Inequality Matters

Dear readers,

For 2019, LIS has several exciting new advancements in preparation. This time we announce that we will further raise the quality and ease-of-use of our *LIS* and *LWS Databases*. By applying a simplified variable structure, LIS will increase the pace at which we add more countries and more years. A specific *highlight* in this issue summarises the main changes.

This issue is also equipped with two strong *inequality matters* articles. Paul Hufe (ifo Munich and LMU Munich) and Andreas Peichl (ifo Munich, LMU Munich, IZA, and CESifo) utilise the normative concept of fairness for comparing income distributions across European countries. Their measure of unfair inequality illustrates well that debates about fairness can be very well informed by empirical data analysis. In the second article, Miles Corak (Stone Center, GC, CUNY) is elaborating, what it takes to build a 'more inclusive society'. Social inclusion does not only mean eradicating child poverty, it also means creating a society where family background matters less, and where public policy guarantees a good linkage between the family, the market and the state in order to keep inequality balanced.

Besides the note on the restructuring of the *LIS* and *LWS Databases*, our *highlights* section includes an overview about the main challenges faced by LIS, when harmonising income data from middle-income countries (Teresa Munzi and Andrej Cupak, LIS). Heba Omar (LIS) and Jörg Neugschwender (LIS) are showing income and poverty trends for the new Russian data (the years 2011-2016 are now based on PIS carried out by Rosstat) in LIS.

Last but not least, our data team is looking for a new colleague working with us in Luxembourg! Find more information here. Also the Stone Center at GC, CUNY in New York has announced job opportunities for postdocs recently. There is also news about our ongoing collaborations with the *Agence Francaise de Developpement (AFD)* and the *Economic Research Forum (ERF)*.

Enjoy reading!

Jörg Neugschwender, editor

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Inequality Matters

Inequality and Unfairness in Europe

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Introduction

As frequent readers of this newsletter are aware, economic inequality has become one of the most prominent topics in public discourse among academics, policymakers and the general public. Typically, these debates are informed by longitudinal or cross-country comparisons with respect to some aggregate measure of economic inequality. For example, in recent academic and policy contributions the authors from the World Inequality Report raise red flags with respect to the current increase in inequality by drawing on long-term comparisons both within and between countries using top (income/wealth) shares as measures of inequality.

Such comparisons are important in their own right. Yet, they are less informative when it comes to the question of distributive justice. In many of these contributions the underlying normative assumption seems to be that less inequality is always better than more. Taking this presumption to its logical conclusion, the ideal outcome in income distribution would be perfect equality. Perfect equality, however, seems hardly defensible either from an efficiency or from a moral perspective. To be sure, there are many potential reasons why inequality is not morally justifiable. However, there are also many reasons why some measure of inequality may be defensible. Everything else being equal, would we really want to redistribute income from A to B if all of their income differential is due to the fact that A works long hours while B privileges leisure over work? If not, it is clear that perfect equality is a misleading reference point when discussing the fairness of a given income distribution.

With hidden normative assumptions abounding in public discourse on inequality, an explicit discussion of what it means to live in a society with a fair distribution of income is surprisingly wanting. Is the current income distribution in Denmark more just than the one in Germany? Has the US become more unfair since the golden age of the welfare state in the aftermath of World War II? Such questions cannot be answered by simple comparisons of aggregate inequality measures such as the Gini coefficient. Instead, it is more useful to pose the question of why we think that inequality is unfair in the first place. Once equipped with an explicitly normative conception, it might be possible to evaluate income distributions from a perspective of fairness. In Hufe *et al.* (2018) we advance this agenda by proposing the first set of inequality measures that is sensitive to three widely accepted fairness concerns at the same time: (a) freedom from poverty, (b) freedom from affluence, and (c) equality of opportunity.

We want to use this short article, which is based on Hufe and Peichl (2018), to showcase our method and illustrate the importance of reconciling different fairness concerns into one combined measure of unfair inequality. In fact, we will show that standard measures of overall inequality, such as the Gini index, are indeed positively correlated with measures of each of these principles of fairness. Yet country rankings may be markedly different depending on which fairness principle we invoke. For example, while some countries perform well in reducing poverty, others perform well in the dimension of opportunity equalization. Hence, to assess whether a given level of inequality is morally objectionable, it is important to reflect the multiplicity of ideals of fairness in the inequality measures used.

Data

To illustrate these suggested aspects of unfairness, we draw on the EU Statistics on Income and Living Conditions (EU-SILC) which covers 31 European countries. EU-SILC is a well-researched database for monitoring inequality, poverty, and social exclusion in Europe which allows for easy comparison of our results with previous works. We consider households to be poor if their household income falls short of the so called European *at-risk-of-poverty rate*, which is set at 60% of the country-specific median equivalized disposable household income. To be categorized as affluent, households must dispose of at least 400% of the median income.

We speak of an unequal distribution of opportunities if we detect income differences based on characteristics that are beyond the control of individuals. In particular, we use four background variables: the biological sex, the migration background, as well as the educational status and occupation status of the parents of individuals.[1] The stronger the dependence of household incomes on these characteristics, the higher the level of inequality of opportunity.

To briefly summarize the data: In 2010, mean disposable household income was the lowest in Romania, Bulgaria and Lithuania (μ < €5,000). At the top of the intra-European country distribution, we find Luxembourg, Norway and Switzerland, where average disposable household income hovers around the €40,000 mark. In all countries in our sample, income distributions are skewed to the right, i.e. the median income lies below the country average. Not surprisingly, incomes are most equally distributed in the Nordic countries. Frontrunner Norway features a Gini score of 0.221, whereas Bulgaria and Lithuania are characterized by a very unequal income distribution, only topped by Latvia with a measure of 0.353.

Unfairness and inequality

As outlined in section 1, demands for full equality are hard to justify. Consequently, comparisons based on inequality measures may be misleading when it comes to the evaluation of income distributions from a fairness perspective. That is why we now turn to three different aspects of inequality that could raise normative concerns: (a) poverty, (b) affluence, and (c) inequality of opportunity.

(a) Poverty. First, we consider individual deprivation, i.e. the concern that some do not have sufficient means to make ends meet. Typically, poverty is calculated by partitioning the population into a poor and a non-poor fraction by means of a poverty line. Then, an aggregation index is applied to summarize income distribution below the poverty line. The higher the poverty index, the more unfair the income distribution from the perspective of those who are poverty-averse. To characterize the lower end of income distributions we draw on the Watts index that increases with (i) the overall number of the poor, (ii) their average shortfall from the poverty line, and (iii) inequality within the poor faction of the population (Zheng, 1993).

As illustrated in Figure 1, the Watts index of poverty is positively correlated with total inequality as measured by the Gini index (ρ=0.686). Yet, the positive correlation hides a more nuanced picture. Consider the cases of the United Kingdom (UK) and Poland (PL). With a Gini index of approximately 0.320 both are on a par in terms of

aggregate inequality. Does this imply that both countries are also on a par from a fairness perspective? Certainly not if fairness accommodates poverty aversion. According to the Watts index, poverty levels in Poland exceed their UK analogues by a long way. Hence, evaluating the income distribution of those two countries by reference to aggregate inequality may be grossly misleading if we uphold that inequality is particularly concerning to the extent that the poor do not have enough to make ends meet.

(b) Affluence. Second, we consider individual affluence, i.e. the concern that some have so much that they could tilt the balance of social processes in their favor. In analogy to poverty measurement, the population is partitioned into an affluent and a non-affluent fraction by means of a richness threshold. Then, an aggregation index is applied to summarize income distribution above the richness line. The higher the richness index, the more unfair the income distribution from the perspective of those who are affluence-averse. Analogous to the measurement of poverty, we use a

modified Watts index to characterize the upper end of income distributions. Rather than households below a poverty threshold it captures those whose incomes exceed a richness line and weights these incomes by means of a logarithmic transformation. In analogy to the poverty measure, the Watts richness measure is positively correlated with total inequality as measured by the Gini index ($\rho=0.674$). However, it is once again important to register the subtle differences in the inequality experiences of the different countries before drawing conclusions with respect to fairness. Consider again the cases of the UK and Poland which are comparable in overall inequality. In contrast to the comparison based on poverty it is now the UK that is characterized by far greater unfairness in income distribution since affluence measures in the UK exceed their analogues in Poland by a long way (Figure 2). Hence, while according to poverty-aversion we ought to prefer the income distribution of the UK to the one of Poland, affluence-aversion leads to the opposite conclusion.

