

# **Inequality Matters**

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



#### Dear readers,

We are pleased to share a substantial update to the LIS and LWS databases. Bulgaria has now been added as a new LIS country, with 16 datasets (BG07 to BG22) integrated into the database.

The LIS series has also been expanded with the annualisation of Icelandic data: 12 new datasets (ISO3 to IS17) now allow for year-by-year analysis. Additional updates include three new datasets from Poland (PL21–PL23) and one from Palestine (PS23).

On the LWS side, researchers can now access data from Mexico (MX19) for the first time. Spain's series has been extended with ES22, and France's data (FR09, FR14, FR17, FR20) has been revised and enriched with additional content.

This issue's *Inequality Matters* section features three articles. Supriya Lakhtakia, Deepak Malghan (both Indian Institute of Management Bangalore), and Hema Swaminathan (Asian Development Bank & IIM Bangalore) explore *occupational assortative mating* and its implications for gender inequality in earnings. Using LIS data across countries and time, they investigate how patterns of occupational similarity between partners influence both inter- and intra-household inequality, offering new insights into the global dynamics of household-level gender disparities.

Jonathan Bradshaw (University of York), Gianluca Munalli, and Dominic Richardson (both from The Learning for Well-being Institute) use recent LIS data to conduct a comparative analysis of *child poverty* across countries. They analyse a set of poverty rates by household composition and offer evidence-based policy recommendations to address child poverty and its long-term consequences.

Vladimir Hlasny (UN ESCWA) addresses the issue of *earnings underreporting and tax overreporting* in global household surveys. Drawing on earlier literature and comparative LIS-based analysis, the article examines the risks of measurement error in survey-based income data, highlighting its impact on assessments of inequality and poverty. Enjoy reading! Jörg Neugschwender

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## **Occupational Assortative Mating and Gender Inequality in Earnings**

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#### Introduction and Background

Assortative mating, or the tendency to partner with someone similar to oneself, has received considerable attention in the academic literature. This similarity among individuals could be conceptualized in diverse ways -- education, occupation, or economic status (earnings, inherited wealth, for example). The literature has focused mainly on educational assortative mating and its implications for between-household inequality. Our research contributes to the literature by examining assortative mating in occupation and its association with gender inequality, emphasizing inter-household *and* intra-household earnings inequality.

With an increase in the age of marriage and more individuals entering the labour market before marriage, occupation as a mode for meeting potential spouses is likely to gain significance. Any change in patterns of occupational assortative mating is expected to have consequences for household earnings inequality.

However, evidence on trends in occupational assortative mating is minimal and based mainly on older periods (Hunt, 1940; Hout, 1982; Kalmijn, 1994). Most research on occupational assortative mating and inequality is limited to the U.S. and a few European countries (Schwartz et al., 2021; Frémeaux & Lefranc, 2020; Cheremukhin et al., 2023; Clark & Cummins, 2022). According to Schwartz et al., (2021), the prevalence of dual-professional couples in the U.S. in certain occupations has nearly tripled between 1970 and 2015-17 but most of the changes in occupational mating patterns are accounted for by changes in distributions of spouses' occupations -- particularly, the massive entry of women in the labour market and the rise of women in professional occupations. In contrast, studies from Europe suggest upward trends in occupational assortative mating. A study in France showed high levels of occupational assortative mating between 2004 and 2011 (Frémeaux & Lefranc, 2020). In England from 1754 to 2021, the degree of assortment by occupation was high (Clark & Cummins, 2022). Besides trends, some recent work on occupational assortative mating has examined its association with educational assortative mating and school-to-work linkages (Lopez-Rodríguez & Gutierrez, 2024; Han & Qian, 2021).

Everything else being equal, greater occupational assortative mating will increase inter-household inequality and decrease intra-household inequality. On the other hand, low occupational assortative mating would decrease inter-household inequality but could come at a cost of higher intra-household inequality, which is often disadvantageous for women (Lersch & Schunck, 2023). Thus, there is a tension between interand intra-household inequality. Studies have mainly considered the relationship between assortative mating and inter-household inequality. For example, Schwartz et al., (2021) find that the contribution of rising occupational assortative mating to economic inequality between households is small but higher than prior estimates of the effects of educational assortative mating on inequality.

We address this research gap in the following ways. First, we aim to paint a global macro picture of assortative mating in occupation for countries using LIS data spanning several decades to explore both spatial and temporal variation. Next, we explore how occupational assortative mating is associated with inter- and intra-household inequality in earnings (also referred to as between and within household earnings inequality, respectively). A global portrait linking assortative mating and household gender inequality will advance inequality research and praxis. Our research offers a new perspective on addressing economic inequality, a pressing concern globally.

#### **Data and Methods**

Our analysis is based on the Luxembourg Income Study (LIS) global database that provides harmonized microdata over six decades across fifty-three countries. This article presents preliminary results for three countries – the United States, Germany, and Brazil.

Our analytic sample comprises heterosexual couple households where the head is living with a partner in a marriage, cohabiting, or in a consensual union. Our sample includes individuals aged 15-64 years, where both partners are employed. Employment can be in one of the three occupational categories – (i) Managers/Professionals (M/P), (ii) Other Skilled Workers (OSW), (iii) Labourers/Elementary (L/E). We rely on broad occupational categories as detailed occupations are available for fewer country-year datasets, limiting the scope of our global analysis. Moreover, broad categories keep this preliminary analysis simpler and easier to interpret.

