

Inequality Matters

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



MESSAGE FROM THE EDITOR

Dear readers,

LIS has temporarily paused the addition of new data during this quarter in preparation of an upcoming update to its LIS and LWS databases. We are pleased to announce that we have been working on several updates and additions to the LIS and LWS databases, aimed at improving data quality and consistency. This work is far advanced, but ongoing. We appreciate the feedback received from the LIS user community, which contributed to enhancing the variable list to support state-of-the-art research projects. Please consult the [Data News](#) section for further information. Stay tuned for our database update in the last quarter of 2024!

Please note that we are still accepting extended abstracts and papers for the [2nd III/LIS Conference on Comparative Economic Inequality](#), taking place on February 27-28, 2025, at the University of Luxembourg. We welcome submissions from scholars at all career stages who are exploring the vast field of comparative economic inequality. The deadline for submissions is September 15, 2024.

This issue's *Inequality Matters* section features four articles. Ella-Marie Assal (University of Antwerp) examines how socio-demographic changes have influenced income inequality in six continental European countries over the past thirty years. Davide Gritti (University of Trento) investigates wealth disparities between migrant and native populations using data from the Luxembourg Wealth Study (LWS). Francesco Savoia (University of Milan) analyses national inequality in Egypt, breaking it down to the regional level using data from the Egyptian ERLIS data. Finally, Alessandro Nardo (University of Antwerp) explores the reciprocity of last-resort means-tested income support using micro-data from the Luxembourg Income Study (LIS) Database across 17 European countries. All four articles were written as an outcome of a research visit carried out in the context of the (LIS)²ER initiative funded by the Luxembourg Ministry of Higher Education and Research.


Enjoy reading!

Jörg Neugschwender

IN THIS ISSUE

Socio-demographic Changes and Income Inequality	1
by Ella-Marie Assal	
Analyzing Migrant Wealth Gaps in Cross-National Perspective Using LWS Data	5
by Davide Gritti	
The Geography of Inequality in Egypt: Decomposition Analysis and Regional Trends over 1999-2017	8
by Francesco Savoia	
Safety Net or Sieve: The Coverage of Minimum Income Schemes and the New Social Risks	12
by Alessandro Nardo	
Data News / Data Release Schedule	17
Working Papers & Publications	18
News, Events and Updates	19

Socio-demographic Changes and Income Inequality*

Ella-Marie Assal , (University of Antwerp)

In recent decades, income inequality has been on the rise in many European countries. One potential driver of this trend could be structural changes in the socio-demographic composition of these countries. Many nations have experienced an aging population, significant changes in household formation, and higher levels of educational attainment. In this note, we explore how these socio-demographic changes have impacted income inequality in six continental European countries over a thirty-year period, from 1990 to 2021.

Methodology

We use the LIS data for Austria, Belgium, France, Germany, Luxemburg and the Netherlands for 1990 (or closest subsequent data year) and 2021 (or the most recent available year). To evaluate the effect of changes in socio-demographic characteristics on the income distribution, we construct counterfactual income distributions. Specifically, we compare the observed, recent income distribution in year t with a counterfactual distribution with the incomes of year t but the socio-demographic composition of a previous year t' . The difference between the actual and counterfactual income distributions then represents the effect of the changes in socio-demographic characteristics.

The counterfactual income distribution is estimated using the semi-parametric reweighting technique as introduced by DiNardo et al. (1996).

Let $f_t(y)$ be the income distribution at date t :

$$f_t(y) = f(y|t_y = t; t_z = t) = \int_{z \in \Omega_z} f(y|z, t_y = t) \times dF(z, t_z = t)$$

Where $f(y|z, t_y = t)$ is the distribution of income y conditional on socio-demographic variables z at date t , and $F(z, t_z = t)$ is the distribution of demographic variables at date z . It is possible to formulate a counterfactual income distribution $f_c(y)$:

$$f_c(y) = f(y|t_y = t; t_z = t') = \int_{z \in \Omega_z} f(y|z, t_y = t) \times dF(z, t_z = t')$$

Where $F(z, t_z = t')$ is now the distribution of demographic variables at date t' . The counterfactual income distribution can be obtained by reweighting the conditional income distributions:

$$f_c(y) = \int_{z \in \Omega_z} f(y|z, t_y = t) \times \omega(z) \times dF(z, t_z = t)$$

Where the reweighting function $\omega(z)$ is defined as:

$$\omega(z) = \frac{dF(z, t_z = t')}{dF(z, t_z = t)} = \frac{f(z|t_z = t')}{f(z|t_z = t)}$$

Which can be rewritten using Bayes' rule:

$$\omega(z) = \frac{f(z|t_z = t')}{f(z|t_z = t)} = \frac{Pr(t_z = t'|z)}{Pr(t_z = t|z)} \times \frac{Pr(t_z = t)}{Pr(t_z = t')}$$

Conditional probabilities $Pr(t_z = t'|z)$ and $Pr(t_z = t|z)$ can be easily estimated using standard techniques for binary response. We use probit models.

Note that the correct interpretation of the counterfactual is as follows: "What would the income distribution at time t have looked like had socio-demographic characteristics remained as they were at time t' , *but* everything else is as observed in time t ?", since the reweighting method keeps constant the income distribution conditional on these characteristics. Consequently, the counterfactual income distribution does not capture equilibrium effects of changing socio-demographic characteristics. For example, the method allows us to capture the effect of the increasing share of the population at retirement age on income inequality, but will not take into the effects of the pressure of an aging population on the incomes conditional on age. In this sense, this reweighting method is a static accounting exercise rather than a dynamic economic model.