Figure 1: Inequality and Poverty
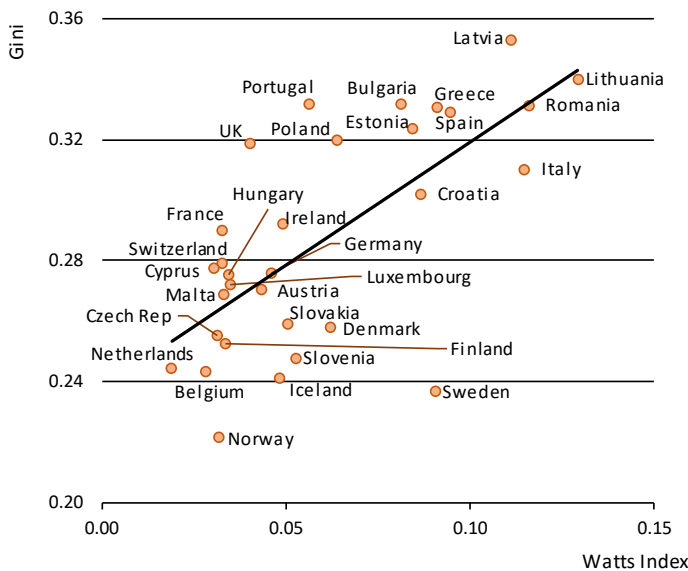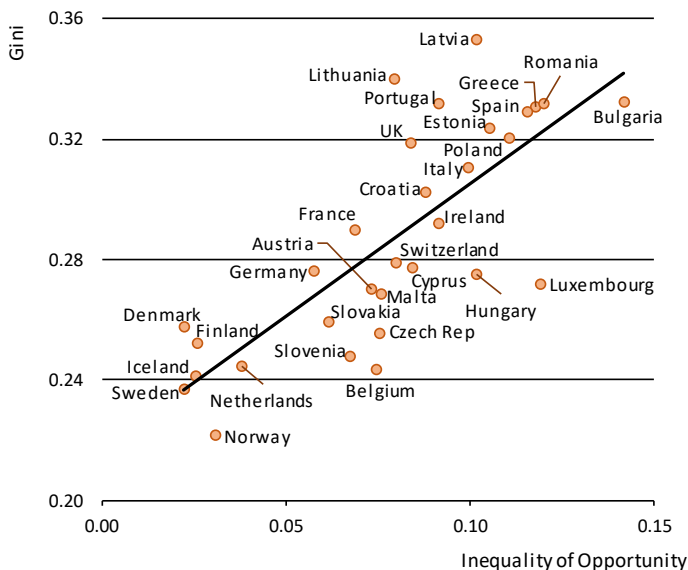

Source: EU-SILC (2011) cross-sectional (rev. 5. June 2015).

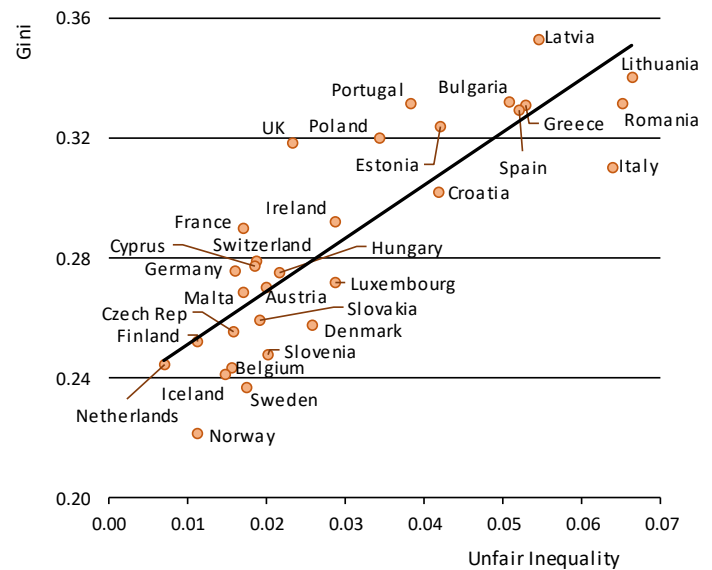**Figure 2: Inequality and Affluence**
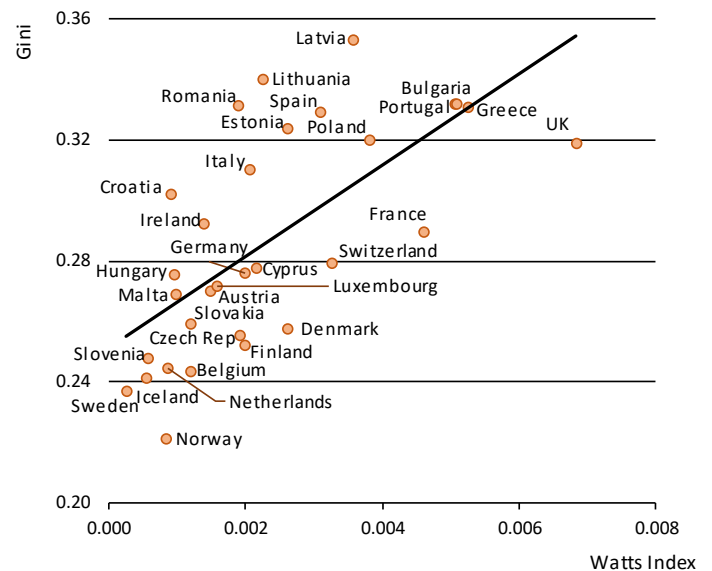
Source: EU-SILC (2011) cross-sectional (rev. 5. June 2015).

Figure 3: Inequality and Inequality of Opportunity

Source: EU-SILC (2011) cross-sectional (rev. 5. June 2015).

Figure 4: Unfair Inequality

Source: EU-SILC (2011) cross-sectional (rev. 5. June 2015).

(c) Inequality of Opportunity. We now turn to the concern regarding unequal opportunities. Typically, inequality of opportunity is measured by comparing incomes across types that are defined by a set of factors beyond individual control (Hufe *et al.* 2017). The larger the disparities across types, the more individual incomes are determined by factors beyond individual control, the more unfair the income distribution from the perspective of an adherent of equal opportunity. For the sake of this argument, we measure inequality of opportunity by means of the ex-ante utilitarian methodology, in which we first replace the incomes of individuals by the mean income of their respective types. Types are defined by the above-mentioned background variables (biological sex, migration background, educational status and occupation status of the parents) of individuals. In a second step, we characterize inequality in this counterfactual distribution by the Gini index. This measure varies according to the following logic: The larger the average disparities due to factors beyond individual control, the larger the disparities in type and the larger the Gini index in the counterfactual distribution, and hence the larger the measure of inequality of opportunity.

The correlation of inequality of opportunity and overall inequality is shown in Figure 3. As in the previous cases, overall inequality is positively correlated with the concern for equal opportunities (ρ=0.771). However, this is not to say that opportunity egalitarians can make fairness judgements based on the comparison of overall inequality alone. For example, in spite of their comparability in overall inequality, Poland and the UK are strongly divergent in terms of their distribution of opportunities. While inequality of opportunity reaches a level of 0.084 Gini points in the UK (Rank 17), inequality of opportunity amounts to 0.110 Gini points (Rank 27) in Poland. Hence,
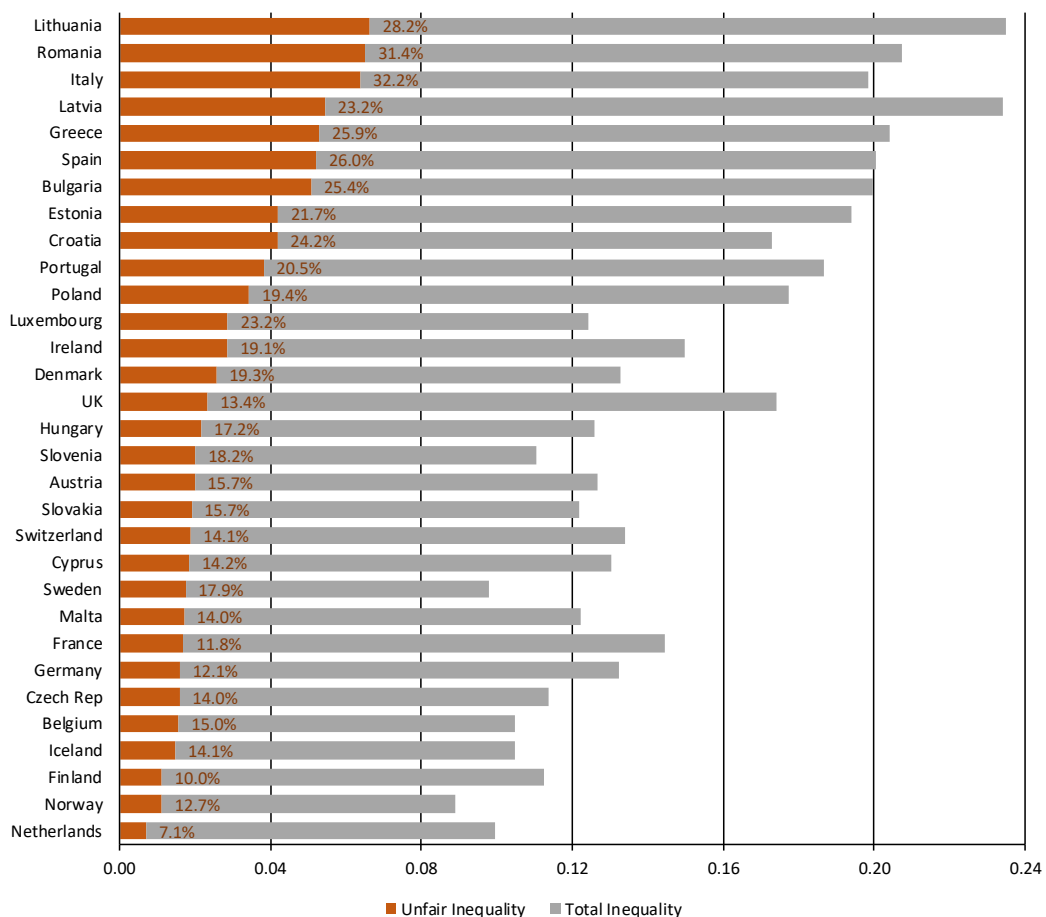
an opportunity egalitarian would prefer the income distribution of the UK over the one in Poland.

