MESSAGE FROM THE EDITOR

Dear readers,

LIS is pleased to announce the appointment of Professor Philippe Van Kerm (University of Luxembourg) as the new LIS Research Director starting from June 2024. Philippe will support LIS Director Peter Lanjouw in leading the scientific programme with a view to further expand the LIS activities to enable, facilitate, promote, and conduct cross-national comparative research.

The LIS Database has grown yet again! 17 new datasets for 4 countries have been added. Notably, Colombia (CO23), France (FR19 and FR20), Luxembourg (LU20 and LU21), and Serbia (RS06 to RS22 with 4 revised datasets) have enriched the database. For more information, please see the Data News section.

This issue’s Inequality Matters section features three articles: Vito De Sandi (University of Bari) proposes a new framework for evaluating fairness in income inequality by integrating equality of opportunity, sufficiency, and limitarianism. The analyses are using Luxembourg’s income distribution for practical application. Petra Sauer (University of Fribourg, INEQ, LIS, LISE R) examines the expansion of tertiary education degrees in Austria and analyzes the evolution of the higher education premium by gender over time. Jörg Neugschwender (LIS) follows up on his previous article on social protection programs, using an international poverty line to assess their effectiveness in poverty prevention. The article also discusses methodological limitations and the need for interactive visualization tools for cross-national poverty analysis.

In the News, Events and Updates section there are various other interesting announcements, among which are the call of papers for the second III/LIS conference in 2025 (to be happening in Luxembourg this time), more information on this year’s LIS Summer Lecture held by Ravi Kanbur, the announcement of this year’s Aldi Award for the best 2023 LIS Working Paper, new R functions to work effectively with the LIS data, etc.

Enjoy reading!

Jörg Neugschwender

Inequality Matters
Quarterly updates on inequality research, LIS micro data releases, and other developments at LIS

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Interested in contributing to the Inequality Matters policy/research briefs? Please contact us at: neugschwender@lisdatacenter.org
Bridging Inequality of Opportunity, Sufficientarianism, and Limitarianism: A Framework for Assessing Unfair Inequality

Vito De Sandi, (University of Bari)

1. Introduction

Imagine that you are a policymaker and that one of your goals is to achieve a fair society. Given the complexity of what fairness might mean, one possible approach as a first step may be to use a measure of inequality of income distribution to compute how equitable society is.

The Gini index, for example, is one of the most widely used measures of inequality to obtain a numerical value of equity in the distribution of a country’s outcome. The Gini index varies between 0 (perfect equality) of outcomes and 1 (perfect inequality). A policymaker who cares about fairness will tend to prefer a distribution that generates values as close to 0 as possible. However, the index is 0 when all incomes are perfectly the same for all and equal to the mean. So, when we apply this index, it is as if we were comparing an empirical distribution of incomes to a hypothetical one where all incomes are equal. Should we then consider the latter as the normative reference distribution? Or, posed differently, should our society aspire to this distributional model? It seems logical to think that such a solution is rather extreme, even impossible to achieve. Yet every commonly implemented index of inequality, from Gini to measures of dispersion and entropy, assesses the goodness of income distribution with respect to its distance from a perfectly egalitarian distribution. In this paper, I propose one among the possible normative distributions that is much more feasible in practice than a perfectly egalitarian solution yet gathering relevant ethical considerations. Moreover, I will propose a measure of unfairness by computing how far the actual distribution appears from the ideal one. A very recent work of Hufe, Kanbur, and Peichl (2022) has proposed a family of measures that incorporate the principles of equality of opportunity (EOP) and freedom from poverty (FfP). Overcoming prior studies which have tended to favor either EOP or FfP, (Brunori, Lugo, et al., 2013). We start from that contribution to propose a simple way of measuring unfairness in a distribution of income embodying in equal fashion three normative principles: equality of opportunity, sufficientarianism, and limitarianism. We present the empirical estimation for Luxembourg, showing how much this country is not so far from the ideal distribution.

2. Social Norms in Brief

2.1 Equality of Opportunity

First, we want to build an ideal distribution that is satisfying equality of opportunity. It can be described as the social ethics, which seeks to level differences in outcomes, not attributable to individual responsibility, but not those for which individuals are responsible for. Following Roemer (1998), we distinguish between inequalities due to factors beyond the individual control and factors within their control, and we consider the inequalities due to the former as unfair (Ramos and Van de Gaer, 2012; Fleurbaey and Maniquet, 2011).

Moreover, the EOp ideal can be broken down into two ethical principles. The first principle of compensation asserts that society should compensate for differences in individual accomplishments due to circumstances. The second principle, the reward principle, requires not to compensate for differences in achievements due to responsibility (Checchi and Peragine, 2010).

Hence, we can define an EOp measure as an estimate of how far a given distribution of outcomes is from equal opportunity counterfactual distribution, in which differences in outcomes caused by circumstances have been compensated.

In concrete, this can be done, first, by dividing the population into types (t): groups of individuals characterized by the same circumstances. To do that, we implement a machine learning approach (regression trees and forest) (Brunori, Ferreira, and Neidhofer, 2023).

Then, we re-scale each individual empirical income ($x_m$) dividing it by the type-specific mean income ($\mu_t$) and multiplying it by the mean for the entire population ($\mu_x$). Thus, we get: $x'_m = \frac{x_m\mu_x}{\mu_t}$

2.2 Sufficientianism

Sufficientianism is the second normative concern required in our work. It is an ethical doctrine recently analyzed axiomatically by Alcantud, Mariotti, and Veneziani (2022) and Bossert et al. (2022), but it traces back to Frankfurt’s thought (1987). In its original formulation, this principle assigns absolute priority to individuals below a certain threshold, and it cares only that everybody has enough.