We use the table-raking method to describe trends in occupational assortative mating (Schwartz et al. 2021). This method identifies the proportion of couples matched across the various occupational categories after accounting for changes in couples' occupational distribution (by holding the marginal distributions of occupational categories constant at their earliest year values). Thus, after accounting for these changes, any increase/decrease in the proportion of matched couples can be interpreted as an increase/decrease in occupational assortative mating. To understand the relationship between assortative mating and intra-household earnings inequality, we use the wife's share in couple earnings as an indicator for intra-household economic inequality (Malghan & Swaminathan, 2021).

#### Findings: Trends in Occupational Assortative Mating

The proportion of couples matched on occupation (homogamy) across time for the three countries is presented in Figure 1. The figure also depicts the trends in occupational hypergamy (husband has an occupation level higher than wife) and hypogamy (wife has an occupation level higher than husband). The figure has been adjusted for changes in the occupational structure of the economy.

In the United States, over six decades, there has been a modest increase in occupational homogamy – from 54.3% in 1963 to 55.7% in 2023. Hypergamy and hypogamy trends have remained stable, with hypergamy being more prevalent than hypogamy throughout the period of analysis.

For Germany, there is a slight decline in occupational homogamy from 71.2% in 1985 to 68.5% in 2020. This decline is accompanied by a slight increase in hypergamy (23.5% to 25.0%) and hypogamy (5.2% to 6.6%).

In Brazil, the pattern of occupational homogamy resembles an S-shape, reflecting a decline from 58.1% in 1981 to around 54% in the early 1990s (1992-1996), followed by an increase to 61.3% by 2022.



Consequently, trends in hypergamy and hypogamy show an increase during the same early 1990s period.

Analyzing the matched couples (homogamy), most occupational mating is among the other skilled workers category. In contrast, not more than 10% of the couples are matched in the managers/professionals and labourers/elementary occupations. This pattern is consistent across all three countries.

From Figure 1, it is evident that the three counties follow varying occupational matching trajectories. The United States shows a modest increase in homogamy, while Germany experiences a slight decline. Brazil's pattern is more dynamic, with fluctuations over time. These trends suggest there may be multiple factors underlying these patterns, such as employment related laws and policies, cultural factors, and social norms.

# Findings: Occupational Assortative Mating and Intra-household Inequality

We analyze the relationship between occupational assortative mating and earnings inequality within the household. We plot the mean of the wife's share in couple earnings for occupationally homogamous, hypergamous, and hypogamous couples (Figure 2).

For couples in the same occupation, the wife's share is below 50% in all three countries, over the entire analysis period (see the dotted line at the 0.5 mark). Interestingly, even among couples where the woman's occupational category is higher than the man's, the wife's share on average remains less than half. On the other hand, among occupational hypergamy couples, the wife's share is much below the halfway mark, suggesting that the man's share in earnings is greater than 50%. Thus, when couples are in the same occupation, and even when the wife is in a higher occupation, her earnings are not equal to the husband's. This suggests that merely considering the extensive margin of work (where she participates in an occupation similar to the







man's) might not be sufficient to understand the earnings gap in occupationally homogamous couples. We must consider differences in work intensity (hours worked) and other factors, such as pay gaps within an occupational category, to understand the earnings gap within couples. Studies have shown that among individuals graduating from the same school and working in similar professional positions, there is a rise in gender gaps in earnings over time due to career interruptions and differences in hours worked (Bertrand et al., 2010). Evidence also suggests that there is a non-linear relationship between hours of work and earnings in certain occupations, such as in the corporate, financial, and legal fields. Hence, flexible working hours (often preferred by women after motherhood) come at a high cost (Goldin, 2014).



#### Figure 2: Mean of wife's share in couple earnings over time

Table 1: Pooled regression of wife's share in coupl	le earnings for occupatior	nally matched –	(homogamy) couples
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	United States	Germany	Brazil
	(1993-2023)	(1985-2020)	(1981-2022)
Wife's part-time status	-0.100***	-0.056***	-0.046***
Wife's weekly hours worked	0.005***	0.006***	0.002***
Husband's part-time status	0.141***	0.163***	0.032***
Husband's weekly hours worked	-0.003***	-0.002***	-0.001***
Own children under 5 years in the household	-0.011***	-0.049***	-0.011***
Own children aged 5 years and above in the	-0.019***	-0.020***	-0.016***
household			
N (couples)	239,950	53,711	517,066
R <sup>2</sup>	0.182	0.425	0.191

\*p<0.1; \*\* p< 0.05; \*\*\*p<0.01

Note: Robust standard errors are in parentheses; all models include year-fixed effects.



Therefore, for the occupation-matched couples, we examine the relationship between intra-household couple earnings inequality and factors capturing intensive work margin, such as weekly hours worked, type of employment (full-time or part-time), and the presence of children in the household. Results of the regression analysis are presented in Table 1.

After controlling for relevant factors such as woman's education, age, occupation, and employment characteristics such as industry of the job (agriculture, industry, services) and sector of employment (public sector or private sector), we find that intensity of work matters among occupationally matched couples. An increase in wife's weekly work hours is associated with a higher earnings share. On the other hand, her part-time work and the presence of children in the household are negatively associated with her earnings share.