A combined measure of unfair inequality

The comparison of Poland and the UK have shown how different normative considerations may yield different, even opposite, results. Therefore, empirical researchers interested in the question of fairness need to find ways to reconcile different normative concerns into aggregate measures. In Hufe *et al.* (2018) we propose a set of measures of unfair inequality that accomplishes this reconciliation. To construct these measures, we follow a two-step procedure. First, we create an alternative, counter-factual income distribution for the observed countries, based on the fairness principles of (a) freedom from poverty, (b) freedom from affluence, and (c) equality of opportunity. In a second step, we construct a scalar measure of unfair inequality by aggregating the differences between the fair norm distribution and the actual income distribution. A larger divergence between ideal and factual allocation thus indicates stronger violations of our three normative principles.

Figure 4 presents the results in relation to the Gini coefficient. Correlation to overall inequality is strongest with our indicator (ρ=0.852) but it paints a much more nuanced picture of (un)fairness than the aggregate measure, considering both freedom from poverty and affluence, as well as inequality of opportunity. Coming back to our example of Poland and the UK, we can see that both score better in terms of unfair inequality than expected from their Gini coefficient. However, anyone wanting to consider all of the aforementioned fairness principles at the same time would prefer the income distribution of the United Kingdom to that of Poland.

Figure 5: Unfair Inequality in Relation to Total Inequality

Country	Unfair Inequality
Lithuania	28.2%
Romania	31.4%
Italy	32.2%
Latvia	23.2%
Greece	25.9%
Spain	26.0%
Bulgaria	25.4%
Estonia	21.7%
Croatia	24.2%
Portugal	20.5%
Poland	19.4%
Luxembourg	23.2%
Ireland	19.1%
Denmark	19.3%
UK	13.4%
Hungary	17.2%
Slovenia	18.2%
Austria	15.7%
Slovakia	15.7%
Switzerland	14.1%
Cyprus	14.2%
Sweden	17.9%
Malta	14.0%
France	11.8%
Germany	12.1%
Czech Rep	14.0%
Belgium	15.0%
Iceland	14.1%
Finland	10.0%
Norway	12.7%
Netherlands	7.1%

Source: EU-SILC (2011) cross-sectional (rev. 5. June 2015).

A more intuitive way to interpret our unfair inequality score is in relation to total income inequality, as measured by the mean log deviation. Figure 5 depicts our comprehensive results. The maroon bars show the extent of unfair inequality within total inequality (grey bars). In relative terms inequality is of most concern in Italy, where almost a third of all inequality is in violation of at least one of our three normative principles.[2]

Conclusion

We have shown that aggregate measures of inequality are imperfect proxies for fairness in a given distribution of income. While inequality correlates positively with poverty, affluence and inequality of opportunity, the correlation is far from perfect, actually leading to different country rankings depending on the chosen normative principle. For proper considerations about fairness it is thus indispensable to have a clear understanding of why we care about inequality.

Current research on fairness preferences suggests that fairness cannot be captured by referring to one normative principle only (Konow & Schwettmann, 2016). Instead it appears that fairness preferences are informed by multiple normative principles - such as freedom from poverty, freedom from affluence and equality of opportunity. Our analysis has shown that the isolated analysis of these aspects may point to different directions when comparing income distributions. It is not necessarily the case that less poverty goes hand in hand with less affluence and a more equal distribution

of opportunities. Hence, the reconciliation of different normative concerns into one aggregate measure of unfair inequality may be an important step towards making more informed judgements about the moral implications of inequality in different countries at different points in time.

[1] *For a more detailed description and remarks on practices in setting up the data, see Hufe et al. (2018).*

[2] *One should note that this interpretation is not neutral towards total inequality. Comparing two countries with equal extents of unfair inequality will characterize the one with less total inequality as more unfair.*

References

Hufe, P.; Peichl, A.; Roemer, J. E.; Ungerer, M. (2017). "Inequality of Income Acquisition: The Role of Childhood Circumstances". *Social Choice and Welfare,* 143 (3-4), 499-544.

Hufe, P.; Kanbur, R.; Peichl, A. (2018). "Measuring Unfair Inequality: Reconciling Equality of Opportunity and Freedom from Poverty". CESifo Working Paper 7119.

Hufe, P., and A. Peichl. 2018. "Inequality and Unfairness in Europe", CESifo Forum 19 (2), 26–34.

Konow, J., and Schwettmann, L. (2016). "The Economics of Justice". in Sabbagh, C. and Schmitt, M. (eds.), *Handbook of Social Justice Theory and Research*, 83-106. New York: Springer.

Peichl, A.; Schaefer, T.; Scheicher. C. (2010). "Measuring richness and poverty: A micro data application to Europe and Germany". *Review of Income and Wealth,* 56 (3), 597-619.

Zheng, B. 1993. "An axiomatic characterization of the Watts poverty index". *Economics Letters,* 42 (1), 81-86.

Building a more inclusive society

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What does "inclusion" mean, and how can we give it enough precision to inform public policy? In this article, I would like to elaborate further on the two facets of the term "mean": "mean" in the sense of how we define inclusion, and "mean" in the sense of its implications for policy. My four major messages are:

1. An inclusive society means that all children can become all that they can be.
2. An inclusive society seeks to eliminate child poverty.
3. Income inequality has the potential to erode inclusion.
4. Public policy must address many dimensions of inequality.

What do we mean by "social inclusion"?

"Social inclusion" is a slippery term, and it certainly does not have a distinct meaning in the social sciences. Hence, it is difficult to frame implications for public policy, which might be beneficial for further developing our understanding of "social inclusion" in societies.

However, terminology matters greatly to public debate and public policy. For example, the term "assimilation" is used in some countries to refer to policies addressed to immigrants. It frames policy discourse in a way that leads to a focus on the shortcomings of migrants. There is a sense of a clear and distinct "mainstream" to society, or to the economy, and migrants are lacking in the skills, language, or even in the attitudes, religion, and culture necessary to fit into this mainstream. Thus, implicitly "assimilation" implies a need for migrants to change.

This is overtly clear in the way that some extreme groups argue against the very presence of migrants, or accommodations toward them. If this perspective rubs many of us the wrong way it is because at some level we recoil from the underlying assumption of "assimilation": that the mainstream is clear, fixed, socially preferred; that the task for groups defined as the "other"—be they migrants, those with low-income or without work, those with physical or mental disabilities, or those of colour—is to adjust, to adapt, to assimilate, and indeed to ultimately identify with that mainstream.

It surely does not take much second thought to recognize that barriers to assimilation may be structural, reflecting overt discrimination in access to fundamental resources that are the basis for full participation in society: access to education, health care, income security, and even to jobs for which migrants may well be perfectly qualified but never hired because of skin colour, accent, or simply the spelling of their last names.

In other words, if perspectives like this rub many of us the wrong way it is because we believe there is a reciprocal obligation, something to be negotiated, something reflecting a partnership in the building of society in which all parties are treated with equal respect, and are in turn changed by the relationship.

This has to be at the core of what we mean by "inclusion" if it is to be a helpful framework. Inclusion embodies the idea that identity is something to be continually re-negotiated as successive waves of minority groups enter into conversation with the majority.

So in this way conversation is not just an excellent metaphor for the meaning of inclusion, it is also a vital mechanism to achieve it. It is through conversation that we can respectfully negotiate the terms of a partnership, but at the same time we appreciate conversation for its own sake, are not threatened or dissatisfied by the fact that it is open-ended, indeed this is what reassures and enriches.

But if building an "inclusive society" through conversation is to be sincere and productive, it has to be done between partners who demonstrate mutual respect, and be capable of freely engaging; partners with a clear sense of others, but also of themselves. It seems that this sort of capacity or capability is also at the core of what we mean by "inclusion".

1. Children can become all that they can be

Amartya Sen argues that we should live in a society in which we all have the freedom to choose the lives that we value. An important prerequisite of this sort of freedom is having a fully developed sense of self, of capacities to define what we value, and to make the choices necessary to get us there.

In my view, when thinking in these terms it is natural to focus upon children. Certainly this is not the only way to think about Sen's ideas, but I have to admit to being surprised that there is so little mention of children in Professor Sen's amazing book *Development as Freedom*. Nonetheless, I would like to put the focus on children, and suggest that if a society is inclusive, it is in the very least a society in which children can become all that they can be.

Focusing on children also allows me to illustrate a framework for understanding the underlying drivers of inclusion, of the challenges facing societies seeking to be more inclusive, and of some public policy implications.

This definition implies that family background should not be destiny, that place and position in society should not echo excessively across the generations with today's poor families raising children who will grow up to be the next generation of poor adults, or for that matter with today's rich families raising the next generation of rich adults.

2. An inclusive society seeks to eliminate child poverty

A commitment to eliminating child poverty is a conversation worth having. In my view, there are two important dimensions of poverty worth keeping in mind. The first relates to basic needs and necessities—adequate resources to be able to procure food, shelter, and clothing. The second dimension is just as important and relates to relative deprivation—adequate resources to participate normally in society. E.g. a cell phone may have been considered a luxury a decade or more ago, but for the present day teenager it is a necessity.