Sufficientianism raises questions about what constitutes "enough," how it should be measured, and the implications for public policy. It often intersects with discussions on welfare and social justice, proposing a threshold-focused approach to resource distribution, which can lead to targeted interventions for those below the sufficiency threshold.

We satisfy this normative concern by applying a relative poverty line ($\theta$), used to measure poverty based on the economic status of a population within a specific context. In particular, we implement a unique poverty line since we tend to believe that poverty is not a type-specific ethical concern. And we set it equal to 50% of the median of the entire distribution (as by OECD Statistics). Thus, our norm-based distribution, already equal in terms of opportunities, should not show any income below the poverty line: $\mu_x \geq \theta$

2.3 Limitarianism

According to the primary definition, Limitarianism, in his intrinsic view, is generally characterized by the claim that “it is not morally permissible to have more resources than are needed to flourish in life fully” (Robeyns, 2017)

However, we prefer to use the instrumental concept, as Limitarianism is necessary to realize “two intrinsic values: political equality ... and the meeting of unmet urgent needs” (Robeyns, 2017)

Focusing on the urgent need argument, one possible “need” might be fighting poverty. Following this line, we have chosen to place the burden of defeating poverty on all those above an income threshold. Moreover, we built this threshold so that it corresponds to the level that ensures no poverty in each type. The idea is quite simple: we channel income from the rich to the poor, starting from the first richest person until his income drops to the level of the second richest individual, and then we take resources proportionally from the first and the second until they reach the income of the third or on until there are no poor, and so on. We make this procedure type-specific.
Thus, we end with multiple and endogenously constructed richness lines ($\Theta_\tau$). Below is a simple example of the mechanism we described. For simplification, there is only one type, and $G_\tau$ is the total amount of resources that need to be taken from the rich.

<table>
<thead>
<tr>
<th>$\tau_1$</th>
<th>$G_{\tau_1} = 6$</th>
<th>$\tau_1$</th>
<th>$G_{\tau_1} = 3$</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>3</td>
<td>1</td>
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<td>40</td>
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<td>42</td>
<td>42 (45-3)</td>
<td>40.5 (42-1.5)</td>
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</tr>
<tr>
<td>45</td>
<td>42 (45-3)</td>
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Below is a simple example of the mechanism we described.

For simplification, the resource is only one type, and $G_\tau$ is the total amount of resources that need to be taken from the rich.

3. Measuring Unfairness

3.1 Norm Distribution

Given all the conditions, we have been able to characterize the following norm-based distribution:

\[
y_i = \begin{cases} 
\Theta_\tau, & i \in H_\tau \\
\mu_x, & i \in M_\tau \\
\mu_x \frac{x_i}{\mu_x}, & i \in L_\tau
\end{cases}
\]

It is very simple to understand. The reference income $y_i$ should be equal to the richness lines ($\Theta_\tau$) for all rich in each type. It should not be less than the common poverty line ($\frac{\Theta}{\mu_x}$) for the poor individual in each type and equal to the opportunity equalized income ($x_i \frac{\mu_x}{\mu_x}$) for the remaining individuals.

3.2 Divergence Measure

We implement a divergence measure of the empirical distribution from the norm-based one. This is not a novel approach. Distinguished works such as those by Cowell (1980), Magdalou and Nock (2011), and Almås et al. (2011) have broadened traditional approaches to quantifying inequality by means of divergences measures. The measure of divergence we choose is the one by Magdalou and Nock (2011):

\[
D(x|y) = \frac{1}{N} \sum_{i \in N} \left( \ln \frac{y_i}{x_i} - \frac{y_i}{y_i} - \frac{x_i}{y_i} \right)
\]

It is a simple measure of the discrepancy of the empirical individual distribution ($x_i$) from the normative one ($y_i$). The greater the discrepancy, the higher the measure and the stronger the unfairness in the distribution.

4. Empirical Application

4.1 Data

For the application, data from the LIS database for Luxembourg, covering the years 2009-2019, were used. The chosen outcome variable is the household equivalent disposable income, which has been adjusted using the consumer price index to 2019 values. The individual circumstances included are the father’s and mother’s education, gender, and birthplace. In Figure 1, we provide a simple representation by year of the average income and the poverty line levels.

![Figure 1. Poverty line and mean income over years](image-url)
4.2 Results

Figure 2 shows three different measurements of unfair inequality from 2009 to 2019.

The blue line represents the index of divergence computed with respect to a perfectly egalitarian distribution. In this specific situation, it corresponds to the standard Mean Logarithmic Deviation. The trend is stable, and the values, ranging from 0.16 to 0.13, show that Luxembourg’s distribution is relatively far from that of a totally egalitarian one.

The red line represents the divergence compared with the norm-based distribution, which satisfies our three normative requirements. The values are relatively stable and much lower than the blue line, indicating less variation from the norm-based distribution compared to the perfectly egalitarian scenario.

The green line measures inequality of opportunity only. It shows the lowest values among the three indices, suggesting a relatively smaller contribution of opportunity inequality to the overall unfairness disparity.

5. Conclusion

We propose a characterization of a new norm-based distribution, which embodies three ethics: Equality of Opportunity, Sufficiency and Limitarianism. We measure the unfairness as a distance between the empirical distribution and the normative one.

The empirical application provides a clear visual representation of how different normative concerns can yield different insights into the nature and extent of inequality within a society. Inequality of opportunity alone is unable to explain the unfairness in Luxembourg’s income distribution (2009-2019) due to the fact that the actual distribution is close to the equal opportunity one. Moreover, the results show that the standard inequality index (blue line), measuring the distance of the distribution from the mean, is much larger than norm-based measures and, hence, far from a possible realization of reality. In addition, Luxembourg appears particularly close to the ideal distribution when both a threshold of poverty and multiple richness lines are included. This makes the normative distribution and its underlying principles a feasible realization and quite simple for a policymaker to implement.