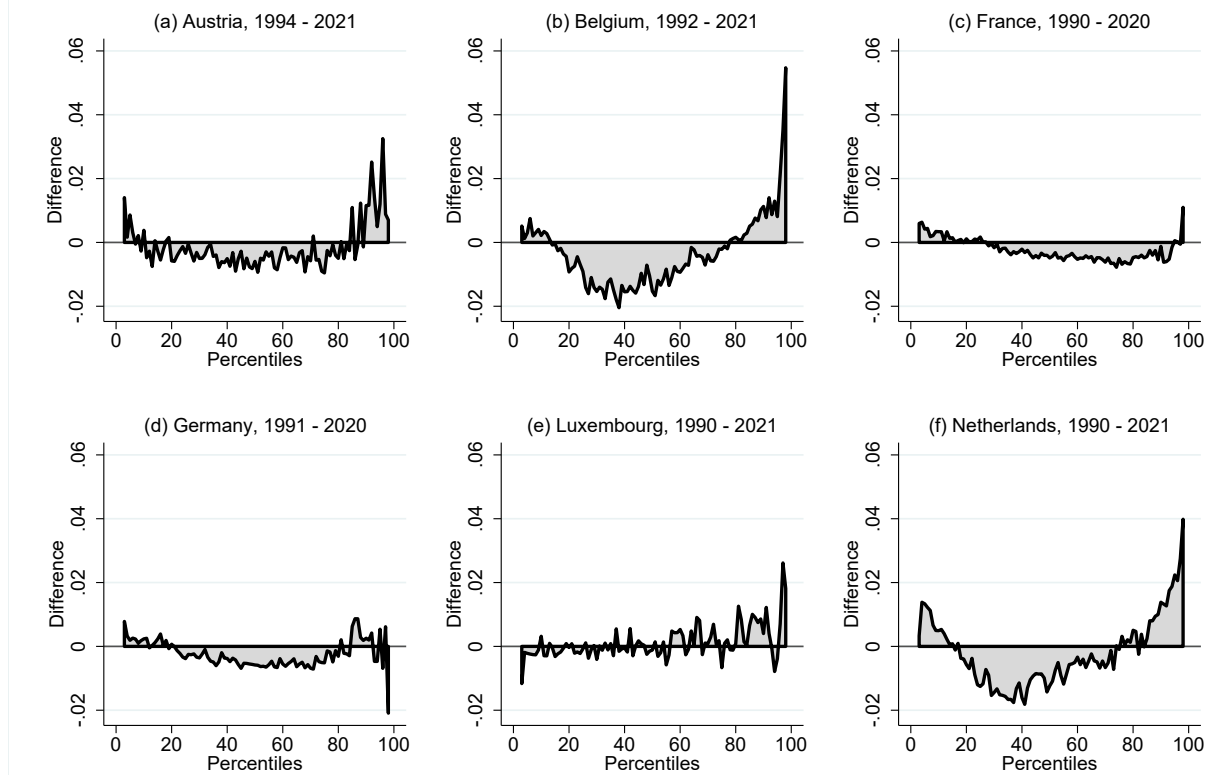
Results

We present the effect of the socio-demographic change on the income distribution by showing the difference between the mean-normalized quintile functions (Pen's parades) for the observed income distribution and the counterfactual income distribution. Negative values indicate that the de-measured incomes at a certain quantile of the distribution have decreased due to the socio-demographic change, while positive values imply that the de-measured incomes at this quantile have increased because of it. Since we are examining de-measured quantile functions, any loss will be offset by a gain elsewhere in the distribution. In other words, the surface of the grey area in the figures below will always sum up to zero¹. Monotonically increasing or decreasing lines indicate, respectively, a clear increase or decrease in income inequality. In the following three figures, we look at the effect of population ageing, changes in household compositions and increasing educational attainments, respectively.

As in many countries, continental European welfare states have been facing the challenges of population aging. Over the past few decades, rising life expectancy and declining fertility rates have led to a substantial increase in the proportion of elderly individuals. Notably, in most of these countries, there has been not only an increase in the elderly population, who typically fall into low-income categories due to their dependence on oftentimes low pension benefits, but also an increase in the proportion of 50–64-year-olds. This last age group is usually better off compared to the rest of the population, benefiting from relatively high wages and often no longer financially burdened by dependent children.