Amartya Sen underscores this dual nature of poverty. If children are to become all that they can be, then they have a need for a certain relative standing in our communities, a standard of living that not only allows them to be fed, sheltered and clothed, but to also to participate fully in the society in which they are growing up.

To relate this idea to public policy advice, I suggest that we think of a family falling into poverty if it has less than half the resources of a family half way up the socio-economic ladder. In thinking of income poverty this would mean setting a poverty line at 50% of the median income appropriately adjusted for family size (see Figure 1 for cross-national divergence). It would also mean regularly updating this poverty line to reflect economic and social changes.

A society that seeks to eliminate child poverty might consider making a commitment of the following sort. Each government would commit to lowering child poverty below the level it inherited at the start of its mandate. This target would be defined as the poverty rate according to one-half of the median income in the year it assumed power.

Figure 1: Child poverty rates across rich countries

% of children living in households with equivalent income lower than 50 % of national median
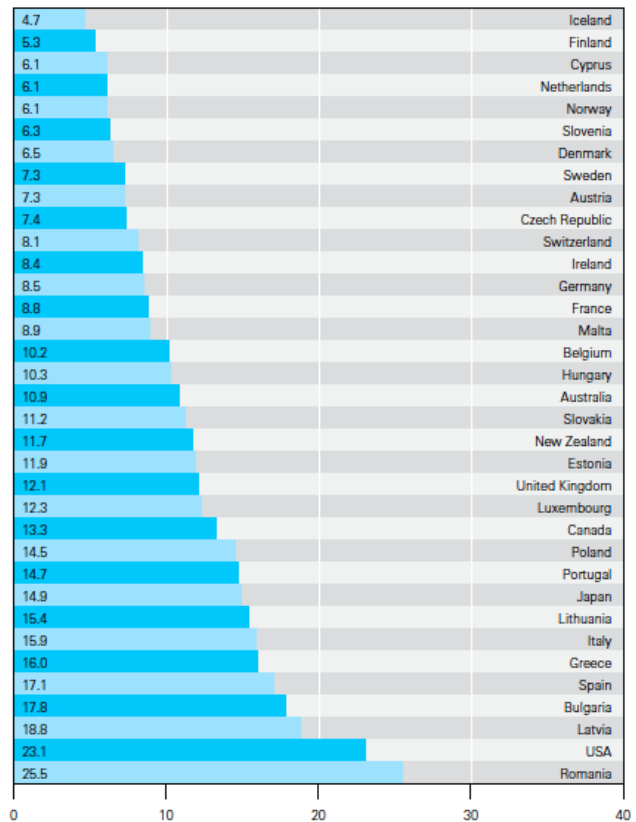
Source: UNICEF Innocenti Research Centre (2012). 'Measuring Child Poverty.' Innocenti Report Card 10. UNICEF Innocenti Research Centre, Florence. Accessed at http://www.unicef-irc.org/publications/660.

Successive governments would face a similar commitment, but based upon a new poverty rate, that defined according to the new median income in the year it assumed power. In this way the poverty line would be continually updated as the median income changes, a reflection of the evolution in what it takes to participate normally.

3. Income inequality has the potential to erode inclusion

A conversation about poverty is implicitly a conversation about inequality in the lower half of the income distribution, and it makes the plight of the relatively poor a social concern. In this way more inequality in the lower half of the income distribution has the potential to erode inclusion. Furthermore, I would like to suggest that income inequality throughout the entire income distribution also has the potential to erode inclusion.

But first another clarification of terminology. A movement, both up and down the income distribution, without regard to family background is termed "social mobility". Income inequality has the potential to erode inclusion because it puts social mobility at risk.

To illustrate this, Figure 2 presents a ranking of some rich countries according to one measure of social mobility: the extent to which the adult incomes of sons are related to the incomes of their fathers. This degree of stickiness between parent and child incomes varies across the rich countries, with almost one-half of income inequality in one generation being passed on between fathers and sons in the UK, Italy, and the United States, but less than one-fifth in Finland, Norway, and Denmark. A middling rank in this overview is shared among countries like New Zealand, Sweden, Australia and Canada.

Figure 2: Fraction of earnings inequality in the parent's generation passed on to the children's generation (%)

While intergenerational income mobility varies, it varies in a particular way. Figure 3 adds a second dimension to Figure 2. The horizontal direction plots countries from the least to the most unequal, according to the Gini coefficient that prevailed about a generation ago (around 1985). Figure 3 reveals that the greater the level of income inequality a generation ago, the lower the degree of mobility—that is the greater the chances that a child will occupy the same place in the income distribution as his or her parents. Greater inequality, in other words, tilts the playing field making it harder for children of lower socio-economic status to climb the ladder, and also more likely for those of higher status to inherit high status in their turn.

**Figure 3: The Great Gatsby Curve: more inequality is associated with less mobility across the generations**

Source: Corak (2013) and OECD.
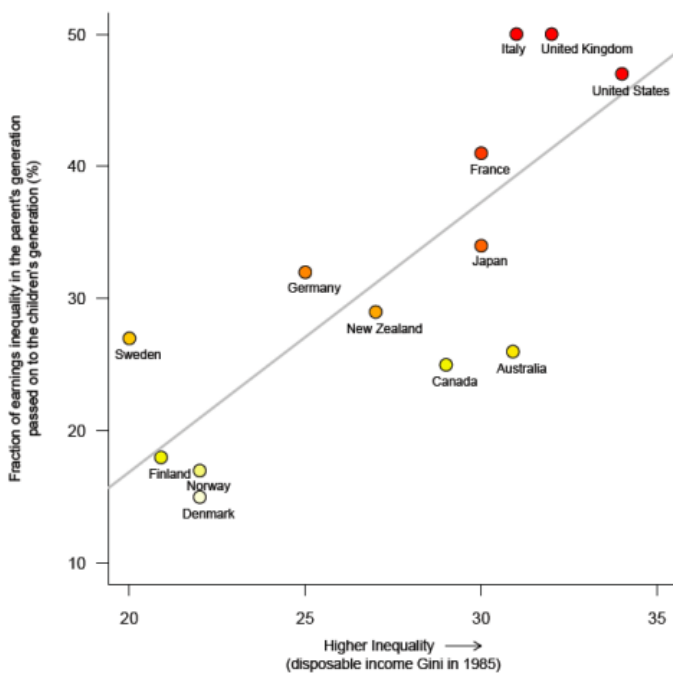
This relationship is often referred to as the Great Gatsby Curve, a name coined by the economist Alan Krueger. The Great Gatsby Curve raises a caution for our conversation about social inclusion. It suggests that the capacity to become all that you can be, will be more likely in more equal societies. To the extent that family income matters for life chances then the more unequal an economy, the less likely children will escape their family origins. High levels of inequality in a country seem not only unfair, but also erode equality of opportunity.

4. Public policy must address many dimensions of inequality

I have put the focus on differences in income, both in thinking about poverty and inequality. But as important as income is, it is not the only driver (Figure 4).

Figure 4: Drivers of social mobility
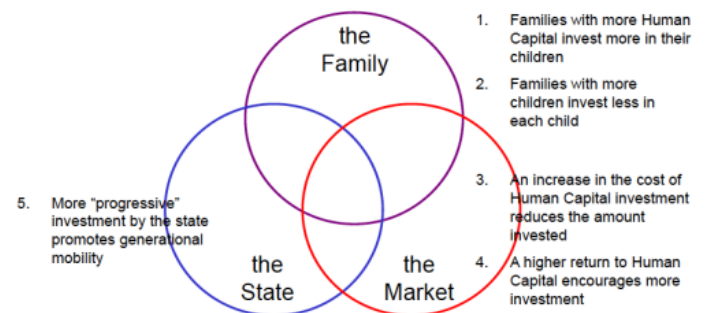
A child's life chances are determined not just by inequality of money, but inequality of education and health care, inequality of experience and expectation, inequality of motivation and esteem, inequality of support and connections. So to fully appreciate the policy challenges it is important to appreciate that the underlying drivers of poverty, social mobility, and ultimately of capabilities and inclusion relate to the interaction between three important forces determining a child's development: government policy, families, and labour markets.

We should never underestimate the major influence that families have on the well-being and development of children. But families must interact with the labour market, and rely on social policy for support and insurance. All children will be more likely to become all that they can be if their families have access to high quality care during their early years, access to high quality education from primary school to university, and access to health care throughout their lives.

Public policy plays an important role in complementing the efforts of families, and will contribute to social mobility if it is progressive, i.e. of relatively more advantage to the relatively disadvantaged. To a certain extent social mobility is a reality because social institutions and public policy have complemented the efforts of families in need in very important ways.

A "more" inclusive society

To conclude, it is promising to engage in a conversation about building a more "inclusive society" than we currently have. And to do so, I have suggested that we need to accept a definition of inclusion that refers to the full development of the capacities of children so that they are in a position as adults to live the lives that they choose to value. A more inclusive society—a society in which children can become all that they can be—will be a society in which the circumstances of birth matter less.

The original version of this articles is available at milescorak.com, and was presented as a keynote address to the "A More Inclusive New Zealand Forum." You can follow Miles Corak @MilesCorak, or read more at MilesCorak.com .