References

Inequality Matters

Educational Expansion and Returns to Higher Education in Austria over three Decades

Petra Sauer, (University of Fribourg, Vienna University of Economics and Business, Luxembourg Income Study (LIS), Luxembourg Institute for Socio-economic Research (LISER))

Since December 2021, LIS has also extended its annualisation strategy to Austria, currently covering the period from 1994 to 2021. This makes it possible to gain insights into long-term trends in social outcomes, to study cohort dynamics, and to estimate the impact of policies.

The Austrian context

Austria is considered a coordinated market economy (Hall and Soskice, 2001) and part of the conservative welfare state regime (Esping-Andersen, 1990). As such, it is characterised by a high degree of coordination in wage bargaining at the sectoral level (Delahaie et al., 2015) and a relatively high degree of redistribution through the tax and transfer system (Rocha-Akis et al., 2016). With a Gini coefficient of 0.28 in 2021, inequality in disposable household income is low compared to other high-income countries. However, inequality in market income remains high: the Gini coefficient for gross wages is equal to 0.42 in 2021, which is higher than in Germany or the UK. The Austrian benefit system provides adequate support for low-income households so that the poverty rate is among the lowest in the OECD (Fürster and Königs, 2020). However, family policies tend to promote the traditional one-earner or one-and-a-half-earner model, contributing to persistently high gender inequalities in hourly pay and working hours (Fürster and Königs, 2020).

Higher education policy in Austria largely follows an egalitarian approach (Pechar and Pellert, 2004). Anyone who has completed upper secondary education has access to higher education, and there are no tuition fees. Entrance examinations are limited to Universities of Applied Sciences (‘Fachhochschulen’) and some fields where demand significantly exceeds supply (e.g. medicine, psychology, teacher training). However, selection in Austria takes place at the secondary level, with the choice between apprenticeships that do not allow access to higher education and academic (‘Gymnasium’) and vocational upper secondary tracks. This important junction, which is largely determined by educational choices made at the age of 9-10, has been shown to act as a barrier for children from disadvantaged backgrounds, contributing to low social mobility in Austria (Fürster and Königs, 2020). When comparing the level of working hours (see Figure 3), differences between the levels of education are also apparent. Highly educated women work the most, and without childcare, their weekly working hours are, on average, around 32 hours, increasing to just over 35 hours. Mothers with a medium level of education increase their working time by approximately 3 hours (from 28 to 31 hours) as the childcare coverage rate increases from 0 up to 60 per cent.

Educational Expansion

Comparatively, Austria is one of the countries with the lowest levels of tertiary education (see Figure 1 in (Sauer and Van Kerm, 2021). Nevertheless, tracking annual changes shows that education has expanded in Austria.

Figure 1 shows the proportion of women and men aged 30-50 with diploma degrees (i.e. one-cycle degrees, which existed in Austria before the Bologna reform introduced a two-cycle structure in 2000/01), bachelor (BA), master (MA) and doctorate (PhD) degrees. The increase in educational attainment was particularly pronounced for one-cycle degrees in the period 2000-05, when women overtook men in higher education.
men. In 2013, as students had to complete the ‘old’ diploma degrees or otherwise move to the BA or MA level, the trend for men flattened out. For women, the proportion continued to increase from 15% in 2015 to 20% in 2020, which could be due to the fact that teaching degrees in all fields had not fully transitioned to the two-cycle structure until 2020. BA and MA degrees can be observed in the data from 2014 onwards. The proportion of BA graduates increased from 1.8% for both women and men to 6.7% for women and 5.2% for men in 2020, while the proportion of MA graduates remained below 1%. The proportion of PhD graduates is relatively constant at around 1.5% over time.

Tracking educational attainment across cohorts (Figure 2) gives a similar but more nuanced picture. Tertiary education began to expand with the cohorts born in 1960. The proportion of women and men aged 30-50 with a one-cycle degree doubled from 9.9% and 8% in the 1960 cohort to 19.2% and 18.9% in the 1980 cohort. This trend levelled off with the cohorts entering the newly introduced two-cycle structure. Thus, BA degrees became increasingly common, tripling from 3.2% (males) and 4% (females) in the 1980 cohort to 9.7% (males) and 10.1% (females) in the 1988 cohort.

In general, more women than men obtain tertiary education. This has been the case since the beginning of the millennium, and for cohorts born in the 1970s and 1980s. The female advantage is, however, much less pronounced in Austria than in other high-income countries (Sauer and Van Kerm, 2021).

The Higher Education Premium

Figure 3 shows the evolution of the gender-specific premium for tertiary education as obtained from OLS regressions of gross hourly wages on a dummy variable indicating whether a person has completed tertiary education, controlling for age, marital and migration status, and hours worked, considering dependent employees aged 30-50. Panel (a) uses the logarithm of gross wages as the dependent variable, thus showing the premium in relative terms. In 1994, tertiary educated workers earned 41.6% (men) and 34.8% (women) more than less educated workers. By 2005 the premium had increased to 46.3% and 66.2% for men and women respectively, before falling back to 27.7% and 41.2% in 2020. This suggests that the incentive to invest in education is greater for women than for men.

As argued by Mandel and Rotman (2021), the relative premium is not well suited to capture differences between groups (and time points) with different distributions. Relative premiums may be larger for women than for men because wages tend to be lower at the bottom. In addition, the logarithm compresses the distribution and makes movements at the top less relevant for the overall dynamics. Panel (b), therefore, shows the higher education premium based on a specification using the level of gross wages (in 2017 USD) as the dependent variable, which shows the premium in absolute terms. Although the overall trend is similar, the gender difference is less pronounced in the 2000-10 period, and since then, the male premium has been slightly higher than the female premium. This is in line with the findings of Mandel and Rotman (2021) for the US and indicates that the fact that top income inequality is more pronounced for men than for women drives the higher education premium.

