies and their leaders perceived that economic security was declining. Various observed measures provide an indication of the likely scale of the problem. For example, while around 12% of people in developed countries are classified by the OECD as income poor, the share of those having financial assets insufficient to cover more than 3 months of (poverty level) living standards is typically three times as high. Similarly, around 12% of adults will typically experience an income loss of 25% or greater in any given year.

In developing countries, governments have also grappled with economic insecurity, as citizens move into wage labour, health care grows more costly, and the traditional risk-spreading role of the family declines. In both developed and developing countries, public debate has centred on the changing character of the economy and society, and on the relative roles of governments, markets and households in coping with the related economic risks.

Still, the definition and measurement of economic security have continued to pose serious difficulties. This is in part because of the multiplicity of definitions and measures proposed; indeed, even the boundary between economic security and other forms of security remains hazy. It is also because of the relative scarcity of high-quality data, particularly panel data in comparable form across a significant number of countries. Despite the difficulties, it is possible to identify a common definition of economic security that is implicit or explicit in much existing literature: individuals' (or households') degree of vulnerability to economic loss. Three elements are inherent in this definition: some probability of an adverse event; some negative economic consequence if this event in fact occurs; and some set of protections (from formal insurance to informal risk sharing, to self-insurance through savings and the like) that potentially offset or prevent these losses.

Within that definition, two distinctions are important when talking about economic security. The first is between observed security and perceived security. Observed security describes measures that use economic data to determine whether an individual or household is insecure (for example, because they are at risk of a large

reduction in income or consumption). Perceived security describes measures based on individuals' own reports of their subjective response to their economic situation (whether through surveys, experiments or some other revelation technique).

The second distinction is between scoreboards or indices of economic security based on (weighted) multiple measures, and integrated measures, which try to capture individual or household security in a single statistic. The main class of integrated measures look at income volatility in some form, particularly large drops in income from one period to the next. For many purposes, integrated measures are preferable to weighted indices measures, which are less transparent and more sensitive to analysts' choice of components and weights.

Since 2009, thinking has greatly advanced on how to conceptualise a lack of economic security as distinct from (but related to) poverty, as well as how to understand the role of psychology, the voluntary or non-voluntary nature of income losses, and the role of buffers that reduce those losses. The development of new indices, as well as new and improved measures, has expanded our understanding of how these metrics perform.

Considerable additional work is required, however, to select the best types of measure and understand their properties. The availability of reliable and cross-nationally comparable data has been a crucial constraint on the development of improved measures of economic security. Three shortcomings of existing statistics stand out: the limited pool of long-term and cross-nationally comparable panel data; the weaknesses of most administrative data for tracing individuals over time; and the lack of regular questions about perceived security in conventional random-sample surveys, much less in panel data.

Nonetheless, these data have been rapidly improving, catalysed by the extensive and increasingly sophisticated literature on volatility. In addition to offering crucial conceptual and methodological guidance, the literature on volatility also provides many valuable clues about the evolution of citizens' economic security. It is increasingly clear, for example, that volatility is particularly high in the United States. Moreover, high volatility suggests that, since an individual's circumstances change often over time, many more people turn to social benefits to cushion them from shocks at some point over their lives than a survey at one point in time would suggest. This was particularly true during the crisis, which did not only directly reduce economic security in many countries, but also create pressures for policy changes that could further reduce the risk-protecting role of government.

1.9. Measuring sustainability

The SDGs framework recognises that progress has to be considered in a holistic manner to take account of the inevitable trade-offs, spill-overs and possible unintended consequences of policy and investment decisions. In Chapter 9, Enrico Giovannini, Marleen De Smedt and Walter J. Radermacher argue that complex systems theory provides a powerful complement to the capital approach for integrating the analysis of the different types of capital involved in sustainability, and for dealing with the many interactions that determine sustainability. A systems approach could also more adequately capture the extent to which a production and consumption path is sustainable, safe and resilient.

The capital approach implies that a sustainable community should keep capital intact for the next generation. It will not consume more than it can produce, so that the level of capital that it leaves for the future is greater than that which it inherited. Sustainability requires taking a broad view of capital, including economic, natural, human and social capital. Measuring changes in capital thus requires adopting a balance sheet to record changes in each of the components. In such a framework, extraction of natural resources is not counted only as a gain (due to the revenue from selling the resources) but also as a loss (since the natural resources have been depleted).

Although it is difficult in practice to build such a measurement framework, there have been substantial advances in advancing our understandings of different elements of the capital approach since 2009. For example, the System of Environmental-Economic Accounting Central Framework (United Nations et al., 2014), formally adopted in 2012, extends standardised national accounting practices to include a broader set of environmental assets such as fish stocks.

The G20 Data Gaps Initiative3 is working towards comprehensive measures of economic sustainability, and the *Guide on Measuring Human Capital* (UNECE, 2017) provides a systematic overview of methods for measuring human capital.

At the same time, many issues remain open, with unresolved controversies over the best way, for instance, of accounting for the depletion of natural resources, the degradation of the environment and the loss of bio-diversity. There are disputes too on the best way of improving and expanding measures of human and social capital.