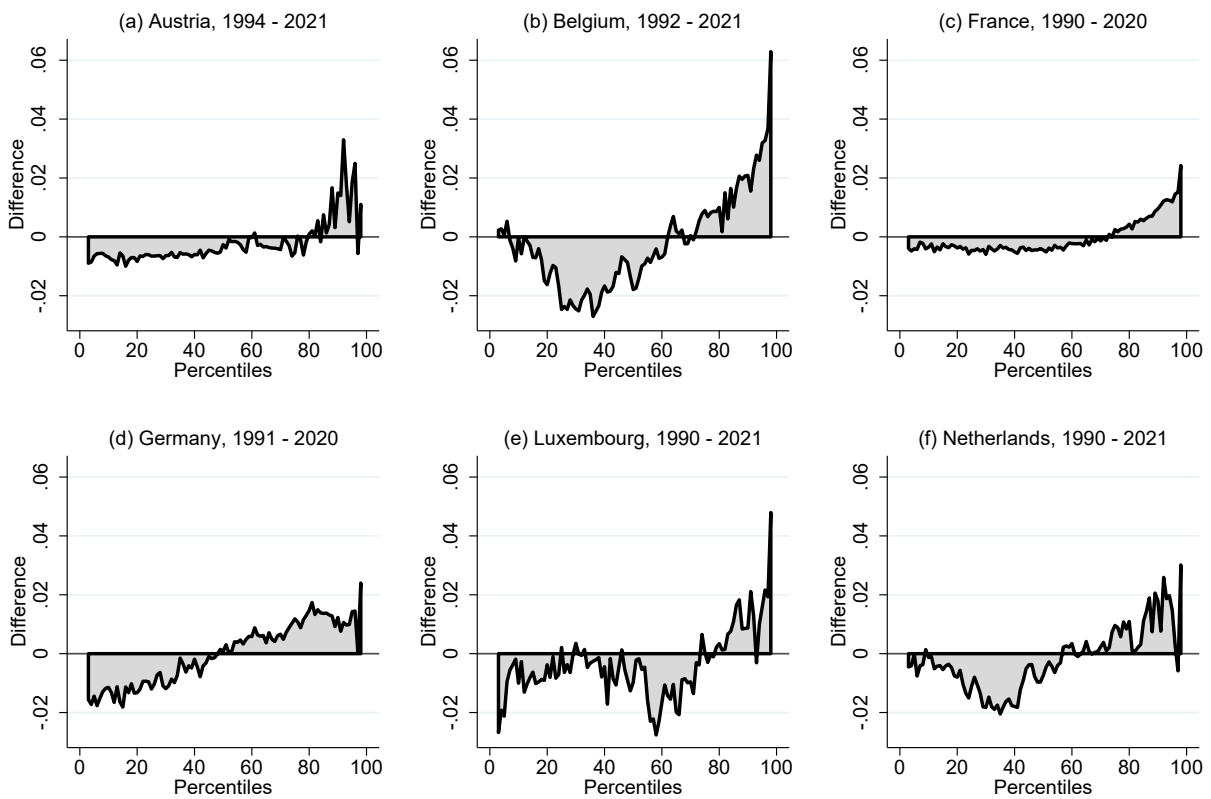
As shown in Figure 1, the effect of the ageing population on the income distribution is generally small. The differences between the observed and counterfactual de-measured income quantile functions are largest in Belgium and the Netherlands. Generally, the changing age distribution has come with small increases in relative incomes at the very bottom of the distribution, decreases for the majority of the distribution (from percentiles 10 to 80), and more pronounced increases at the top of the distribution. One exception is Luxemburg, which has seen quite a non-typical ageing evolution due to high migration rates. Given these patterns, where the largest gains are at the top, the figures suggest that population ageing has slightly increased income inequality.

Figure 1. Difference between observed mean-normalized quantile function and counterfactual with reweighted age categories



Note: Vertical axis shows difference between the observed and counterfactual mean-normalized quintile functions. Five age categories considered for the counterfactual: under 16 years, 17-29 years, 30-49 years, 50-64 years, and 65 and over.

Figure 2. Difference between observed mean-normalized quantile function and counterfactual with reweighted household types



Note: Vertical axis shows difference between the observed and counterfactual mean-normalized quintile functions. Five household types reweighted in the counterfactual: Single, couple with children, couple without children, single parent and a residual category.

Given overall declines in marriage rates, rising divorce rates and decreasing fertility levels, there has been a decrease of individuals living in “traditional” households - consisting of a couple with children - in all six countries analyzed. This decline is generally accompanied by an increase in the number of singles (both with and without children) and an increase in couples without children. Typically, singles, and especially single parents, are found at the lower end of the income distribution, while couples without children are often at the higher end.

Figure 2 shows that the effect of the changing household types is quite similar for all countries in the analysis. Generally, we see a near to monotonic pattern where the relative incomes for the bottom three quarters of the distribution decrease, while the relative incomes for those in the top 25% increase. This pattern is particularly pronounced in Belgium, Germany and the Netherlands. Consequently, it is evident that in all the countries analyzed, the changing household composition (i.e. the shift away from the “traditional” household) is contributing to an increase in income inequality.

Finally, Figure 3 shows the effect of the increasing education levels. In all countries in the analysis, the majority of the population was low educated in the beginning of the 1990s. However, educational attainment had increased since then, causing an increased proportion of the population in the middle and highly educated categories. One might intuitively expect that when more people join the “well-off” group, inequality decreases. However, how the distribution of education levels impacts income inequality depends on the starting point. A society where the majority of the population is low educated (which was the case in the early 1990s) is likely to be more equal than

one in which workers are more distributed across education levels (think of Kuznet’s curve).