The datapoints from 2014 and onwards allow for an additional breakdown in more detailed education categories at the tertiary level. However, the small sample sizes do not allow for a distinction between men and women. A few more additional datasets will be needed to strengthen the robust calculation of educational premiums distinguished by sex. Figure 4 shows that a BA degree yields, on average, 20% higher wages than lower levels of education. The premium for the ‘old’ diploma is more than twice as high (40%), and the monetary return for an MA degree is even higher (60%). It should be noted that this may be due to differences in length and quality or to differences in the signalling value on the labour market.

**Figure 2: Educational expansion across birth cohorts**

Notes: Own calculations based on LIS data. The education categories are constructed based on the country-specific education variable (educ_c). The cohort born in 1982 was 18 when the Bologna structure was implemented in 2000.
Potential explanations and ways forward

Existing comparative evidence from Weisstanner and Arminger (2018), based on LIS data, shows that Austria is in the upper half of the spectrum of high-income countries, with an average education premium of 40% over the period 2004-14. Other continental European countries such as Germany and Switzerland have similar values; the premium is higher in the US (more than 60%), Spain, Poland and the Czech Republic (around 50%) but much lower in the Nordic countries (around 20%). In about half of the 22 countries analysed by Weisstanner and Arminger (2018), the premium declined in the period 2007-13.

Various explanations have been put forward to understand cross-country differences and changes over time. For example, the continuously decreasing premium observed in Austria since 2005 could be the outcome of market forces, i.e. the supply of tertiary-educated workers outstripping the demand driven by technological change and globalisation (e.g. Autor et al., 2020). However, institutional factors and policies may also be relevant. Wage-setting mechanisms set floors for lower wages and ceilings for higher wages, thereby limiting the spread between the wages of high- and low-educated workers. Moreover, generous public spending on education and progressive tax-transfer systems have been shown to limit the spread of education premiums by altering incentives to bargain for...
high wages (Weisstanner and Armingeon, 2020). The extent to which these factors help to explain changes over time, and whether they apply differently to women and men, remains an open question. The availability of country-specific annualised time series facilitates research that addresses such questions. On the one hand, reforms such as the Bologna process could be used to make causal inferences about the impact of educational expansion. On the other hand, policy changes in relevant areas that affect wages in different parts of the distribution can not only shed light on the importance of institutional factors but also help to understand the relative relevance of top versus bottom dynamics and gender differences. While this enables to shed light into the underlying mechanisms of country-specific time trends it has to be acknowledged that such mechanisms differ across contexts (van de Werfhorst, 2011).

1. The harmonised data is based on the ECHP from 1994 to 2000 and the SILC from 2003 onwards.

2. These figures are obtained through DART: https://dart.lisdatacenter.org/dart.

3. Medicine, Dentistry, and Veterinary studies will remain exemptions from the Bologna structure.

4. This includes one-cycle, BA, MA and PhD degrees.

References


Förster, M. F. and Königs, M. (2020) Promoting Social Mobility in Austria, OECD.


Analyzing the Impact of Social Protection Programs in a Cross-national Perspective – Part 2
Jörg Neugschwender, (LIS)

This article is based on the authors presentation “How to compare social protection programs around the world and measure their role in eradicating extreme poverty and vulnerability to poverty” held at the UNECE Group of Experts on Measuring Poverty and Inequality meeting in Geneva, 28-29 November 2023.

1. Introduction
Continuous readers of Inequality Matters may be well aware that a follow-up of the previous article, Analyzing the Impact of Social Protection Programs in a Cross-national Perspective (Issue 29, March 2024), was scheduled for this issue. So, as promised, here it is. Before proceeding with the second part, let me quickly recapture the main argument from the previous article. In the first part, I had introduced a simple technique to analyze the effectiveness of social transfers in poverty prevention. I showcased how the percentage of poor would go up when all social transfers or one area of social transfers were taken out entirely from disposable income. The poverty concept was benchmarked against relative poverty estimation techniques where a certain percentage is considered at-risk of poverty, when the income is below a certain percentage of median equivalised disposable income. Various alternatives in methodology were discussed and the methodology was further elaborated on a sub-group setting for single-parent households. It had been concluded that when comparing relative at-risk-of-poverty over time, one gets a better idea of how things have changed for vulnerable groups and how policies have made a difference. The time and cross-country dimensions also give valuable information about policy intervention and the behavioral consequences of persons adapting to these changes in the short- and mid-term. However, at the same time, the methodology fell short of giving a clear indication of poverty trends, i.e., how countries prevent poverty measured against an absolute fixed threshold over time. Therefore, this article will extend the scope to absolute poverty measures and highlight its valuable contribution and discuss its limitations. The article concludes with a summary.

2. Absolute poverty measurement – international poverty lines
Absolute poverty measurement is different from relative measures. Among others, for international comparison a common technique of an international poverty line has been developed in a background paper for the World Bank’s World Development Report 1990. In the initial methodology introduced by Ravallion, Datt, and van de Walle (1991), the poverty line was determined by selecting 33 national poverty lines in various developing and industrialized countries. Using purchasing power parity (PPP) exchange rates, all national poverty lines were converted into US dollars for the base year 1985. From the relative numerical proximity of the poverty lines, a common poverty line was set to 32 US dollars per month, which in the following was described as international poverty line set at one dollar per day. In their paper Dollar a Day Revisited, Ravallion, Chen, and Sangraula (2009) provide an updated analysis and history of the international poverty line concept. The current poverty thresholds are described by Jolliffe et al. (2022). In addition to the commonly used extreme poverty threshold $2.15 based on low-income countries, the authors estimated two alternative measures. The rates for lower-middle-income countries and upper-middle-income countries are calculated to be $3.65 and $6.85, respectively, expressed in 2017 PPP. These are valuable additions, particularly when comparing results across countries with different levels of development.