Measuring the sustainability of the *systems* (sets of processes working together and interacting) that contribute to human society – including our eco-system in particular – also requires accounting for trans-boundary issues, uncertainties, instabilities, tipping points and other issues related to complexity. For example, our eco-system clearly interacts with our economic system, stretches across international boundaries, and is likely to be vulnerable to tipping points that we do not yet understand well. Indeed, a common flaw of economic analysis is that it does not take into account the planetary boundaries within which our economic system operates. While some progress has been achieved on the environmental aspects of our overall global "system," notably with respect to emissions of greenhouse gases (through global input-output tables), the quantification of uncertainties, instabilities and tipping points has mostly remained confined to scientific journals and has not yet translated into statistical practice or even standard economic analysis.

Risk and resilience are other important aspects of complex systems. The repercussions of the financial crisis outside of the financial sphere have intensified interest in measuring the interactions of different sectors to quantify sustainability and systemic risk, as well as raising issues about accurate measurement of the value added by the financial sector. The G20 Data Gaps Initiative, which is working towards comprehensive measures of economic risk, is an important part of this analysis. Bringing different sectors together in the systems approach is a new idea and substantial work will be required to make it operational, requiring inputs from across disciplines. An international task force would be important to move this agenda forward.

1.10. Trust and social capital

A key component of social capital is trust, the topic discussed by Yann Algan in Chapter 10 on the basis of the OECD's definition of trust as: "a person's belief that another person or institution will act consistently with their expectations of positive behaviour". Trust between individuals (inter-personal trust) and trust in institutions (institutional trust) are a key determinant of economic growth, social cohesion and subjective well-being. Higher levels of inter-personal trust at the country level are associated with higher GDP per capita and lower income inequality (as measured by Gini coefficients). Having co-operative social relationships with others affects people's health and happiness above and beyond the monetary gains derived from co-operation. Institutional trust is a key element of a resilient society and is critical for implementing effective policies, since public programmes, regulations and reforms depend on the co-operation and compliance of citizens. Trust is therefore a crucial component for policy reform and for the legitimacy and sustainability of any political system.

Most of the research on the role of trust and co-operation draws on answers from survey questions. Survey data supply subjective information, which requires caution in use and interpretation. Issues include how individuals interpret the question they are asked, and whether there are systematic differences between groups in their interpretations that might be misread as differences in the underlying level of trust. Surveys are generally unable to disentangle the variety of social preferences that can be involved in inter-personal trust such as altruism, reciprocity, social desirability and reputation. In some cases there is insufficient data coverage to fully analyse differences across people or countries or over time.

Experimental measures of trust are a promising tool for improving our grasp of these issues, especially when implemented in conjunction with surveys. Experimental measures ask participants to make decisions under uncertainty, with their degree of trust influencing their decision, allowing for a measure of trust that may be more reliable than responses to survey questions. There have been significant advances in experimental measures since 2009, including the development of online platforms that permit data collection based on representative samples at low cost. The relationship between lab-based experimental measures and field outcomes has however to be investigated more thoroughly if we are to rely on the experimental method to make inferences about the real world. In addition, identical experiments are generally not repeated in different countries, so it is difficult to understand if there is cross-country variation in the underlying mechanisms of trust.

One solution is to combine surveys with experiments. Experiments carried out on representative samples could also shed light on the nature of social attitudes and on the extent of bilateral co-operation between individuals in the larger population.

Both generalised trust and trust in institutions are higher among higher income groups and among more highly-educated people, and they are lower among unemployed people and single-person households with at least one dependent child. While these patterns hold true across the majority of OECD countries, it is important to study the drivers of trust in the context of countries' specific circumstances, so as to shed light on how policy-makers could develop such an important type of social capital. If trust plays a key role in explaining economic and social outcomes, it becomes urgent to identify the institutions and public policies needed for it to develop.

References

Anand, S., P. Segal and J.E. Stiglitz (eds.) (2010), *Debates on the Measurement of Global Poverty*, Oxford University Press, New York.

Stiglitz, J.E., A. Sen and J.-P. Fitoussi (2009), *Report by the Commission on the Measurement of Economic and Social Progress*, http://ec.europa.eu/eurostat/documents/118025/118123/Fitoussi+Commission+report.

UNECE (2017), *Guide on Measuring Human Capital*, United Nations, New York, http://dx.doi.org/10.18356/e636c136-en.

United Nations (2015), "Transforming our world: The 2030 agenda for sustainable development", Resolution 70/1 of the UN General Assembly, www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E.

United Nations et al. (2014), System of Environmental-Economic Accounting 2012 – Experimental Ecosystem Accounting, https://unstats.un.org/unsd/envaccounting/seeaRev/eea_final_en.pdf.

Notes

- ← 1. Similarly, those producing the datasets should document all assumptions clearly and thoroughly; make the data, programmes and results publicly available to allow for replicability whenever it applies; compare their methods and results with one another and, eventually, agree on conventions and best-practice when calculating inequality indicators from microdata, secondary, and imputation-based sources.
- ← 2. The DINA data are compiled based on tax records; as these records do not always allow combining information on individuals belonging to the same household, the national income data mentioned in the text are expressed on a "per adult" basis (with no adjustment for family size). This concept differs from the "per consumption unit" basis (with adjustment for family size) used for the income data discussed in Chapter 3.
- ← 3. www.imf.org/external/np/seminars/eng/dgi/index.htm.

▶End of the section – Back to iLibrary publication page