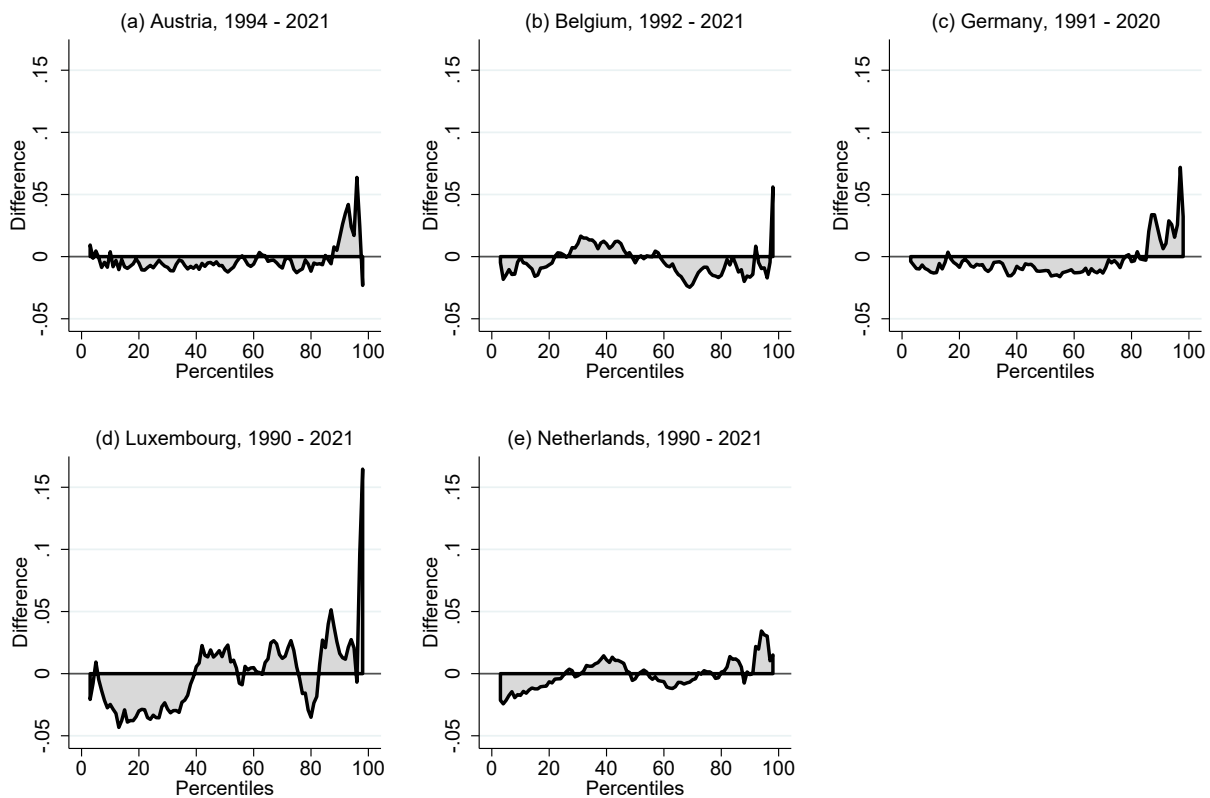
Figure 3 demonstrates that the rise in educational attainment has indeed contributed to increasing inequality. In France and Germany, the effect is quite clear: there are small losses for the bottom 80 percent of the income distribution and gains for the top 20 percent. In Belgium, Luxembourg, and the Netherlands, the losses and gains are more dispersed across the distribution, but generally, there are losses at the bottom and gains at the top. The results for Luxembourg are particularly pronounced, mainly due to a more dramatic shift in educational levels driven by the increase of highly skilled labor migration.

As was the case for the previous results, keep in mind that the graphs in Figure 3 do not take into account any indirect effects. In reality, the returns to education are influenced by the distribution of the education levels in the workforce.

Conclusion and discussion

The effects of socio-demographic changes on income inequality in each country are summarized in Table 1. The analysis reveals that these changes can partly explain the upward trends in income inequality, indicating that structural socio-demographic forces are at play. The effects of aging are minimal or even negligible. However, changes in household composition have a more pronounced positive effect on inequality. Finally, while the impact of educational attainment is not always clear-cut, it also appears to contribute to increasing inequality.

Figure 3. Difference between observed mean-normalized quantile function and counterfactual with reweighted age categories



Note: Vertical axis shows difference between the observed and counterfactual mean-normalized quintile functions. Three education levels reweighted in the counterfactual based on highest attained education level: low (no secondary education degree), middle (secondary education degree) and high (tertiary education degree). France not included in graph because highest education level attained not available for 1990.

	Observed 2020/2021	Counterfactual without ageing		Counterfactual without changing household composition		Counterfactual without higher education attainment	
	Gini	Gini	Diff.	Gini	Diff.	Gini	Diff.
Austria	27.8	27.6	0.2	27.3	0.5	27.3	0.5
Belgium	25	24.4	0.6	24.1	0.9	24.7	0.3
France	29.2	29.2	0	28.8	0.4		
Germany	30.4	30.3	0.1	29.9	0.5	29.7	0.7
Luxembourg	29.3	29.3	0	28.6	0.7	28.2	1.1
The Netherlands	26.3	25.9	0.4	25.7	0.6	25.8	0.5

It is important to note that these findings reflect only the direct effects of socio-demographic changes. Furthermore, demographic shifts are just one piece of the puzzle. These countries have also experienced significant societal changes in the labor market, tax-benefit systems, and other areas that influence income inequality. Further evaluations would be needed to fully understand the interplay of these factors and their impact on income distribution.

* This article is an outcome of a research visit carried out in the context of the (LIS)2ER initiative which received funding from the Luxembourg Ministry of Higher Education and Research.

¹ It is possible that this is not always clearly reflected in the figures, which exclude the first and last percentile because of potential extreme values.

References

DiNardo, J., Fortin, N.M. and Lemieux, T (1996). Labor Market Institutions and the Distribution of Wages, 1973-1992: A Semiparametric Approach. *Econometrica* 64, no. 5 (1996): 1001–1044.

Analyzing Migrant Wealth Gaps in Cross-National Perspective Using LWS Data*

Davide Gritti ✉, (University of Trento)

Wealth inequality literature has recently expanded by adopting a comparative approach. However, wealth stratification by migration background has been slower to follow this trend.

Adding wealth to research on migration and host-country integration would be of utmost importance. First, the existence of substantial gaps in wealth accumulation and asset participation might be taken as an indicator of economic and social exclusion (Agius Vallejo and Keister, 2020). Second, as wealth is a fundamental stratifier of life chances (Killewald et al., 2017), differences in wealth accumulation translate into inequalities in different domains, across various life stages of individuals, and over generations.