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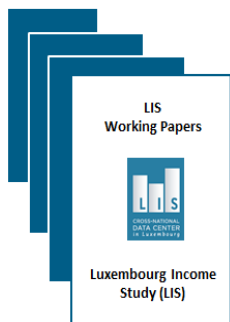
Focus on 'Asset Poverty Among Children: A Cross-national Study of Poverty Risk' **LWS WP No.29 by** *David W. Rothwell* ✉ **(Oregon State University)**, *Timothy Ottusch* ✉ **(University of Arizona)**, *Jennifer K. Finders* ✉ **(Oregon State University)**

Assets and debts shape a family's ability to make ends meet and plan for the future in ways that income does not. We introduce child asset poverty as the condition of a child living in a family that owns a level of financial assets that falls below a systematic threshold. That threshold is based on three months of the relative income poverty threshold of 50% of equivalized median household income (derived from original framework by Haveman & Wolff, 2004). Using these methods, several studies have compared overall rates of asset poverty across countries (Azpitarte, 2012; Brandolini, Magri, & Smeeding, 2010) and the OECD now includes these asset poverty metrics in its database warehouse.

Yet very little is known about the extent of asset poverty among children. We build on one study of asset poverty among children in Canada (Blumenthal & Rothwell, 2018) and extend the framework to compare countries. Using harmonized and comparable household wealth survey data from the Luxembourg Wealth Study, this paper finds that child asset poverty is consistently higher than income poverty and that children are at greater risk of asset poverty than other age groups. After adjusting for labor market and demographic factors, American children are at higher risk of asset poverty than children in other countries (ranging from 1.07 times higher than Australia to 1.69 higher than Norway). Applying the penalties and prevalences framework by Brady *et al.* (2017), counterfactual decompositions revealed that reducing the prevalence of single-parent female families in the U.S. would only hypothetically reduce the poverty rate by 2.8 percentage points, suggesting that the high U.S. child asset poverty rates in comparison to other countries are driven by factors unrelated to family structure.

Paper is in press at Children and Youth Services Review: https://doi.org/10.1016/j.childyouth.2018.11.045

Data News

Data releases

Luxembourg Income Study (LIS)

Russia 🔗

LIS is delighted to announce that the entire series from a new Russian survey has been added to the *LIS Database*. The data are based on the 5 waves of the new *Survey of the Population Income and participation in Social programs (PIS)* carried out by the *Federal State Statistics Service (Rosstat)*. The 5 waves correspond to 4 new data points for LIS (RU11 for Wave VIII, RU14 for Wave IX and RU15 and RU16 for Wave X) and one revised point (RU13, which we have updated with the PIS data).

United Kingdom 🔗

One more data point for United Kingdom, namely UK16 (Wave X), has been added to the *LIS Database*. The dataset is based on the 2016-17 wave of the *Family Resources Survey (FRS)* carried out by the *Office for National Statistics (ONS)* and sponsored by the *Department for Work and Pensions (DWP)*.

Luxembourg Wealth Study (LWS)

Canada 🔗

One more data point for Canada, namely CA16 (Wave X), has been added to the *LWS Database*. The dataset is based on the 2016 wave of the *Survey of Financial Securities (SFS)* carried out by *Statistics Canada*; this brings the total number of Canadian datasets in *LWS* to four (CA99, CA05, CA12 and CA16).

Data revisions

Luxembourg Income Study (LIS)

Russia 🔗 - RU04, RU07 and RU10 have been revised in order to include some additional family and education benefits; this correction has a modest impact on total disposable income.

LIS/LWS Data Release Schedule

In Spring 2019, the revised versions of the entire *LIS* and *LWS Databases* will be launched (see *Highlights* section, page 9). LIS anticipates that by Summer 2019, the following datasets will be added:

- to the *LIS Database*: Colombia 2016, Côte d'Ivoire 2002, 2008 and 2015, Finland 2016, Japan 2010 and 2013, Spain 2016.

- to the *LWS Database*: Japan 2004, 2009, 2011 and 2014, South Africa 2015 and 2017, Spain 2002, 2005, 2008, 2011 and 2014.

Country coverage *LIS Database* - end of 2018
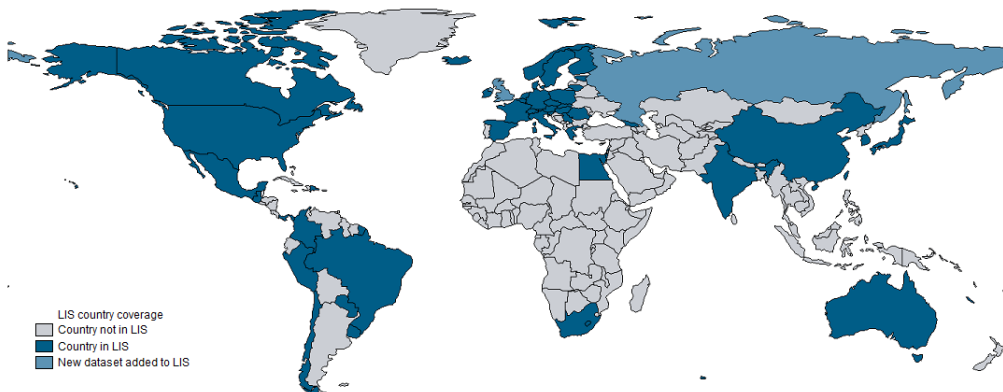
Country coverage *LWS Database* - end of 2018
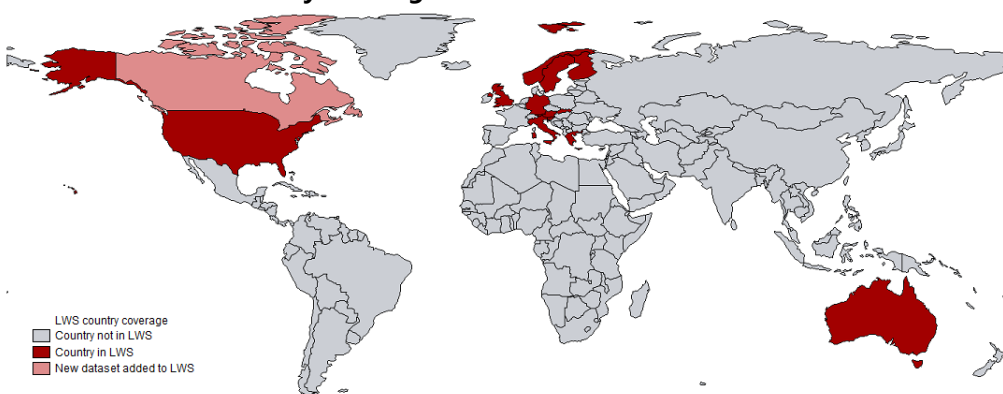
Highlights

Restructuring of the *LIS* and *LWS Databases*

LIS

We are pleased to announce that LIS is currently working on an ambitious restructuring of the *LIS* and *LWS Databases*. Two major factors motivated the timing and content of this update: (1) The recognition that our current variable lists include a level of detail which, unfortunately, is not available in many of the datasets that we acquire, limiting users' capacity to address comparative questions across large numbers of countries. (2) Increasing demand by the research community for lengthy over-time microdata series, while covering an increasing number of countries.

The main objective of this project is to raise the quality and ease-of-use of our harmonised microdata, by providing more standardised content across the national files. In practice, this means that the revised *LIS* and *LWS* variable templates will include fewer variables, but will offer a higher degree of comparability in the reduced sets of variables.

The main elements of this redesign can be summarised as follows:

- Full restructuring of the income and expenditure variables, with the result being simpler disaggregation trees, coupled with a corresponding renaming of variables. See the schematic below for a first look at the new income and expenditure variables.

- Simplification of the information on labour force status and employment intensity.

- Removal of a number of detailed country-specific variables, coupled with the introduction of more ready-to-use dummy variables.

- Addition of two standardised education variables: highest education (at the level of the first-digit ISCED classification) and years of education. The more detailed ISCED classification will allow users to better distinguish education tracks that vary within and across countries.

How will these changes affect the work of *LIS* and *LWS* microdata users?

The LIS data team is now transforming the entire existing *LIS* and *LWS Databases* from the current into the revised format. The revised version of the two databases will be launched in March 2019. After that date, new *LIS* and *LWS* datasets will be introduced in the new data structure. Pre-revised versions of the *LIS* and *LWS* datasets will continue to be accessible through LISSY, for a period of time, to enable users to complete ongoing projects. We anticipate that this restructuring of the microdata will be accompanied by an overhaul of our documentation system (METIS) during the course of 2019.

We are confident that our data users — both new and experienced — will benefit substantially from this restructuring. In addition to increasing the quality of the harmonised data, the simplified structure will allow us, ultimately, to increase the pace at which we add more countries and more years. Our expansion plans include two priorities: adding more middle- and possibly low-income countries, and providing annual data series when possible.