In the following, I simply use these commonly applied thresholds as a tool to visualize progress over time. Although used typically in conjunction with consumption data, the application to income data allows for additional interpretation concerning the importance of social transfers. Like in Figure 1 in the previous article, the grey bars in Figure 3 describe the population share with disposable income below the poverty threshold. Unlike in Figure 1, where the relative poverty threshold is re-calculated year by year, in Figure 3 the threshold for poverty is fixed for

Fig. 3. Absolute poverty rates before and after social transfers

<table>
<thead>
<tr>
<th>Year</th>
<th>Poland</th>
<th>United Kingdom</th>
</tr>
</thead>
</table>

- Poverty rate, below 6.85 $ a day
- Poverty rate without general social assistance
- Poverty rate without family transfers
- Poverty rate without all public transfers (excluding pensions)
the entire over-time series at $6.85. Thus, the more progress in a country, the steeper the decrease in poverty. Analogously to Figure 1 the squares show the poverty rates when either all social transfers (blue), or simply one policy area (family transfers (red) or general social assistance (green)) is taken out from disposable income. The methodology is exemplified in a two-country comparison of Poland and the United Kingdom.

The example of the United Kingdom shows that the threshold for upper-middle income countries is practically too low since the beginning of the series in 1985 to yield a significant share of persons with income below this threshold; these might refer mostly to persons with instable income, e.g. temporary losses through self-employment activity or negative returns from capital on the one hand, but possibly also from incompletely collected information on regular income in the survey responses on the other hand. What is striking to see is that, particularly in the early 1990s, social transfers are a significant pillar of poverty prevention. Note that the rate of 15 % excludes entirely the effect of pensions. Thus, for roughly 15 % of the population, social transfers (without taking pensions into account) are the essential source to be out of poverty, measured at the threshold of $6.85 for upper-middle income countries, which is set for a high-income country like the United Kingdom at a relatively extremely low level. Raising the threshold would, therefore, show even distinctly higher rates. Interestingly enough, taking out solely transfers from one policy area, as shown here each separately for family transfers and general social assistance, hardly has an impact on increased poverty. This indicates that in the United Kingdom various social transfers from different policy areas are received simultaneously.\(^1\)

The case of Poland reveals an entirely different pattern. First of all, the threshold of $6.85 for upper-middle-income countries was still a decisive threshold for 15 % of the population in the mid-2000s. The steeply decreasing poverty rates since then mirror the quick progress moving from entering the upper-middle income group to entering the high-income group within 15 years (World Bank Group, 2017). The effect of taking out social transfers is less pronounced as compared to the United Kingdom. This mirrors a comparatively less established social security system. Moreover, starting from 2016, the main effect of poverty prevention can be allocated to family transfers. As argued in the previous article, the transition from assistance-based to universal child allowance is the primary explanation for this pattern. An interesting insight is that poverty rates started to go up in 2019, mirroring one important effect: other incomes besides family transfers may have become less important in the income mix; in other words, some households rely less on additional income sources. Given Poland’s rather good economic situation, this seems to be a behavioral consequence rather than an economically driven one. Additional socio-demographic information on the subsample falling below the threshold would be essential to get further insight into who is among the 5 % of the population below the threshold or among the 7.5 %, respectively, when taking out family transfers.

Figure 4 provides an extended overview of the various absolute poverty thresholds established by the World Bank Group: $2.15, $3.65, and $6.85. Panel A shows the long-term trends in four countries which experience a transformation from upper-middle to high-income countries in this period. According to the current World Bank classification, Chile and Romania are already considered high-income...
countries, whereas Mexico and Paraguay are still among the upper-middle-income group. Panel B shows, besides the previously introduced case of the United Kingdom, two more advanced high-income countries, France and the United States.

The comparison between the two panels reveals a striking difference in the importance of social transfers. Taking out social transfers from disposable income does not strongly increase poverty rates in panel A. To a certain extent the only exception is Romania, which is somewhat similar to the Polish case analyzed before. In both countries, taking out social transfers increases absolute poverty by roughly four percentage points. This is much less compared to the cases of France (on average around seven percentage points increase) and the United Kingdom (on average around ten percentage points increase). Notable is the distinctive pattern in the United States, where a larger share of persons remains below the poverty thresholds, even the $2.15 threshold. At the same time, the United States looks less dependent on current social transfers; poverty rates after taking out social transfers yield poverty rates mostly still below 5%. The impact of the COVID-19 measures in 2020 and 2021 is interesting, which helped to decrease the population share living below the various poverty thresholds substantially. An interactive tool where the absolute poverty threshold could be raised, based on the user’s interest, would be perfect.

There are a few shortcomings to be noted. First of all, the presented thresholds are arbitrarily chosen. The income level of $6.85 might, in one country, capture the level to cover a typical basket of goods for essential consumption well. In contrast, in another country, the level might be just too high (overestimation of poverty, as the basket of goods for essential consumption is much cheaper) or too low (underestimation of poverty, as the basket of goods for essential consumption is much more expensive). An internationally agreed definition of a basket of essential goods is hard to achieve, as this is at the discretion of the national institutes. Even, if possible, this would mean that national concepts for absolute poverty thresholds need to differ ideally across countries and over time. Whether such an approach could yield comparable outcomes remains questionable. The here presented concept of an international poverty line should be understood as a welcome simplification that allows easy country comparisons over time.