#### Discussion

Our results show mixed trends in occupational assortative mating across countries, with modest changes over time. Among couples matched on occupation, the wife's work intensity plays a vital role in driving differences in spouses' earnings within the household. The decisions to work in jobs that require a certain number of hours or that are part-time might result from various factors, such as life cycle events like motherhood, the double burden of work, etc. We propose to expand our analysis to consider cultural and institutional factors that may be correlated with women's employment and earnings. Likewise, analysis of detailed occupational categories and their attributes could shed additional light on the wife's earnings share.

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## Comparing Child Poverty Using the Luxembourg Income Study and Policy Recommendations

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#### Introduction

Child poverty represents one of the most serious and persistent social challenges worldwide. It affects children's cognitive, educational, health, and social development, and can perpetuate cycles of economic and social inequality across generations. To understand the extent of the issue and enable cross-country comparisons, this analysis utilizes the most recent data from the Luxembourg Income Study (LIS) to examine child poverty in different national contexts. Various poverty scenarios will be presented, based on household composition, and evidence-based policy recommendations will be proposed.

#### State of Child Poverty

There is considerable variation in child poverty rates across the following countries. As illustrated in Figure 1, Northern European economies such as Denmark, Norway, and Finland report very low rates (around 5-7%), whereas countries like the United States and Spain exhibit substantially higher rates (around 20%). At the higher end of the spectrum, countries such as Colombia and Brazil reach child poverty rates of approximately 30%. These disparities are not solely a reflection of income levels, but rather differences in redistributive policies and the extent of social spending. Countries with more

#### Figure 1: Overall child poverty rates



Note: Countries are ordered left to right by the percentage reduction in child poverty achieved by social transfers. Source: Author's calculations of LIS data, 2024.



#### Figure 2: Child poverty rates for single parent families

Note: Countries are ordered left to right by the percentage reduction in child poverty achieved by social transfers. Source: Author's calculations of LIS data, 2024.



comprehensive welfare systems are generally more effective in reducing child poverty. This is clearly evident in the graph, which shows that countries with similar levels of pre-transfer child poverty can end up with very different outcomes after public transfers are taken into account.

As illustrated in Figures 2, 3 and 4, single-parent households and large families - defined as those with three or more children - face significantly higher poverty risks compared to smaller or two-parent families, highlighting the vulnerability associated with limited income sources and greater financial demands. This trend is consistent across various national contexts and underscores the importance of supporting these vulnerable groups and reduce the structural inequalities they face.

#### Conclusions

The data from the Luxembourg Income Study clearly demonstrate that child poverty is not an inevitable outcome, but rather a political choice. At a time when the need for strong, inclusive social policy is greater than ever, it is essential to recognize the urgency of implementing comprehensive and universal policies that support children throughout their development.

Just as most societies maintain a generational pact to ensure financial security for the elderly through pension systems, a similar commitment must be made to the well-being of children. Unlike older adults, children are entirely dependent on others for their survival, growth, and future potential. They need intentional support through well-designed public policies that not only alleviate immediate hardship but also lay the foundation for long-term development. Countries that prioritize investments in children - through transfers, services, and social protection - can achieve substantial reductions in child poverty and future economic returns. However, as the data suggest, the volume of social spending alone is not sufficient. Many countries with high levels of social expenditure experience only modest returns in terms of poverty reduction, particularly when



### Figure 3: Child poverty rates in one child families (% of children in households with equivalent income less than 50% median)

Note: Countries are ordered left to right by the percentage reduction in child poverty achieved by social transfers. Source: Author's calculations of LIS data, 2024.



Figure 4: Child poverty rates for three plus child

Note: Countries are ordered left to right by the percentage reduction in child poverty achieved by social transfers. Source: Author's calculations of LIS data, 2024.



compared to others with similar spending levels. This highlights the need to reassess not just the scale, but also the structure and focus of spending.

Research shows that the most effective strategies are those that are both comprehensive and universal - covering every stage of childhood, from the prenatal period through to age 18. These policies must be available to all children, regardless of household income or social status. Decades of evidence have shown that targeted policies, while well-intentioned, often fail to reduce inequality in a meaningful or lasting way. Rather than lifting families above the poverty threshold, such approaches often merely reshuffle the income distribution, offering minimal long-term impact. Universal policies, by contrast, ensure broad support and have the potential to drive real change. Key components of the proposed policy portfolio should include universal maternity and paternity leave, universal childcare, and a universal child benefit. These measures would not only promote equity and social cohesion, but also invest in the long-term development and well-being of future generations.

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## False Negatives? Earnings Underreporting, Tax Overreporting in Surveys Worldwide

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#### Motivation

Incomes in household surveys are subject to various reporting and measurement issues biasing the static and dynamic assessments of inequality and poverty (Ceriani et al. 2022; Hlasny et al. 2022). Some households under/over-report their earnings or liabilities, fail to respond to questions about some sources of income, or are excluded entirely through their own choice or through decisions of statistical agencies or survey aggregators.

In contrast to tax registries, we may not expect income underreporting on household surveys, given that households have little to gain from lying or making themselves look poor in front of survey enumerators. Nevertheless, tallying all earnings and losses over the span of a survey period can be daunting, and reporting public assistance such as food stamps may be embarrassing, so some income sources of the rich and poor alike may be left out. Since truthful reporting on surveys cannot be ascertained or legally enforced, misreporting may be even more rampant in surveys than in tax records (Higgins et al. 2018).