Flow variables in the new *LIS Database* - preliminary draft
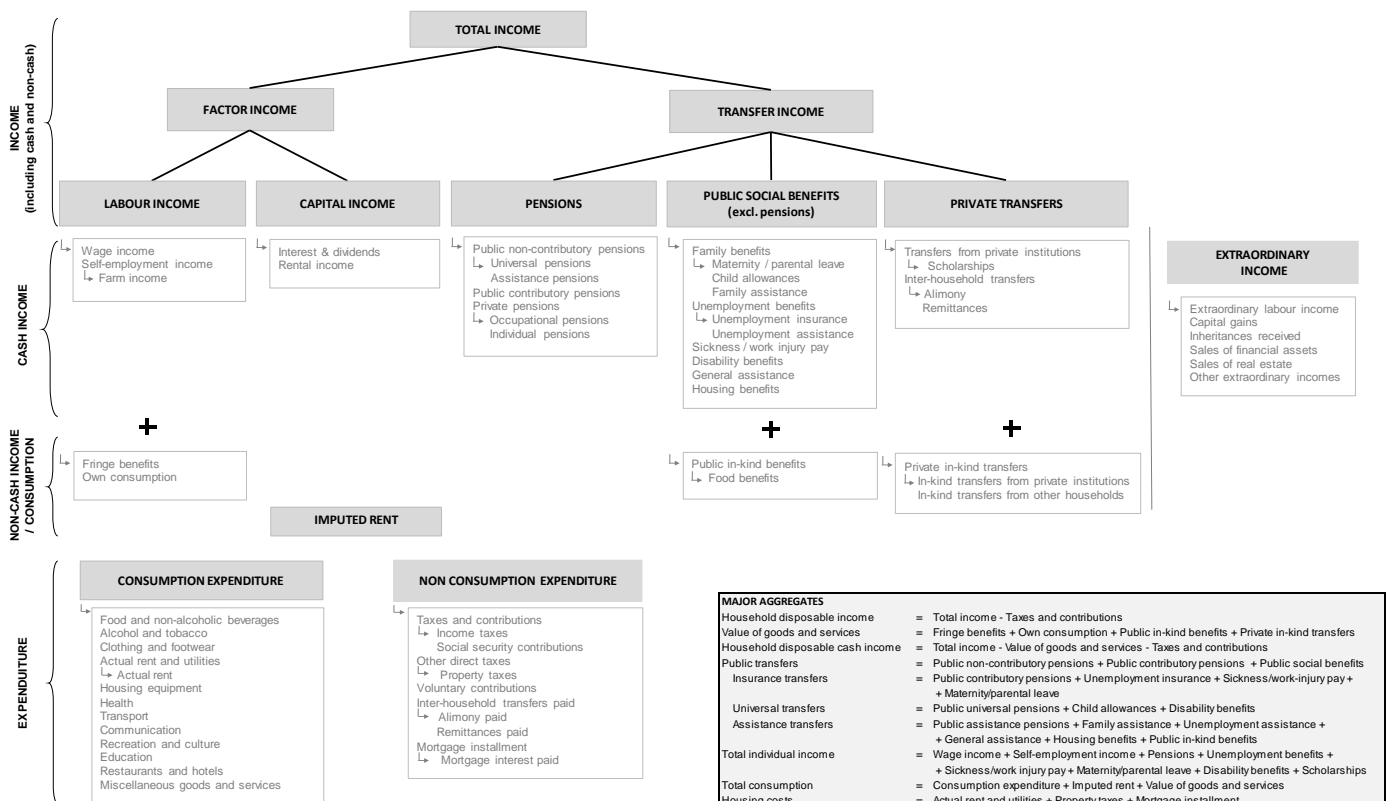
The challenges of harmonising income data from middle-income countries

Teresa Munzi ✉, (LIS) and Andrej Cupak, ✉ (LIS)

"There has been tremendous progress in the measurement of inequality and poverty in the developing world, although serious problems of consistency and comparability still remain…" (Alvaredo and Gasparini, 2015).

From its inception in the 1980s, LIS has consistently focused on high-income countries. Then in 2007 a pilot project was carried out with the collaboration of a team at the World Bank in order to study the feasibility of including middle-income countries into the LIS Database. Following the decision to go ahead with this expansion, LIS has made some conceptual adjustments and changes to its list of harmonised variables in order to accommodate more diverse labour market characteristics, social benefit structures, consumption patterns, transnational income flows and within-country variability, and hence maximise its applicability to datasets from both high- and middle-income countries. After ten years of harmonising data from middle-income countries alongside the high-income ones, LIS has acquired considerable expertise with respect to the main challenges which are typically found when working with income micro data from these sources. An overview of all such issues is available in a recent UNU-WIDER working paper by Checchi *et al.* (2018). Among several caveats discussed in the full version of the paper, this short note mostly focuses on issues concerning the measurement of income.

First and foremost, indicators of inequality, poverty and well-being are still prevalently based on *consumption rather than income* data, which often implies that income micro data are either non-existent or insufficient for the purpose of calculating robust income indicators (not collected, collected but not provided, collected but not exhaustive enough to capture the totality of household income).

In middle-income countries the proportion of *non-monetary incomes* from own consumption and social and/or private assistance-based transfers is much more important than in high-income countries, and its effect on inequality and poverty measures can be significant (see Figure 1, where only the LIS countries that collect non-cash incomes are included).

When adjusting the variable list at the time of the inclusion of middle-income countries, LIS adjusted the concept of disposable household income to also include non-monetary incomes. Whereas this adjustment was necessary in order to get a more unbiased picture of the households' standards of living in those countries, the inclusion of those incomes in the data has often proven to be particularly tricky. The main issues can be summarised as follows:

- The very first problem is due to the fact that coverage of the non-monetary incomes collected by the different surveys differs widely across countries, which has implications for comparability. For example, in surveys that are chiefly focused on consumption, the value of most goods and services consumed but not paid for (either because own-produced or because received from the employer, the government, charitable institutions or other private households) is collected with great detail and precision, whereas in other types of surveys the availability of such goods is much more scarce.

- Another problem arises with the non-monetisation of quantities of goods and services. As of this moment, LIS has taken the approach to only include those incomes that have been monetised by the data provider, thus increasing the potential bias due to the fact that in some countries, for purely practical rather than conceptual reasons, the final income concept includes a greater share of non-monetary types of income than in other cases.

Figure 1: Impact of non-monetary incomes
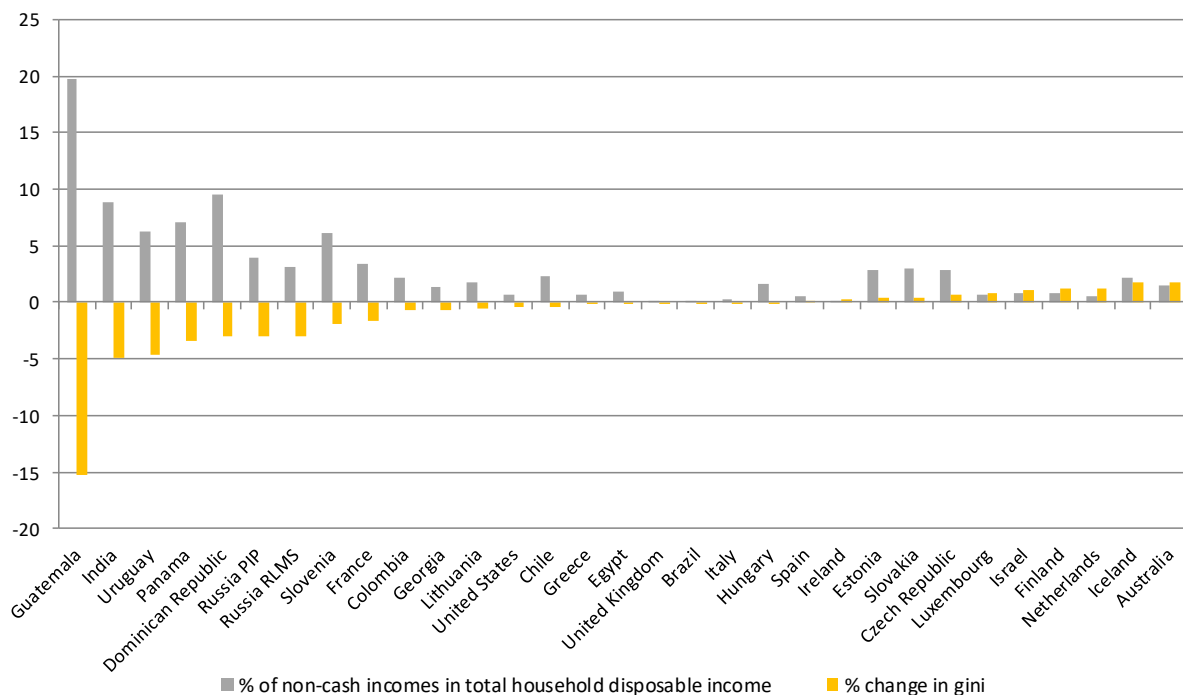
Source: *LIS Database.*

- Somewhat arbitrary assumptions are also made in cases where non-monetary incomes are collected in different sections of the questionnaire (among consumption variables, among the household level incomes from household activities, and among individual level labour incomes). It is clear that these amounts will certainly overlap to some extent and that obtaining a final amount that does not include any under- or over-counting of some of the income sources is proving extremely hard.

Independently from (but related to) the issue of the non-monetary incomes, another problematic area is that of *self-employment incomes* in general (see Figure 2 for a cross-country comparison) – especially incomes from farming activities and informal activities. By their very nature these kinds of income are more irregular and difficult to measure, and the reliability of a total household income variable which is made up in large part of those types of income thus becomes much more difficult. In addition, when it is collected at the household level only (as it is often the case in middle-income countries where surveys have specific sections about household activities), the creation of a comprehensive measure of total individual labour income becomes impossible, hence restricting the possibility of using such an important variable in many empirical analyses.