The lamented lack of comparative research on wealth stratification by migration background is largely due to data availability issues. In this contribution, I will (a) discuss the use of the harmonized Luxembourg Wealth Study (LWS) as a unique resource for comparative research on wealth stratification by migration background, and (b) provide a recent descriptive overview of wealth stratification across multiple countries.

Summary of previous research

To my knowledge, four studies have investigated cross-country household wealth differences by migratory background. Mathä et al. (2011) examined migrant wealth gaps (MWG) in Germany, Italy, and Luxembourg, utilizing early releases of LWS data. Bauer et al. (2011) compared Australia, Germany, and the United States using national samples, while Abdul-Razzak et al. (2015) focused on the United States and Italy, also using national samples. Ferrari (2020) investigated MWG in 17 European countries, aggregated into four macro-areas, using SHARE data on populations aged 50 and over.

These studies consistently show that a substantial migrant wealth gap exists, which is robust across most of the wealth distribution. A significant portion of this disadvantage among migrant households is attributed to lower homeownership rates compared to natives. Despite these commonalities, there are large differences in the magnitude of MWG. For instance, Bauer et al. (2011) reported that the MWG at the mean ranged from approximately 9,000 US dollars in Australia to around 150,000 US dollars in the United States.

In seeking to explain the sources of MWG, and similar to research on income differentials, these studies primarily focused on compositional differences between natives and migrants. Decomposition methods were applied to identify the influence of sociodemographic (e.g., age, household composition) and socioeconomic (e.g., educational attainment, income, occupation) characteristics on the observed MWG.

Wealth disparities linked to migratory backgrounds are often examined within the broader context of racial inequalities, with the white-black wealth gap being one of the most extensively studied topics in wealth literature (Conley, 2010). Consequently, the literature tends to distinguish between primary factors – such as ethnicity – that affect both natives and migrants, and secondary factors – such as discrimination – that impact migrants specifically. This distinction is relevant to comparative studies of migrants gaps, as observed gaps may also reflect underlying ethnic wealth disparities.

What can be done using the Luxembourg Wealth Study

The LWS cross-national harmonized wealth database provides a unique opportunity to conduct comparative research on the assets and debts of migrant populations, as well as comparisons between migrants and natives. Additionally, the database includes a range of migration-related individual characteristics. With its combination of high-quality data on migration, wealth, and sociodemographic and socioeconomic characteristics, the LWS database is particularly well-suited for comparative studies on this topic.

Of the 21 countries included in the LWS database, 16 countries have immigration data available for at least one year. Covering survey years from 2004 to 2022, these countries are: Australia, Austria, Chile, Denmark, Estonia, Finland, Germany, Greece, Italy, Luxembourg, Norway, Slovakia, Slovenia, South Africa, Sweden, and the United States. In contrast, Canada, Japan, South Korea, Spain, and the United Kingdom have no immigration data available in any survey years. Overall, the use of LWS data allows for cross-sectional analyses of MWG in several European countries and other regions, enabling comparisons across national contexts with vastly different institutional settings that influence both wealth accumulation opportunities and social and economic barriers for immigrants.

Out of 103 country-years, immigration data is available for 60 country-years. Longitudinal analysis, in the form of repeated cross-sectional studies spanning at least a decade, would be possible for eight countries. Some countries—such as Australia, Italy, Norway, and Denmark—are particularly well-suited for this purpose. Given the high number of available country-years, precise estimates of the evolution of MWG can be obtained for this subset of countries. This would allow for investigating the influences of changes in immigrant demographics (e.g., aging), immigration policy (e.g., reforms in citizenship laws), and socioeconomic crises.

While restricted only to some country-years combinations, the additional variables in the migration section are key for an in-depth characterisation of migrants. Two of them are particularly relevant. First, by using years of residence in the country it is possible to make comparisons between natives, permanent and temporary migrants as well as to model the magnitude of the convergence between migrants' and natives' wealth accumulation trajectories over the age distribution (Semyonov and Lewin-Epstein, 2022). Second, by using the country (or area) of birth, it is possible to better understand the diversity of migrant structure in each country and also to make comparisons between migrants coming from the same country (or area) of birth across different countries. While years of residence and area of birth are largely available in LWS, the information on citizenship of the host country as well as ethnicity is available for a small subset of countries, making the inferential capacity of the analysis on this matter much more limited. Finally, the use of behavioral/attitudinal variables could have great potential, given the oftentimes mentioned relevance of attitudes in driving differences between natives and migrants in wealth attainment.

An overview of the potential of LWS would be incomplete without acknowledging its limitations. Despite the growing numerical and societal significance of second-generation migrants and their integration worldwide, information on migrant generation is directly

available in LWS for only two countries: Germany and Norway allow for identifying second-generation migrants.

Some evidence on migrant wealth (and debt) gaps across countries

Using the information from LWS, I present descriptive evidence on wealth and debt disparities based on immigration background. This analysis utilizes 14 national cross-sectional datasets, primarily from 2016 to 2018, with the notable exception of the United States, for which the only available dataset is from 2022. The analysis is based on a sample of approximately 500,000 households, where the head of the household is between 20 and 75 years old.

I define as "immigrant" any household where the head of the household is reported as such.¹ For wealth-related variables, I considered harmonized wealth aggregates, including disposable net worth, real estate assets, financial assets (excluding pensions), total debts, debts related to real estate, and debts on non-housing liabilities. All values are expressed in 2017 US dollars adjusted for purchasing power parity (PPP).