That is not to say that surveys are inferior sources of information on the poor. The measurement problems have their analogies in tax registries, where taxpayers may intentionally conceal earnings, change the date of realization of certain gains or losses, choose which tax jurisdictions to report earnings under, or fail to file taxes altogether. In surveys and registries alike, the lower end of income distributions typically includes unsustainably low income values that fall short of deprivation thresholds according to any definition, such as the international \$2.15/day extreme poverty line or the 'wolf point' necessary for bare survival (Davis 1941) or even zero. While households earning these incomes may still benefit from non-market production, non-monetary inflows and other remittances, these incomes are so low that they appear incompatible with sustainable consumption streams, and usually cannot be squared with the households' observed behaviors and other socio-economic outcomes. Exactly-zero incomes are also quite unlikely in the population, as most households receive some monetary or nonmonetary earnings, or private or public transfers. Zero incomes may be introduced by survey handlers, such as when not keeping a clear distinction in losses vs. missing information vs. non applicable information (Neugschwender 2020).

#### **Existing evidence**

Misreporting of earnings and tax liabilities, and shifting of their reporting across the years for strategic tax-liability considerations, are traditionally thought to be the primary sources of extreme income observations reported by households, particularly those at the lower end (Paulus 2015). Many of these households do not have a profile of deprived units (Brewer et al. 2017). Evidence from Latin America comparing the distribution of survey incomes and tax records shows that self-employment incomes are underreported even at the lowest survey quantiles. Beside the prime suspect of tax evasion, it may be that gains from self-employment may not have been captured in the survey snapshot – partly because of how survey questions are formulated, or because of accounting norms and practices. Households may have realized them outside of the snapshot window or in other legal jurisdictions. Finally, limited recall of gains from sales or of the

annualized investment in self-employment activities may be responsible for accidental – yet still systematic and substantial – omission.

Evidence from linked survey and tax-registry data reveals that employment incomes at the bottom of the distribution may be particularly affected by discrepancies. In Estonia, they have led to underreporting of true earnings by 17% of the surveyed population (Paulus 2015). Linking survey and tax-records income data in the US also suggests substantial underreporting in surveys (Higgins et al. 2018). Linking income-survey and food-stamp administrative data shows that social assistance fails to be reported in surveys by over one-third of housing-assistance recipients, 40% of food-stamp recipients and 60% of general-assistance recipients, resulting in sharply underestimated bottom incomes (Meyer and Mittag 2019). Another problematic income source is imputed rent among houseowners: As evidenced in Peru, particularly the poorer among houseowners in rural areas tend to underestimate their rental values by 20–25% (Ceriani et al. 2019).

Experimental research design also reveals that individuals' underreporting of earnings and over-deducting of liabilities is asymmetric between their positive and negative income flows (Fochmann and Wolf 2019). This, by extension, may call for separate assessments across those reporting lower earnings and liabilities, and those with higher ones.

#### **Evidence from LIS database**

Systematic study of rare extreme income values requires using large harmonized data where their 'regularities' can be inferred. The Luxembourg Income Study (LIS 2024) database, encompassing 900+ household surveys from 60+ countries, covering over 28 million households, facilitates such an analysis. The LIS database also covers most of the spectrum of national household surveys encountered around the world in terms of the level of economic development, inequality and poverty, sample size, and definitions of incomes. In light of this heterogeneity, the LIS database is an ideal testing ground for comparative income distribution analyses such as this one. The following analysis relies on 909 LIS surveys with harmonized income distributions. They span years 1963–2023, and cover countries on six continents, of all income and human-development classifications.

Among the 909 surveys, 810 surveys contain zeros or negatives for disposable household incomes: 638 surveys include zeros and 605 include negatives, with an overlap of 433 surveys containing both. Among the surveys containing some zeros or negatives, zero incomes typically make up 0.51% of overall samples (131,235 out of 25.9 million household records in the 810 surveys), and negative incomes make up 0.14% (36,806 records).

In 101 surveys, zeros and negatives account for over 1% of income records (or up to 9.2% in one survey). The values of negative incomes (evaluated in local currency units) are also not trivial in size. Mean negative income in a survey exceeds 200% of the mean overall nationwide income in 22 surveys. In another 76 surveys, mean negative income is as high as 100–200% of mean overall nationwide income. For illustration, the German 2019 survey contains 258 zeros and 16 negatives (together making up 1.4% of the sample of 19,963 households), where the negatives are on average three-quarters as high (in absolute value) as the survey's positive incomes.



Zeros, as we have argued, are largely an artefact of the data preparation and cleaning practices by statistical agencies. Negatives, on the other hand, indicate a particular balance of households' inflows and liabilities among the various income components. To understand the source of negative income values, we compare the role of several major income components. We highlight the share of households in survey samples that have negative capital income, negative self-employment income (henceforth 'self-employment losses'), or tax and social security withholdings and adjustments higher than the always-positive income components (including wage earnings, transfers, pensions, and rental income; 'excess tax outlays' for short). We also calculate the means of the negative capital income, self-employment losses, and excessive tax outlays. These measures indicate how much the negative capital income, self-employment losses, or excess tax outlays contribute to the prevalence and magnitude of negative incomes in each survey (Hlasny 2023).