Finally, the *treatment of taxes and social security contributions* also varies from middle- to high-income countries. The very low reliance on direct taxes in most middle-income countries implies that in many surveys the borderline between gross and net incomes is often unclear. In some surveys incomes are collected partly gross and partly net (often only wage income being gross of taxes and contributions while all others are net); in other cases, it is not clear from the questionnaire or survey methodology whether incomes should be collected gross or net of income taxes and contributions. Such imprecision unavoidably leads to mixed results as regards data collection. Moreover, several middle-income countries provide income data only in gross terms, without any indication of the amount of taxes and contributions paid on them. One implication of this is that in order to obtain a measure of disposable income comparable to other countries taxes and contributions need to be simulated. In any case, even in the presence of full information on taxes and contributions, the low reliance on direct taxes relative to the indirect ones in middle-income countries might add a bias to the comparability of well-being indicators based on disposable household income. If indirect taxes were also taken into account, the true difference in inequality between high- and middle-income countries might even be more exacerbated than what the figures show.

In conclusion, in spite of the manifold efforts at the various levels of the data production chain (survey conception, implementation, data editing and data harmonisation), too many significant gaps remain to ensure proper consistency of income micro-datasets from high- and middle-income countries. The question of whether those two sets of data can be analysed within the same framework, or should be kept separated, therefore remains an important one. LIS has adopted the view that a common framework is possible while at the same time strongly emphasising the importance of highlighting all the caveats that go with such an approach. A next step would thus be to analyse the potential biases due to those challenges.

References

Alvaredo, F., and L. Gasparini (2015). Recent trends in inequality and poverty in developing countries. In *Handbook of Income Distribution* (Vol. 2, pp. 697-805). Elsevier.

Checchi, D., A. Cupak, T. Munzi and J. Gornick (2018). Empirical challenges comparing inequality across countries: The case of middle-income countries from the LIS Database. WIDER Working Paper 2018/149. Helsinki: UNU-WIDER, accessible here.

Figure 2: Labour income availability at the individual level
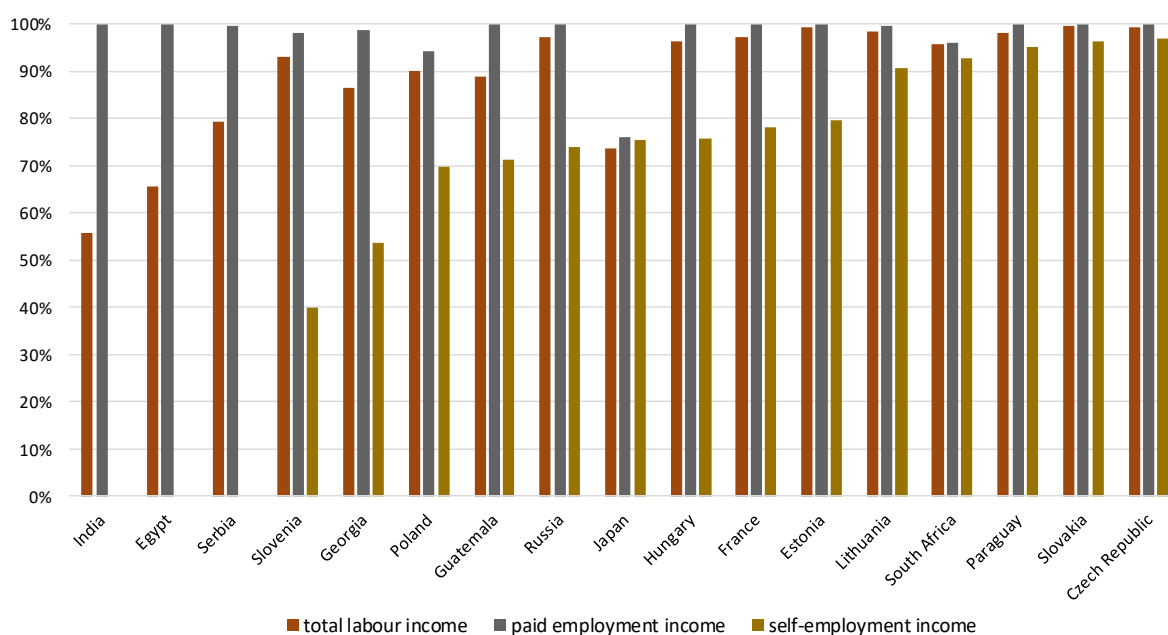
Note: Are included only the countries where self-employment income is not fully available at the individual level.

Source: *LIS Database.*

The new Russian data from PIS in LIS - a glance at income and poverty

Heba Omar ✉ , (LIS)
Jörg Neugschwender ✉, (LIS)

In this quarter (Winter 2018), LIS has released five new data points for Russia into the *LIS Database*: ru11, ru13, ru14, ru15, and ru16. The datasets are based on the *Survey of Population Income and Participation in Social Programs (PIS)* carried out by *Rosstat*.[1]

In 2012, Rosstat began the PIS survey in order to improve capture and produce more reliable income and poverty indicators (for the following in more detail see United Nations, 2017). Prior to PIS, Rosstat used a methodological approach of 1) empirical data collected through household budgets sample surveys (HBS), and 2) an analytical model, with the application of HBS results and macroeconomic indicators. However, some concerns were raised with respect to this approach: First, variance in poverty estimates obtained through the two sources created a lack of coherence in the poverty rates for the entire population and when decomposed according to different socio-demographic characteristics. Second, as the HBS focused on expenditure and consumption data, information on income remained underestimated. To carefully address these issues, the PIS survey mainly focuses on the collection of different income components, and the availability of social support and social services. Sample coverage of the survey was enlarged gradually from 10,000 households in 2012 (ru11) to 60,000 in 2016 (ru15), and 160,000 in 2017 (ru16). In addition, the PIS closely follows the *European Survey of Income and Living Conditions (SILC)* methodology in income aggregation, while also being consistent with the *ILO Resolution on Household Income and Expenditure* (2013). In 2013, and the years following, estimates obtained through PIS showed higher correlation and convergence with macroeconomic indicators compared to HBS, 88% vis-à-vis 70% on average.

In this article, we explore key findings concerning poverty, inequality, and disposable income trends from the newly added data points. For all three measures, we use disposable household income, equivalised by the LIS scale (household income divided by the square root of household members). After describing the observed trends in the data, we will discuss these trends further in the subsequent section.

According to the collected data, inequality trends in Russia from 2011 to 2016 (Fig. 1) suggest that, while inequality is persistently moderately high, with a Gini coefficient above 0.3, it has declined from around 0.36 in 2011 to 0.33 in 2016, a 3 percentage points decrease, while it has stagnated in recent years. As noted by the World Bank (2018a), these figures should be interpreted with caution, as top income earners were not well captured, which could bias the estimates downward.

For the same years, we also look at poverty rates (at 50% below the median) for different groups: total population, children, and elderly (Fig. 2). The highest poverty rate (around 19%) can be observed among children, the most vulnerable group. Child poverty is among the highest in the developed and ex-Soviet Union countries.[2] While overall poverty showed a minor decrease (0.7 percentage point) over the surveyed period, elderly poverty showed an opposite pattern, registering a slight increase from 13.5% to 14.3% (with a significant increase of 4 percentage points in 2013).
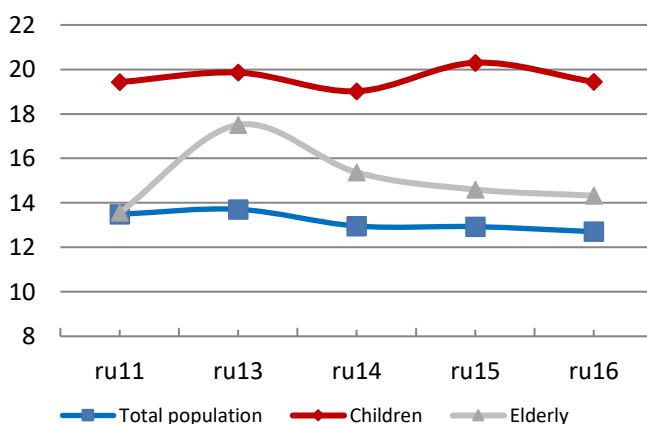
Fig. 1. Inequality trends in Russia (2011-2016)
(Gini index on disposable income)
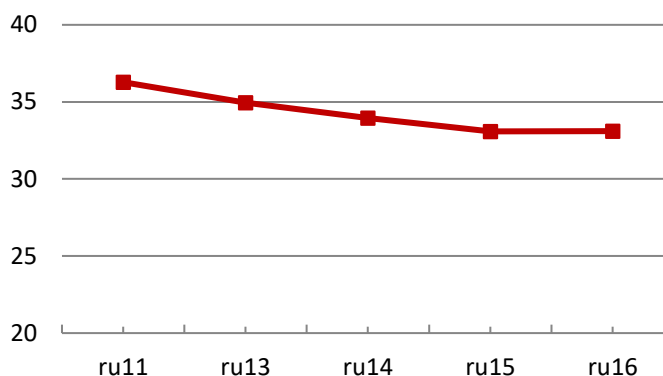
Source: *LIS Inequality and Poverty Key Figures,*
http://www.lisdatacenter.org. December 2018. Luxembourg: LIS.

Fig. 2. Poverty trends in Russia (2011-2016)
(% of individuals with household income below 50% of median)

Source: *LIS Inequality and Poverty Key Figures,*
http://www.lisdatacenter.org. December 2018. Luxembourg: LIS.