Figure 1 illustrates asset participation rates, representing the percentage of native and migrant populations holding any form of assets or liabilities. All countries exhibit high participation rates, consistently above 75%. However, in the vast majority of countries, natives are more likely to possess wealth compared to migrants. The most significant differences in asset participation are observed in Germany, Finland, and Norway. Conversely, in countries like Australia and the United States, the differences are minimal. A closer inspection of housing and financial asset participation rates reveals varying trends across wealth components. While financial asset participation rates are generally similar between the two groups,

significant disparities exist in the ownership of real assets. This finding aligns with previous research on the role of homeownership in wealth stratification. Notably, this is particularly evident in European countries such as Finland, Denmark, Italy, and Norway, despite their differing housing systems.

Regarding debt, despite considerable cross-country heterogeneity in overall debt access, natives are generally more likely to hold debt than migrants. Differences are negligible in countries such as Australia and the United States and are relatively small overall, except in Finland and Norway. Similar to wealth, disparities in debt are primarily driven by liabilities related to real estate rather than non-real-estate assets.

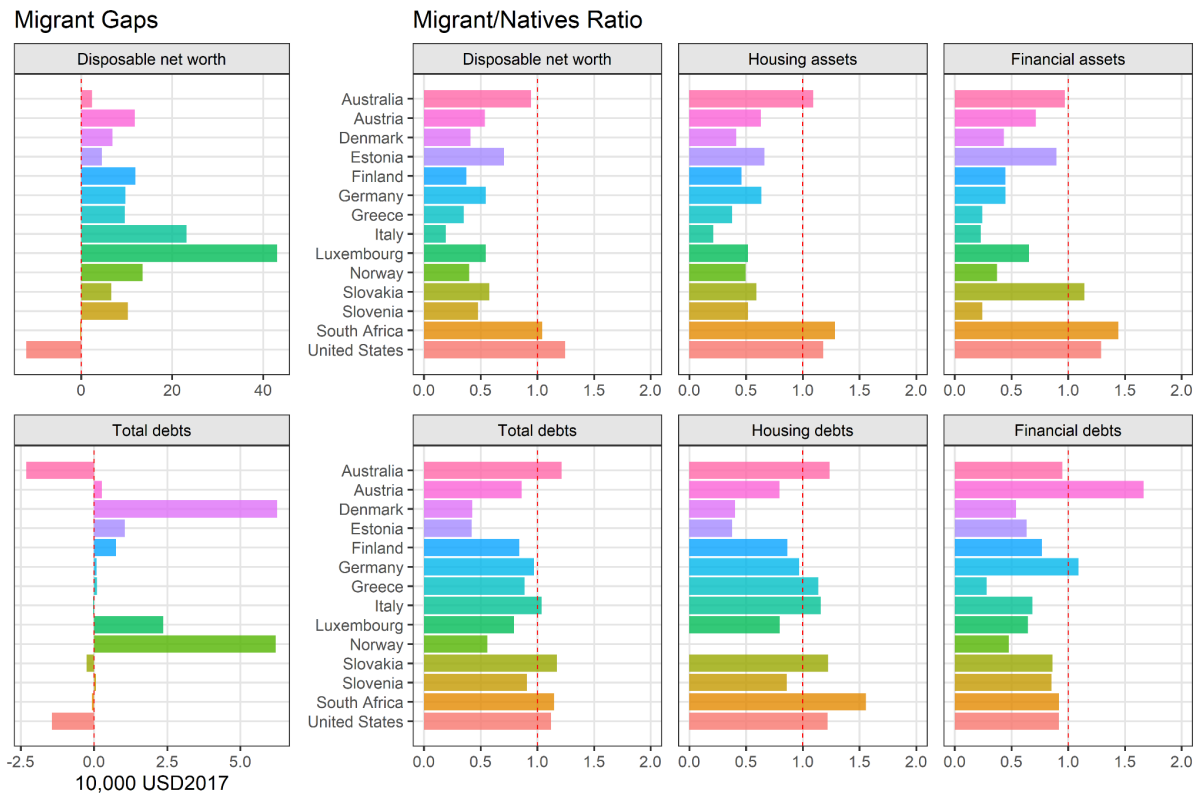
Figure 2 presents descriptive statistics based on the monetary values of wealth and debt variables. The left panel displays the migrant gaps in disposable net worth and total debts at the means, expressed in increments of 10,000 US dollars. The right panel shows the ratio between migrants' and natives' wealth and debts, with a further breakdown by housing and financial components.

Regarding wealth gaps, 12 out of the 14 countries exhibit a wealth gap disadvantageous to immigrants, averaging around 100,000 US dollars, with a maximum gap of approximately 400,000 US dollars in Luxembourg. Interestingly, the wealth gap is about 20,000 US dollars in Australia, null in South Africa, and even negative in the United States.² The immigrant-to-native wealth ratios further illustrate that, in most countries, immigrants own about half the wealth of natives. Notably, these ratios tend to be smaller for housing wealth compared to financial wealth, corroborating the importance of homeownership in wealth inequality.

Figure 1. Assets and debts participation rates. 14 countries, 2016/2018



Figure 2. Migrant gaps and migrants/natives ratios for wealth and debt. 14 countries, 2016/2018



As for debt gaps, the differences are smaller in magnitude than wealth gaps. In six out of the 14 countries, natives carry more debt than migrants, with an average difference of about 10,000 US dollars and a maximum of 60,000 US dollars in Norway and Denmark. Interestingly, in Australia and the United States, immigrants are more indebted than natives. Given the significant cross-country variation in debt access, ratios are a more reliable measure for comparison: in most countries, migrants and natives hold similar amounts of debt.

Concluding remarks

As migrant populations increasingly reach retirement age, the urgency of research on wealth disparities has grown, particularly in countries where privately accumulated economic resources are crucial for consumption during retirement.