We find that the main source of negative incomes, in 60% of all surveys, is self-employment losses. Additionally, excess tax outlays are the main source of negatives in over one-third of surveys. In the remaining surveys, negative capital income accounts for the majority of negative disposable incomes.

The importance of self-employment incomes is not surprising. Selfemployment, including farming, incomes are particularly prone to mismeasurement and misreporting given the irregular timing of gains and outlays. Self-employment losses are by far the most frequent source of negative disposable incomes, but their magnitude is not much higher than that of the excessive tax outlays and negative capital income when it comes to causing high sizes of negative incomes. In other words, compared to the excessive tax burden and negative capital incomes, self-employment losses are more frequent and more problematic at the extensive margin, but not necessarily the largest at the intensive margin. (For completeness, negative net transfers, after subtracting pensions, also contribute to negative incomes, but are much less prevalent and smaller in magnitude.)

For example, in the 2018–2022 United States, the few dozen households with negative incomes had outlays on income taxes typically 139–415% as high as the mean negative disposable income in those years (\$107,000–159,000 compared to the negative incomes of \$32,116–87,269 across the years). Brazil, Canada (especially older years) exhibit similarly high realized excess tax outlays. In France and Norway, meanwhile, negative incomes are largely due to negative capital incomes, while in Australia, Denmark, the Netherlands and the United Kingdom, for example, self-employment losses dominate in magnitude.

Richer and poorer countries exhibit diverging patterns. In low- and lower-middle income countries, self-employment losses are the most frequent as well as the largest source of negative disposable incomes in surveys (Figures 1 and 2). Higher up the distribution of country incomes, in upper-middle income and transitional economies, the sources of





Note: Samples restricted to surveys with the income component non-missing. Sample shares with negative self-employment income or high tax burden shown on left axis; Sample shares with negative capital income shown on right axis. The figure is truncated from above for clarity of presentation. There are an additional 3 surveys with higher shares of negative self-employment income records as shares of mean income (9 and 4 surveys with higher mean negative capital incomes or excessive tax burdens, respectively).





# Figure 2. Negative self-employment incomes, negative capital incomes and high tax burden as share of mean negative income, by national income level (%)

Note: Samples restricted to surveys with the income component non-missing. The figure is truncated from above for clarity of presentation. There are an additional 20 surveys with higher mean negative self-employment incomes as shares of mean negative incomes (2 and 9 surveys with higher mean negative capital incomes or excessive tax burdens as shares of mean negative incomes, respectively).

negative incomes vary, but self-employment losses and negative capital incomes dominate. Excessive tax assessments are also prevalent in their number if not in magnitude. Among high-income countries, selfemployment losses still play a leading role in terms of their prevalence, but they join excessive tax assessments as the main drivers of the magnitude of negative incomes.

Are households with non-positive incomes poor or socially disadvantaged? Looking at some indicators of households' contemporaneous and longer-term socio-economic position - including consumption, labor market status, health, education, marital status, homeownership and urban/rural residence - we conclude that households with negative incomes share similar characteristics with other households in terms of material wellbeing and social status. Table 1 confirms this for binary socio-economic indicators - the prevalence of desirable characteristics is as high among negative-income households as among positive-income households (or even higher). In fact, the lower the negative disposable income, the higher the share of households with better socio-economic status: This applies to household heads' health, employment status, marital status and homeownership. By contrast, zero-income households appear to be presently materially deprived in terms of consumption, employment status and homeownership, even though their human capabilities as manifested by their health, education and residence near urban markets are not clearly worse than their peers' (Table 1). Perhaps surprisingly, zero-income households are less likely to be engaged in farming, and less likely to reside in rural areas.

In LIS surveys where consumption is available, consumption of households with negative disposable income tends to be as high as consumption of their positive-income counterparts, or higher, while consumption of zero-income households is clearly lower. This is quite consistent across most surveys, and notably across all but a few survey rounds in Brazil, France, Georgia, Germany, Hungary, Italy, Mexico, Poland, Serbia and the United Kingdom.

Taken together, evidence in these paragraphs points to clear patterns in how non-positive incomes arise in surveys. At the same time, the evidence highlights that those incomes – both zeros and negatives – may not represent households' true socio-economic standing or even contemporaneous material welfare. While the paradox could be partly attributed to households' coping strategies such as consumption smoothing and engagement in non-monetary or non-market income supplementation when faced with crises, the bottom line is that the reported values underestimate households' incomes and welfare. And, specifically, *underreporting* of self-employment earnings appears to play a predominant role in lower-income countries, joined by underreporting of capital earnings in middle income countries, while significant tax *overreporting* or *overassessment* contributes in high income countries.