In what follows, we will present numbers for nominal vs. real income trends over the period of 2011-2016. Figures 3.1 and 3.2 plot the development of median equivalised income in nominal vs. real terms. Fig. 3.1 reveals that nominal disposable household income in Russian Rubles almost doubled during the period, while a closer look at the same income measure in real terms (Fig 3.2, ppp-adjusted using International US Dollar)[3] shows a significant downward trend, with a decrease in equivalised disposable income from 18,773 in 2013 to 16,521 in 2016. The data clearly supports the view that the period was characterised by an economic boom followed by a recession. The drop in real disposable income reflects the recent recession that followed the 2014 financial crisis, triggered by a serious devaluation of the Russian Ruble and high inflation rates.

This scenario, combined with pro-rich income taxation policies (flat rate at 13%) with no wealth tax (Russell, 2018), and shrinking self-employment incomes, as small business activities are contracted (World Bank, 2018b), resulted in comparatively high poverty rates throughout the whole period 2011-2016. According to official Russian statistics, poverty increased to 20 million Russians in 2016 (Russell, 2018).

Fig. 3.1 Median disposable income - current prices
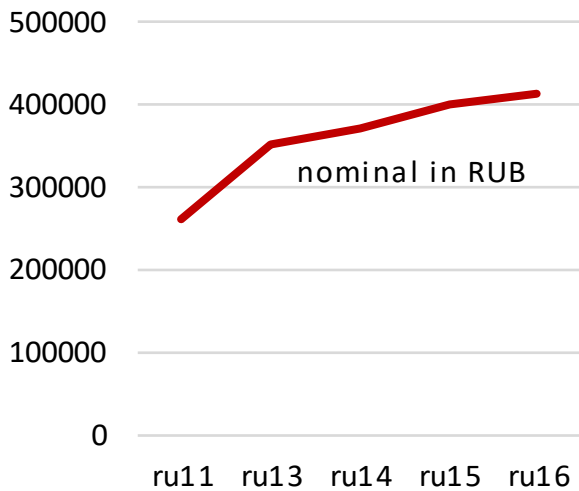
Source: *LIS Database* .

Fig. 3.2 Median disposable income - ppp adjusted
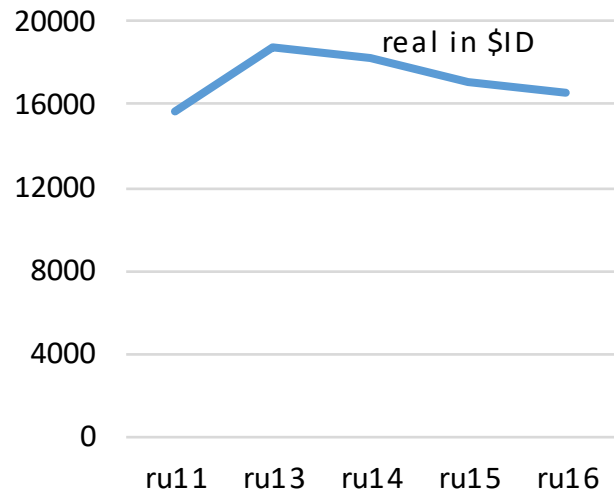
Source: *LIS Database* .

Where does this leave inequality? It would be natural to expect growing inequality when poverty gets more acute. Russell (2018) seeks to explain this paradox with employer strategies during the crisis. Rather than lay-offs, Russian employers focused on wage cuts, which in turn affected employees across the whole income distribution. We encourage LIS microdata users to explore this interesting pattern further.

In conclusion, we see that inequality and poverty in Russia remain some of the most pressing topics and that they require an implementation of additional pro-poor policies, a better-developed state redistribution system possibly combined with a higher tax rate for the wealthy, and particularly raised (price-adjusted) social benefits that keep up with inflation targeted at poor families and children.

1 *For LIS users, please note that the data of ru13 from the RLMS survey has been replaced by the PIS survey. For those interested in accessing the old survey data point, please contact us. The old data points of ru00, ru04, ru07,*

and ru10 from the RLMS survey have been revised and are still part of the LIS database and accessible through the LISSY system.

2 *LIS provides child poverty rates among its key figures for all the available countries/years through its search engine tool.*

3 *LIS provides ppp deflators through this link.*

References

Russell, M. (2018). Socioeconomic inequality in Russia, European Parliamentary Research Service, accessible here.

United Nations (2017). Development of methodology in the field of measuring inequality and poverty in transition to new sources of information: Experiences and problems, Note by the Federal State Statistics Service of the Russian Federation (Rosstat), Economic Commission for Europe, ECE/CES/2017/33, Conference of European Statisticians, Sixty-fifth plenary session, Geneva, 19-21 June 2017, accessible here.

World Bank (2018b). Poverty & Equity Brief, Europe & Central Asia, Russian Federation, World Bank, April 2018, accessible here.

World Bank (2018a). Poverty & Equity Brief, Europe & Central Asia, Russian Federation, World Bank, October 2018, accessible here.

News, Events and Updates

New job opportunity at LIS, Luxembourg – Microdata Expert

LIS is seeking applications for a *Microdata Expert* (2-year contract). The position involves joining the LIS data team in producing harmonised datasets. This includes evaluating the original datasets structure and quality (possibly working with data providers), harmonising original variables, documenting harmonisation methods and dataset specificities, assisting and instructing users. The successful candidate will have: i) a Master in statistics, sociology, economics, demography, or another social science; ii) extensive experience in management of large micro datasets; iii) knowledge of STATA; knowledge of R is an asset, as is experience working with the LIS data; iv) excellent command of English, other languages are an asset; v) strong quantitative skills, abilities to pay attention to detail and to work closely within a team in a cooperative way. For more information, see here.

GC's Stone Center launches new postdoctoral scholars program on socio-economic inequality

The Stone Center on Socio-Economic Inequality at The Graduate Center announced a new postdoctoral program that will support two scholars beginning in the 2019-2020 academic year and two beginning in the 2020-2021 year. The program will enable postdoctoral scholars, or postdocs, to spend two years producing empirical research on topics such as earnings, income, and wealth inequality. One position is reserved for a scholar whose research focuses on high-end wealth. For a second position, the Stone Center will give priority to applicants whose work investigates aspects of wealth at any point of the wealth/income distribution. The remaining positions will be awarded to scholars researching other areas of inequality.

Each postdoc will receive an annual salary, benefits including health insurance, funding to hire Graduate Center students as research assistants, and additional support to help offset the costs of hardware and software, books and journals, and travel. The new program is funded by a philanthropic gift of $1.2 million from The James M. and Cathleen D. Stone Foundation.

Postdocs will divide their time between their own research projects, collaborations with senior scholars associated with the center, and contributions to public learning through lectures, writing, and other outreach to diverse audiences and scholars in the field.

To apply to the postdoctoral position focused on high-end wealth, see here. To apply to the position focused on other areas of socio-economic inequality, see here.

Applications for fall 2019 are due by January 15.

Collaboration with the Agence Francaise de Developpement (AFD) - data from Côte d'Ivoire and Vietnam

As a result of the research agreement signed earlier this year by LIS and AFD, data from two lower middle income countries have been acquired by LIS. Three waves of data from the Household Living Standards Survey (ENV) from Côte d'Ivoire (2002, 2008 and 2015) and nine waves of data from the Viet Nam Household Living Standards Survey (VHLSS), ranging from 1993 to 2013, are currently being harmonised for inclusion into the *LIS Database*.

13th International Conference of the Agence Française de Développement "Inequality and Social Cohesion" – presentations by Janet Gornick and Branko Milanovic

The 13th International Conference of the AFD "Inequality and Social Cohesion" was held in Paris on December 6 and 7. The opening session of the scientific day of the conference was dedicated to the presentations of LIS US Office Director Janet Gornick and LIS Senior Scholar Branko Milanovic. Janet Gornick presented on the interplay between women's earnings and household income based on a cross-national analysis of high- and middle-income countries carried out with LIS data, while Branko Milanovic gave some insights on market income inequality, political alignment, and redistribution in Latin America. Both presentations will be followed by working papers shortly.

ERF-LIS conference: Inequality trends around the Mediterranean

The Cairo-based Economic Research Forum (ERF) and LIS have joined forces in order to exploit the richness of the microdata offered by both institutions to offer access to a harmonised common database containing income and expenditure microdata from the MENA region countries of the ERF and the LIS countries. Following a selective process, researchers will have the opportunity to gain access to this common database in order to study inequality trends around the Mediterranean. The papers will be presented first in a conference and then they will be considered in a special issue of the Journal of Income Distribution (JID). Stay tuned for the call for proposals on the LIS and ERF websites.

Visiting scholars at LIS

This October, LIS welcomed one visiting scholar to work onsite with the LIS data, namely Deepak Malghan. Deepak is a theoretical ecological economist at the faculty of the Indian Institute of Management Bangalore in India. At the LIS data center, he worked on a joint project with Hema Swaminathan that aims to characterize global trends in intra-household income inequality. The project investigates the contribution of inequality *within* households - specifically between men and women in a household to overall income inequality. Rather than characterising gender inequality as the inequality *between* sexes, this project studies gender inequality as the inequality *within* households. Deepak also worked with the *LWS* data to model the relationship between household wealth and intra-household income inequality.