This contribution highlights LWS as a valuable database for advancing our understanding of wealth inequality and stratification related to migration. While existing research has focused on a limited number of countries, LWS allows for broader analysis across a more extensive range of countries and time periods, with data spanning several years and, in some cases, more than a decade.

By using LWS data for 14 countries, I found evidence that migrants hold less wealth than natives in almost all countries, while in only a few cases are immigrants more indebted than natives. Although this disadvantage is widespread, differences across countries exist in both the magnitude of disadvantages and wealth component (real or financial) driving the disadvantages. Exploring cross-country differences in migrant wealth and debt gaps is a necessary first step; however, the most compelling aspect lies in understanding the underlying determinants of these disparities, both at the individual and contextual levels. The extensive data provided by LWS can enable

future researchers to make significant advances in the related literature.

* This article is an outcome of a research visit carried out in the context of the (LIS)2ER initiative which received funding from the Luxembourg Ministry of Higher Education and Research.

- 1 Given that immigration background is provided at the individual level, it is possible to further differentiate households by distinguishing mixed households in which both migrants and natives are present.
- 2 As mentioned earlier, US22 is the first and only dataset for the United States that includes information on migratory background. Since my estimates differ somewhat from those found in previous literature, it will be important to reassess the robustness of these findings as more data becomes available in future releases.

References

Abdul-Razzak, N., Osili, U. O., & Paulson, A. L. (2015). immigrants' access to financial services and asset accumulation. In *Handbook of the economics of international migration* (Vol. 1, pp. 387-442). North-Holland.

Agius Vallejo, J., & Keister, L. A. (2020). Immigrants and wealth attainment: migration, inequality, and integration. *Journal of Ethnic and Migration Studies*, 46(18), 3745-3761.

Bauer, T. K., Cobb-Clark, D. A., Hildebrand, V. A., & Sinning, M. G. (2011). A comparative analysis of the nativity wealth gap. *Economic Inquiry*, 49(4), 989-1007.

Conley, D. (2010). *Being black, living in the red: Race, wealth, and social policy in America*. University of California Press.


Ferrari, Irene. (2020). The nativity wealth gap in Europe: a matching approach. *Journal of Population Economics*, 33(1), 33-77.

Killewald, A., Pfeffer, F. T., & Schachner, J. N. (2017). Wealth inequality and accumulation. *Annual Review of Sociology*, 43(1), 379-404.

Mathä, T. Y., Porpiglia, A., & Sierminska, E. (2011). The immigrant/native wealth gap in Germany, Italy and Luxembourg. *ECB Working Paper*, 1302

Semyonov, M., & Lewin-Epstein, N. (2022). The wealth gap between ageing immigrants and native-born in ten European countries. *Czech Sociological Review*, 57(6), 639-660.

The Geography of Inequality in Egypt: Decomposition Analysis and Regional Trends over 1999-2017*

Francesco Savoia , (University of Milan and University of Bologna)

Introduction

The analysis of economic inequality in Egypt – and, more broadly, in Middle East and North Africa (MENA) countries - has recently sparked an interesting debate regarding its extent and trends, generating quite a bit of controversy (e.g., Verme et al. 2014, Ianchovichina et al. 2015). Rising inequality has been cited as one of the factors behind the uprisings in Arab countries by media and academics. However, in Egypt, estimates of inequality measures at the national level, based on household surveys, suggest that inequality has been moderate and relatively stable over time (Al-Shawarby, 2014).

One way to reconcile this apparent paradox, not unique to Egypt and often referred to as the “Arab inequality puzzle”, is on technical grounds. Measuring economic inequality is often challenging, especially in developing countries where detailed and comprehensive administrative data on income and wealth are typically scarce or entirely unavailable. This may lead to substantial discrepancies between the way income inequality is measured and its true extent. In the case of Egypt, existing statistics may underestimate its true extent. One argument is that income inequality estimates are drawn from household surveys with various limitations, especially with respect to the “true” top incomes (Achcar, 2020). Hlasny and Verme (2018) addressed this issue. After correcting for problems such as the number of non-respondents in household surveys, the estimated inequality was found to be higher by a minimum of 1.1 to a maximum of 4.1 percentage points. Similarly, Van der Weide et al. (2018) argued that top income shares in Egypt were significantly underestimated. Using house prices to re-estimate the top tail of the income distribution, the revised Gini index was found to be 25% higher than the value reported in the World Bank’s statistics.¹

Here, we revisit inequality in Egypt by looking at its geographical variation. This note, in particular, focuses on the sub-national dimension of inequality, including the urban-rural gap, and how income distribution has evolved within Egyptian regions (*governorates*) over nearly two

decades. This is important because fairly unequal regions may coexist alongside relatively equal ones and individuals’ experience of inequality at the “local level” may reflect that.