#### Conclusions

Earnings underreporting and tax overreporting appear to plague national income surveys worldwide, and high-income countries are not spared. A substantial share of surveys as well as households responding to them show non-positive incomes, despite those households



	DHI<0	DHI=0	DHI>0	Large negative DHI < -µ∕2	Medium negative -μ/10 > DHI ≥ - μ/2	Small negative 0 > DHI ≥ -μ/10
Head employed (0/1)	0.631	0.219	0.646	0.770	0.728	0.567
Anyone in HH employed (0/1)	0.683	0.238	0.739	0.843	0.800	0.612
Head economically active (0/1)	0.705	0.400	0.664	0.798	0.769	0.657
Head retired (0/1)	0.101	0.074	0.199	0.105	0.106	0.097
House-owning HH (0/1)	0.713	0.482	0.669	0.784	0.742	0.681
Head healthy (0/1)	0.661	0.639	0.654	0.717	0.655	0.659
Head marriage-separated or						
widowed (0/1)	0.210	0.253	0.214	0.163	0.201	0.231
HH involved in farming (0/1)	0.462	0.083	0.205	0.576	0.527	0.476
HH rural residence (0/1)	0.406	0.240	0.281	0.400	0.411	0.408
Surveys	605	638	920	605	605	605

## Table 1. Prevalence of selected socio-economic statuses by households' disposable income

Notes:  $\mu$  refers to mean national DHI. The reported values are the shares of households (population-weighted) with DHI in a particular range who hold a particular socio-economic status – out of all households in that DHI range.

appearing to be otherwise socio-economically non-deprived. The negative incomes and their major components – self-employment losses, excessive tax liabilities and negative capital income – are often large in magnitude. Moreover, they are just the tip of the iceberg, since the presence of additional small positive incomes – or indeed misreported values at all income quantiles – may pose a still greater hurdle for understanding true inequality and poverty. The trouble is, the observed incomes are used by policymakers for setting poverty thresholds, identifying vulnerable populations, and producing accurate proxy means test indices for targeting the poor and tailoring public assistance. Proper measurement of bottom incomes and understanding their context is thus crucial in the drive to improve the living conditions of those truly at the bottom.

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## Data News / Data Release Schedule



Bulgaria (16 new LIS datasets) – Addition of annual series BG07 to BG22 to the LIS Database.
Iceland (12 new LIS datasets, 3 revised) – Annualisation from IS03 to IS17 in the LIS Database.
Mexico (1 new LWS dataset) – Addition of MX19 to the LWS Database.
Palestine (1 new LIS dataset, 1 revised) – Addition of PS23 to the LIS Database.
Poland (3 new LIS datasets, 19 revised) – Addition of PL21, PL22, and PL23 to the LIS Database.
Spain (1 new LWS dataset) – Addition of ES22 to the LWS Database.
France (4 revised LWS datasets) – Revisions to FR09/FR14/FR17/FR20, and additional content provided.

## Data Releases and Revisions – Luxembourg Income Study (LIS)

#### Bulgaria

With 16 datasets spanning the period **BG07** to **BG22**, Bulgaria, has been added as a NEW country to the LIS Database. This annual series is based on the EU Statistics on Income and Living Conditions (EU-SILC) conducted by the National Statistical Institute of Bulgaria.

#### Iceland

Twelve new datasets from Iceland have been added (**IS03** through **IS17**). The annual data series is based on the EU Statistics on Income and Living Conditions (EU-SILC) Iceland (including some national variables), administered by Statistics Iceland.

LIS received new data from the data provider also for the datasets **IS04**, **IS07** & **IS10** which were reharmonized in the new template using the newly received data (including national variables on pension and children benefits) and imputations for children benefits. The maternity/paternity and parental leave wage replacement are available now at the individual level. The split between the three pillars of pension is available now, as well as a more accurate split for the additional set between insurance, assistance and universal benefits.

#### Palestine

One new dataset from Palestine has been added to the LIS Database (**PS23**). The dataset is based on the Palestine Expenditure and Consumption Survey (PECS) carried out by the Palestinian Central Bureau of Statistics (PCBS).

Minor consistency revisions have been carried out for dataset PS17.

#### Poland

Three new datasets from Poland have been added to the LIS Database (**PL21**, **PL22**, and **PL23**). These datasets are based on the Polish Household Budget Survey (HBS) conducted by Statistics Poland (GUS).

The previously harmonized datasets **PL95-PL20** have been revised for consistency. Among various minor revisions, the 2016 introduced family benefit (500+) can be now analysed on its own in variable *hi412* (child allowance) for the datasets **PL16-PL23**. Various minor children and family allowances are placed in the more aggregated variable *hi41* (family benefits).

## Data Releases and Revisions – Luxembourg Wealth Study (LWS)

#### Mexico

Mexico was added to the LWS Database. The new dataset **MX19** is based on the National Survey on Household Finances (ENFIH) carried out by the National Statistical Institute (INEGI) in collaboration with the Bank of Mexico.

#### Spain

One new dataset from Spain has been added to the LWS Database (**ES22**). The dataset is based on the Household Finance and Consumption Survey (HFCS) conducted by the Bank of Spain.

#### France

The LWS datasets **FR09** to **FR20** were significantly revised in the variable business equity (*hannb*), and other minor adjustments to assets were carried out, including the residual values of non-financial assets (*hanno*) and money owed to the household (*hafom*). On the liabilities side, minor revisions were made to loans for real estate other than principal residence (*hlro*) and adjustments to investment loans (*hlni*). A significant number of variables were added, including liabilities by security, wealth-related variables (inheritance/gifts), and behavioral variables. For dataset **FR14**, replicate weights are now provided.