Another limitation concerns the spatial differences in price levels within countries. Similar income levels do not allow to consume the same basket of goods across regions. This is a well-established element in consumption data analyses at the national level but much less common in income data analyses. By using one commonly defined poverty threshold over the entire country, one certainly loses precision in determining who is actually poor. Therefore, an analysis based on consumption data in conjunction with income and social security data would yield better insights. Unfortunately, such data are frequently not collected jointly in advanced countries.

3. Conclusion – one indicator is not enough – reflections on a helpful visualization tool

In conclusion, social protection systems play a crucial role in helping people escape poverty. It is essential to look at both social benefits and poverty levels together. Both articles together have shown that absolute and relative poverty measures give different but important information. But the key lesson is: One indicator is not enough. It is the multitude of information and options that allow for multifaceted analyses and recommendations to further develop well-targeted social security systems.

To understand all of this, interactive visualization tools are crucial. Such tools need to be easy to understand and, at the same time, allow for modifying multiple factors. Among these critical factors are choosing specific benefits, looking at different groups of people, deciding on the method for measuring poverty, and selecting a time frame. In addition, there is also a need for exhaustive metadata, including clear correspondence between national programs, which are included in the broader policy areas each year. Although this information exists in the LIS Database, retrieving it in a cross-country setting and over time is challenging but worth an attempt given its merits for evidence-based policy decisions.

1 This is supported by the equally low importance of the other policy areas not shown here. A complete set of numbers can be forwarded upon request for the curious reader.

References


Data News / Data Release Schedule

LIS is happy to announce the following data updates:

**Colombia** (1 new) – Addition of CO23 to the LIS Database

**France** (2 new) – Addition of FR19 and FR20 to the LIS Database

**Luxembourg** (2 new) – Addition of LU20 and LU21 to the LIS Database

**Serbia** (12 new & 4 revised) – Annualisation from RS06 to RS22 in the LIS Database

Data Releases and Revisions – Luxembourg Income Study (LIS)

**Colombia**

One new dataset from Colombia has been added to the LIS Database (CO23). The new dataset is based on the Great Integrated Household Survey / Gran Encuesta Integrada de Hogares (GEIH) carried out by the National Administrative Department of Statistics / Departamento Administrativo Nacional de Estadística (DANE). Please note that starting from CO22 the GEIH is based on the latest 2018 Census (henceforth referred to as GEIH-M18) implying a new methodology in terms of sampling, weighting and the collection of several labour market and income items.

**France**

LIS has added two more data points, FR19 and FR20, to the LIS Database. The datasets are from the Tax and Social Incomes Survey (ERFS) carried out by the National Institute of Statistics and Economic Studies (INSEE).

**Luxembourg**

Two new datasets from Luxembourg have been added to the LIS Database, LU20 and LU21. The data are based on the Socio-economic Panel “Living in Luxembourg” / Panel socio-économique “Liewen zu Letzebuerg” (PSELL III), from which is also created the Survey on Income and Living Conditions (EU-SILC). The data are provided by the National Institute for Statistics and Economic Studies of the Grand Duchy of Luxembourg (STATEC). Yet again, LIS is grateful for the invaluable help and support offered by STATEC to prepare the data.

**Serbia**

LIS has annualised the Serbian data series from RS06 to RS22. All datasets are based on the Household Budget Survey carried out by the Statistical Office of the Republic of Serbia. The previously available datasets RS06/RS10/RS13/RS16 have been slightly reworked for consistency, essentially in the education section and to a lesser extent in the incomes and consumption sections. The LIS Key Figures changed moderately.

LIS/LWS Data Release Schedule

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Focus on The Role of Single Motherhood in America’s High Child Poverty

LIS WP No. 881 by David Brady (University of California, Riverside & WZB Berlin Social Science Center), Regina Baker (University of North Carolina, Chapel Hill), Ryan Finnigan (University of California, Berkeley)

Many claim a high prevalence of single motherhood plays a significant role in America’s high child poverty. Using the Luxembourg Income Study, the authors compare the “prevalences and penalties” for child poverty across 30 rich democracies and over time within the U.S. 1979-2019. Several descriptive patterns contradict the importance of single motherhood. The U.S. prevalence of single motherhood is cross-nationally moderate and typical, and historically stable. Also, child poverty and the prevalence of single motherhood have trended in opposite directions in recent decades in the U.S. More important than the prevalence of single motherhood, the U.S. stands out for having the highest penalty across 30 rich democracies. Counterfactual simulations demonstrate that reducing single motherhood would not substantially reduce child poverty. Even if there was zero single motherhood: (a) the U.S. would not change from having the fourth highest child poverty rate; (b) the 41-year trend in child poverty would be very similar; and (c) the extreme racial inequalities in child poverty would not decline. Rather than the prevalence of single motherhood, the high penalty for single motherhood and extremely high Black and Latino child poverty rates—affect regardless of single motherhood—are far more important to America’s high child poverty.
LIS Welcomes Philippe Van Kerm as Research Director

LIS is pleased to announce the appointment of Philippe Van Kerm as new LIS Research Director starting from June 2024. Philippe will support LIS Director Peter Lanjouw in leading the scientific programme with a view to further expand the LIS activities to facilitate, promote, and conduct cross-national comparative research. Philippe is an economist and a professor in inequality and social policy analysis at the University of Luxembourg’s Department of Social Sciences. He has a vast experience in micro-data analysis on poverty and inequality. Besides publishing numerous research in peer-reviewed journals, he has been developing software tools that are widely used worldwide for inequality, poverty and welfare analysis. He is well acquainted with the LIS infrastructure and has regularly been teaching poverty and inequality analysis and advanced quantitative methods at the University of Luxembourg and at the LIS Summer Workshop. Philippe’s proven experience in research in inequality and poverty, together with his long-standing knowledge of LIS, will undoubtedly help him advance LIS’ mission and achieve further growth in the future. LIS welcomes him warmly!