#### LIS/LWS Data Release Schedule

	Autumn 2025	Winter 2025		
Germany	DE21			
Luxembourg	LU22, LU23			
Panama		PA96-PA22		
Uruguay	UY23			
LWS Database				
China		CN11,CN13,CN15,CN17		
India	IN91-IN19			
United Kingdom	UK21			



## **Working Papers & Publications**



Focus on The Heterogeneities of Immigrant Poverty in the U.S. CLIS WP No. 899 by David Bradley, Alexis Bocanegra, Diana Cervantes, Lauren Macy, Nasdira Romero Saravia

## Immigrants are now more than one-fifth of the poor in the U.S. Yet, despite some valuable literature, immigrant poverty remains arguably understudied. This study builds on the larger literatures on immigrant attainment and poverty, and the smaller literature on immigrant poverty. Using the Luxembourg Income Study (LIS), the authors provide an improved descriptive demographic portrait of immigrant poverty from 1993-2023, across 51 states (including D.C.), and within 2019-2024 (N=760,026). There is considerable heterogeneity over time. After declining for several decades, immigrant poverty increased substantially in recent years. Immigrant poverty also varies enormously across states. States' immigrant poverty rates are moderately negatively correlated with states' immigrant share of the population and strongly positively correlated with states' non-immigrant poverty. There are large heterogeneities by nation of origin as well. While immigrants from India have among the lowest poverty of any group in the U.S., Honduran immigrant poverty is 6-7 times higher. While especially being a noncitizen immigrant increases poverty, heterogeneities in immigrant poverty are driven more by the major risks of poverty than the immigrant characteristics of being a citizen, years of residence, or mixed status households. That said, heterogeneities by nation of origin are explained by varying mixes of risks, immigrant characteristics and educational selectivity. Ultimately, the authors demonstrate immigrant poverty is not one coherent phenomenon. Indeed, the heterogeneities within immigrant poverty are perhaps even more important than the heterogeneities in poverty between immigrants and non-immigrants.

## LIS working papers series

## LIS working papers series - No. 892 $^{\mathscr{O}}$

The Effect of Child Allowance on Multidimensional Poverty during the First Period of the Democratic Party of Japan by Raffaele Ciula

### LIS working papers series - No. 893

Inequality Bands: Seventy-five Years of Measuring Income Inequality in Latin America

by Facundo Alvaredo, François Bourguignon, Francisco Ferreira, Nora Lustig

Published: Oxford Open Economics 4, Issue Supplement 1 (2025): i9-i35. https://doi.org/10.1093/ooec/odae018

## LIS working papers series - No. 894 $^{\prime\prime\prime}$

Income Distribution in Sweden in a Comparative Perspective: Evidence from New LIS-data by Anders Björklund, Markus Jäntti

## LIS working papers series - No. 895

Evolution of Fiscal Systems: Convergence or Divergence? by Paloma Péligry, Xavier Ragot Published: Socio-Economic Review 22, no.2 (2024), 907-930, https://doi.org/10.1093/ser/mwad070

## LIS working papers series - No. 896 $^{\mathscr{P}}$ The Colonial Origins of Labour Market Duality in West Africa

by Johannes Kirchhof

# LIS working papers series - No. 897 $^{\mathscr{O}}$ Proper Correlation Coefficients for Nominal Random Variables

by Jan-Lukas Wermuth

## LIS working papers series - No. 898 $^{\mathscr{O}}$

Governance, Risks, and Returns to Human Capital by Daniel Jacobi, Elizabeth M. King, Claudio Montenegro, Peter F. Orazem

## LIS working papers series - No. 899 $^{\mathscr{O}}$

The Heterogeneities of Immigrant Poverty in the U.S. by David Bradley, Alexis Bocanegra, Diana Cervantes, Lauren Macy, Nasdira Romero Saravia Published: Forthcoming at Population Research & Policy Review

## LWS working papers series

LWS working papers series - No. 48 $^{\mathscr{O}}$ No Enemy is Worse than Bad Advice: Financial Information Sources and Household Wealth by Ivan Skliarov, Łukasz Goczek



## News, Events and Updates

## Invitation to the 2025 LIS Summer Lecture on "Social contagion, inequality and mobility", 30 June 2025

LIS is happy to invite you to its 2025 Summer Lecture on **"Social contagion, inequality and mobility"** by Professor Marc Fleurbaey, Paris School of Economics.



The lecture will take place on Monday, June 30, 2025, from 17:30 to 18:30 [Luxembourg Local Time] at the Blackbox, Ground Floor, Maison des Sciences Humaines (MSH), 11,

Porte des Sciences, L-4366 Esch-Belval, Luxembourg.

For more details about the Summer Lecture, please visit this page.

Registration is mandatory through this application form.

Deadline for registration: June 23, 2025.

For questions and inquiries, please write to workshop@lisdatacenter.org.

# LIS Granted the Aldi Award for 2024 LIS Working Paper

This year's winner of the LIS Aldi Award are Carlos J. Gil-Hernández, Pedro Salas-Rojo, Guillem Vidal-Lorda, and Davide Villani for the LWS Working Paper No. 43 entitled "Wealth Inequality and Stratification by Social Classes in 21st -Century Europe".

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.

Pedro Salas-Rojo will be presenting the winning paper at the upcoming LIS Summer Workshop.

## New LIS & LWS documentation: Contents of LIS and LWS flow variables and LWS assets and liabilities variables

In order to provide more detailed documentation about the construction of flow variables in the LIS and LWS Databases, and assets and liabilities variables in the LWS Database, LIS has published detailed content tables for each dataset on our website, available in two Excel documents for LIS and three for LWS. In all documents, the information is organised by country and within each country by year, giving a comprehensive overview to the users. These documents will be updated every time LIS releases new datasets with the new countries added, additional years for existing countries, and any revisions to previous data that might occur.