Call for Papers for the 2nd III/LIS Comparative Economic Inequality Conference 2025

LIS and the UK LIS Satellite Office at the International Inequalities Institute (III) invite scholars working in the field of comparative economic inequality to contribute to the 2nd III/LIS Comparative Economic Inequality Conference on 27-28 February 2024 at the University of Luxembourg.

Keynote speakers are Nora Lustig, Tulane University, and Fabian Pfeffer, LMU Munich.

We invite submissions from scholars at all levels of seniority who are working on comparative economic inequality, broadly interpreted. Topics include (but are not restricted to) new approaches to the measurement of inequalities in income, wealth, or debt; across genders, racialised groups, class, or space. We are particularly interested in papers looking at cross-country differences using LIS/LWS or similar data but are also open to comparative work on inequalities across different socio-demographic or socio-economic groups within countries. Both theoretical and empirical contributions are welcome. The deadline for submissions (working papers or extended abstracts) is September 15, 2024. The conference organizers will notify all with the decisions after October 15, 2024. Please send the abstract or any questions surrounding the conference to iii.lis@lisdatacenter.org.

Scientific Committee: H. Xavier Jara (LSE), Teresa Munzi (LIS), Philippe Van Kerm (LIS), Nora Waitkus (LSE).

More information about the call is available here.

Message from LIS Director Peter Lanjouw

I am pleased to announce that an expansion of the structure of the LIS directorship has taken place, with the reinstatement of the position of LIS Research Director. LIS was fortunate to have Professor Lee Rainwater in this role from the very establishment of LIS in 1984 until 2005, succeeded by Professor Markus Jäntti until 2014. Following the expansion of its research agenda, LIS has decided to re-instate this role, to be filled, as of this June, by Professor Philippe Van Kerm, as part of a larger collaboration with the University of Luxembourg. Philippe will support us in the following way: i) using the LIS data in his research and teaching with a view to increase LIS visibility and access, ii) advising the team on advanced methodological techniques to produce higher quality harmonised data, and iii) actively contributing to setting priorities in terms of LIS vision for the future.

For me it is a privilege and real pleasure to welcome Philippe to the LIS team. I have long admired Philippe’s combination of deep scholarship with his relentless focus on broad social and policy relevance. We are sure to benefit greatly from his experience and insights. All of us at LIS - staff, directors and board - are delighted to welcome him on board!

Best wishes,

Peter Lanjouw

LIS Director

LIS Granted the Aldi Award for 2023 LIS Working Paper

This year’s winner of the LIS Aldi Award is Itay Machtei (University of North Carolina at Chapel Hill) for the LIS Working Paper No. 854 entitled “Testing Theories of Redistribution: Structure of Inequality, Electoral Institutions, and Partisan Politics” co-written with Evelyne Huber and John D. Stephens.

The winning paper underwent a rigorous evaluation process, with six reviewers assessing its merits, and it was unanimously voted as the best among the qualified LIS and LWS Working papers. Every year, the award is granted to the writer under age 40 whose LIS or LWS Working Paper from the previous year best demonstrates the qualities of good scholarship that Aldi exhibited. Itay will be presenting the winning paper at the upcoming LIS Summer Workshop.
2024 LIS Summer Lecture Invitation

LIS is happy to invite you to its 2024 Summer Lecture on “Predistribution versus Redistribution” by Prof. Ravi Kanbur, Cornell University.

The lecture will take place on Monday, July 1, 2024, from 17:00 to 18:00 [Luxembourg Local Time] at the LISER Conference Room, First Floor, Maison des Sciences Humaines (MSH), 11, Porte des Sciences, L-4366 Esch-Belval, Luxembourg.

Lecture Abstract

Over the past quarter century there has been a shift in the analytical and policy discourse, away from redistribution of market incomes through tax-transfer regimes and towards “predistribution” of pre-market productivities through education and human capital interventions.

There are three strands of the arguments underlying this shift: the technical and economic problems associated with redistribution, the moral superiority of equalizing opportunities rather than outcomes, and the greater acceptability of predistribution in the political realm. Each of these arguments warrants closer examination and upon scrutiny is not as strong as it appears in the current discourse. The drift away from redistribution should be assessed carefully by those who wish to address rising inequalities.

Registration

Registration for attending the Summer Lecture is mandatory, you can register through this link.

Registration Deadline: 23rd of June 2024.

The lecture will be followed by a Cocktail Dinner from 18:00 to 19:00.

(LIS)²ER Visitors Programme 2024

In April, the (LIS)²ER visitors program kicked off. The objective of this project is to organize in the context of the (LIS)²ER initiative, an institutional collaboration between LIS and Liser – is to promote and develop data-driven knowledge about policies to fight inequalities and to deepen our understanding of ‘what works’ in reducing inequalities. We received an impressive number of excellent submissions. In the course of the initiative, the hosting 9 short term and 2 long-term visitors.

In April, Vito de Sandi (University of Bari) joined LIS for two weeks to work on “Excessivist Social Welfare Ordering”. He was followed by Francesco Savoia (Yunus Social Business Center, University of Bologna) to work on “the distributive impact of the European regional development policy. Evidence from regression discontinuity design“ and Jacques Silber (Bar-Ilan University) working on “Economic Insecurity, the Demand for Redistributive and Voting Behavior”.

Each of these visitors have presented a seminar discussing the findings of the projects they were working on during their stay.

For more information about the (LIS)²ER Visitors Programme and our upcoming visitors, please see here.

Introducing `lissyuse ()’: New R Function in LISSY

To enhance and simplify the use of the LIS databases through the LISSY user interface, the LIS team has developed a new R function, lissyuse(), for easy and efficient data loading.

The `lissyuse()` function allows LISSY R-users to quickly import entire series of data within the LIS/LWS databases for specific countries and/or time periods. It also automatically merges household-level databases with individual-level ones based on user-selected variables, if needed.

For more information about the function and its options, please see here.

This R function operates similarly to the Stata lissyuse command, which the LIS team developed for Stata users to easily merge and append datasets within the LIS/LWS/ERFLIS databases. For full documentation of the Stata-lissyuse command, please see here.

For feedback and questions regarding the lissyuse command and functionality, please contact usersupport@lisdatacenter.org.

LIS Country-Year Samples Isoginis: A New Dataset Added to the LIS Complementary Database

This dataset provides estimates, including standard deviations, of isoginis across 86 country-year samples from the LIS dataset (LIS release March 2024). Isoginis represent innovative indicators of inequality across various percentile levels, akin to the conventional Gini index. For further details, refer to the article:

Louis Chauvel (2024). “Isoginis as a Set of Indicators to Compare Trends and Shapes of Income Inequality: The Fading Swedish Middle-Class Society in a World of Diverse Dynamics”, Inequality Matters, Quarterly updates on inequality research, Issue No.29 (March 2024).

In addition to isoginis, the dataset includes indicators such as sigma (indicating the slope of imbalance between upper and lower tail inequality) and pi (measuring polarization). Furthermore, the proportion at risk of poverty (p pora), i.e. below 50% of the median, and its log-symmetric for those at risk of richness (r ira), i.e. above 2 times the median, are also provided.

Isoginis were computed using version 2 of the STATA module ’isogina’ (accessible via ’ssc install isogina’), as described by Louis Chauvel in the associated publication. (See Louis Chauvel, 2024. “ISOGINI: Stata module to estimate isogini measures at different percentiles,” Statistical Software Components S459299, Boston College Department of Economics, revised 16 Mar 2024.)

The standard deviation of each estimate come from a 50-repetitions bootstrap included in then isogini module.

To access the dataset and the relevant documentation, please visit this page.

LIS Team Participation in Conferences/Workshops

Andrej Cupák (National Bank of Slovakia) and Piotr Paradowski (LIS) led the workshop on Household Finance and Consumption Survey (HFCS) and Luxembourg Wealth Study (LWS) Database. The workshop was organized by the National Bank of Slovakia (NBS) in Bratislava, April 22-24, 2024. The workshop included students, researchers, and analysts interested in exploring the economic and financial dynamics of household wealth, assets, and liabilities.

**Stone Center at GC CUNY Hosted Its Sixth In-Person Inequality by the Numbers Workshop**

The Stone Center’s Inequality by the Numbers workshop was held in New York City on 3-7 June. The 2024 workshop was the first to be held in-person since 2019.

The workshop takes a broad approach to the study of socio-economic inequalities. Instructors view inequalities through multiple lenses, including gender, sexuality, class, race, ethnicity, age, and immigration status, as well as through multidisciplinary perspectives. Disparities are considered in several geographic contexts: within New York City, across the US states, across countries, and globally.

Eighteen lectures, focused on inequality, were presented: Leslie McCall (politics), Janet Gornick (LIS data/research), Bhash Mazumder (mobility), Branko Milanovic (global inequality), Paul Krugman (economic perceptions), Michelle Holder (US labor market), Nancy Folbre (paid care), Hannah Walker (political participation), Suresh Naidu (unions), James Parrott and Lauren Melodia (NYC), Jackie John (criminal-legal system), Deborah Balk and Daniela Tagtachian (environment), Núria Rodríguez-Planas (higher education), Van Tran (immigration), Salvatore Morelli (wealth), Martin Gilens (representation), Jacob Faber (housing), and Tina Law (computational methods).

This year, fifty early scholars attended the workshop, mostly PhD students from universities across the US. The US contingent was joined by students from Paris School of Economics, London School of Economics, Bocconi University, Roma Tre University, University of Modena, University of Strasbourg, University of Oldenberg, and Zhejiang University. This year’s workshop also welcomed attendees from several non-university institutions, including the Institute for Women’s Policy Research, the Center for Economic and Policy Research, and the United Nations Department of Economic and Social Affairs.

The lectures were supplemented, each day, with scheduled one-on-one research consultations.

**Stone Center at GC CUNY Announced Its Sixth Cohort of Postdoctoral Scholars**

A sixth cohort of postdoctoral scholars will join the Stone Center for two-year appointments that begin in September 2024. Zhexun Mo was selected for a position that focuses on global inequality, currently or historically, and economic inequality in China. Severin Rapp was selected for a position that focuses on wealth inequality.

Zhexun Mo is an economist whose research examines the intersection of political economics, development, and economic history. In particular, he explores inequalities in their multidimensional forms and their interactions with political forces over the long run, such as the repercussions of coercive inequalities engendered by conscription and forced labor in colonial French Africa. He also constructs historical national wealth balance sheets and works on the development of better measurement methods for income and wealth inequalities in East Asian countries over the long term. Mo is expected to receive his Ph.D. in Economics from the Paris School of Economics in July.

Severin Rapp is an economist who works on wealth inequality and intergenerational transfers. He is interested in improving the availability of evidence on the distribution of wealth and bequests, including by unearthing new data and creating tools to make data from different sources and countries comparable. In addition, he has researched the consequences of wealth inequality and behavioral economics. During his doctoral studies at the Vienna University of Economics and Business (WU), Severin worked as an economist at the Organisation for Economic Co-operation and Development (OECD) and as a consultant for various organizations, including the Austrian National Bank. He is expected to receive his Ph.D. from WU in Economics and Social Sciences in July.

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