More information about these tables and how to read them, can be found here.

You can access from here the LIS and LWS tables.

#### Lissyrtools vo.2.0 Released

A new version of the lissyrtools R package is now available. Version 0.2.0 introduces several key improvements for LIS and LWS users, including:

- Local workflow development with built-in sample data.
- A new lissyuse() function for streamlined dataset access and merging.
- Seamless use of weights in aggregating functions.
- Enhanced display clarity and easy plotting with structure\_to\_plot().
- Quick access to country and year coverage, and variable metadata.

These updates are designed to simplify data preparation, analysis, and visualization, supporting efficient and organized workflows—whether focused on a single country or cross-national comparisons.

(3) Read the full release note for more detail from here and visit the lissyrtools website for full documentation, example code, and installation details.

#### LIS Team Participation in Conferences/Workshops

- On April 16<sup>th</sup>, LIS Director, Peter Lanjouw, gave a presentation on "Economic Development, Middle Income Countries, Luxembourg Consumption Study (LCS)" during the 'Socio-Economic Inequality in China Through A Cross-National Lens' Workshop hosted by the Stone Center.
- LIS was invited by the Roma Tre University for its Second InRome Summer Meeting on "Inequality, Taxation, and the Environment". During the meeting, on May 15<sup>th</sup> Teresa Munzi and Heba Omar made a presentation on "Hands-on LIS data: Digging in the New Survey Waves on Palestine"

## (LIS)<sup>2</sup>ER Visitors Programme 2025

During this quarter, LIS and LISER have hosted the first cohort of visitors in the framework of the (LIS)<sup>2</sup>ER 2025 Visitors Programme. Since May, the initiative hosted four short-term visitors to work on the LIS/LWS data in-house; namely Despina Gavresi (University of Luxembourg), Ana Muñoz Fernández (University of Malaga), Andreas Weiland (Otto-Friedrich-University Bamberg), and Nicole Kappelle (Trinity College Dublin).

On May 28th, the LIS-LISER seminar hosted Despina Gavresi who made a presentation on "who will be presenting "The Legacy of Growing Up in a Recession on Attitudes Towards European Integration". The paper presented examined the long-term consequences of experiencing a recession on individual attitudes towards the European Union (EU).



## Stone Center at GC CUNY hosted a workshop on Socio-Economic Inequality in China Through a Cross-National Lens – April 15-16, 2025

The Stone Center hosted a two-day workshop, in April, focused on inequalities in China. The event was organized by a team from the center – senior scholars Branko Milanovic and Janet Gornick, and postdoctoral scholar Zhexun Mo. Presenters came from Xiamen University, Zhejiang University, and Hong Kong University, as well from universities in the US and Europe. Presenters also included LIS Director Peter Lanjouw, Christoph Lakner from the World Bank, and James Stone from the Stone Foundation.

The event was structured around seven sessions:

- 1 US and China: Income Inequality And Poverty
- 2 Wealth And Wealth Inequality
- 3 Empirical Research / Data Session #1: China
- 4 Technology, Climate, Social Transformation
- 5 Social Inequalities
- 6 Empirical Research / Data Session #2: US, Cross-National
- 7 Historical Analyses

Zhexun Mo prepared a summary of the workshop, with links to the slides when those are available. He closed by noting: "The Stone Center is deeply grateful to all speakers, chairs, and participants for making this workshop a success. We look forward to supporting ongoing collaborations sparked by this gathering and to continuing our engagement with partners across the globe."

## Stone Center at GC CUNY hosted its Seventh In-Person Inequality by the Numbers workshop – June 9-13, 2025

The Stone Center's annual *Inequality by the Numbers* workshop – as in prior years – took a broad approach to the study of socio-economic inequalities, spanning gaps in income, wealth, employment, wages, education, health, and housing, as well sessions focused on social mobility, politics, impacts of climate change, and interactions with the criminal-legal system.

The instructors assessed inequalities through multiple lenses, including gender, sexuality, class, race, ethnicity, age, and immigration status, and through multidisciplinary perspectives. Disparities were considered in several geographic contexts: within New York City, across the U.S. states, across countries, and globally.

This year's instructors included the six Stone Center senior scholars – Janet Gornick, Leslie McCall, Branko Milanovic, Miles Corak, Paul Krugman, and Salvatore Morelli – as well as guest lecturers Maria Abascal, Jordan Conwell, Lane Kenworthy, David Knight, Michael Martell, Núria Rodríguez-Planas, Xi Song, William Solecki, Florencia Torche, Van Tran, Hannah Walker, Adia Harvey Wingfield, and Wenfei Xu.

The 50 admitted attendees were predominantly PhD students from across the social sciences; they were joined by a smaller contingent based in research institutes, government, and journalism. Several attendees came from universities in the "tri-state area" (near NYC) including the CUNY Graduate Center, Columbia, New York University, the New School, Princeton, University of Connecticut, and Yale. Others arrived from Northeastern, University of Minnesota, Boston University, and the University of Wisconsin. They were joined by attendees from University of São Paulo, State University of Rio de Janeiro, Indian Institute of Technology, and LMU Munich. One came from LISER in Luxembourg and one from the Indian Statistical Institute in Delhi.