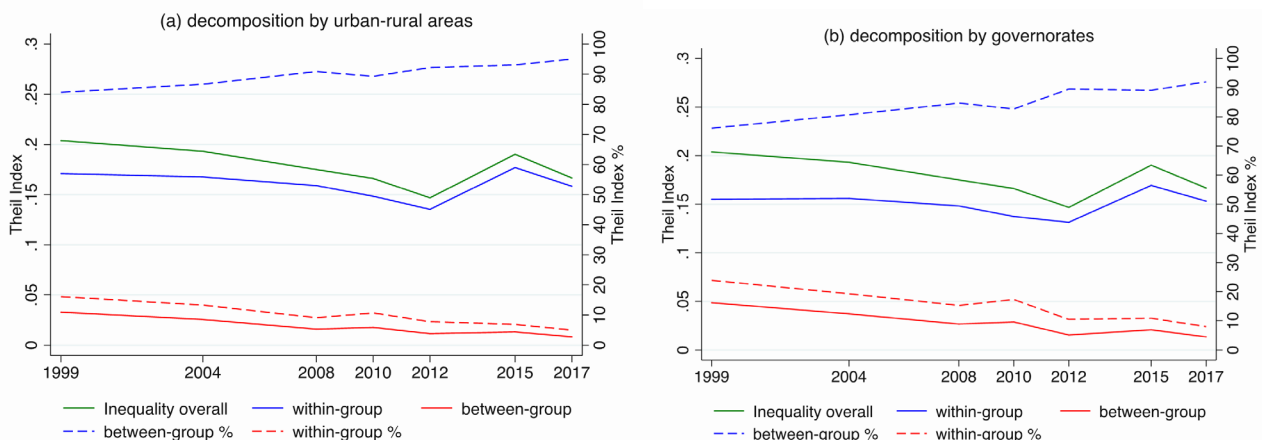
The spatial dimension of inequality

Using ERF-LIS data based on CAPMAS surveys, we first decompose income inequality by population subgroups using the geographical location and calculate inequality within each subsample and between the means of the subsamples, to assess the importance of subgroups. In our case, the between-group and the within-group components measure the inequality contribution coming, respectively, from: (a) the differences in urban and rural means and the income differences inside each area; and from (b) the differences in *governorates* means and the income differences inside each *governorate*. For all measures, we detect extreme values via the interquartile range following the recent LIS procedure (Neuenschwender 2020).

Figure 1 illustrates the Theil Index and subgroup decomposition over 1999-2017. Consistent with previous evidence, the overall level of inequality declined steadily until 2012, followed by an upward trend.² At first glance, exploring the geographical divide, it is apparent that the within-component almost entirely explains overall inequality in Egypt, with the between component decreasing steadily over time. In 2017, the contribution of the within and between component in urban and rural areas is respectively 95% and 5%. Looking at the regional data, intra-regional inequality accounted for about 92% of the total in 2017, whereas inter-regional inequality significantly decreased over time and accounted for the remaining 8%. This indicates that overall inequality in Egypt is driven by specific regional dynamics.

Table 1 reports further statistics for urban and rural areas illustrating the extent to which income disparities in each contributed to overall Egyptian inequality in 1999 and 2017. In line with the results of Milanovic (2014), Theil indices and Gini show that the influence predominantly

Figure 1. Income inequality in Egypt: Theil index and subgroup decomposition 1999-2017



Notes: Theil index decomposition of the equalised disposable household income based on ERF-LIS data. Data are top-bottom coded detecting extreme values via the interquartile range.

Table 1. Subgroup indices and statistics in urban and rural areas

	1999				2017			
	GE(0)	GE(1)	GE(2)	Gini	GE(0)	GE(1)	GE(2)	Gini
URBAN	0.200	0.240	0.374	0.351	0.167	0.201	0.321	0.319
RURAL	0.083	0.091	0.118	0.225	0.106	0.117	0.158	0.253

	Population	Mean	Relative	Income		Population	Mean	Relative	Income
	share %	income	mean	share		share %	income	mean	share
URBAN	41.08	6787.00	1.309	0.54		42.60	29811.65	1.150	0.49
RURAL	58.92	4063.70	0.784	0.46		57.40	23007.45	0.888	0.51

Notes: inequality measures calculated on equivalised disposable household income. GE(0) is the mean logarithmic deviation (MLD), GE(1) is the Theil index, and GE(2) is half the square of the coefficient of variation.

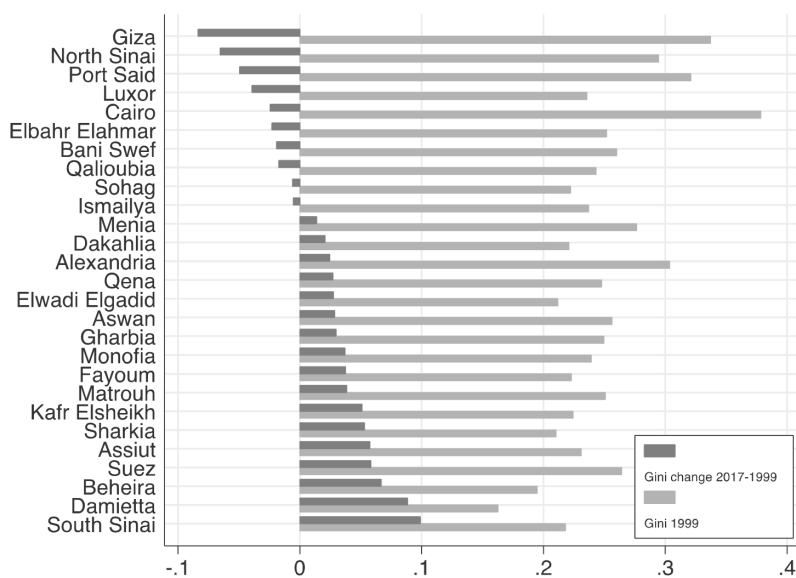
stems from urban areas, reinforcing that the inequality gap remains largely geographical. It is between the four main Egyptian cities, and the rest of the country. In 1999, the mean income of the urban area was about 1.30 times the overall mean income, with the average per capita urban income being 67% higher than the average rural income. After nearly two decades it reduced to 29.5%.

Overall, although the initial gap was quite deep it significantly reduced over time. The income shares for urban and rural areas in Egypt have shifted significantly between 1999 and 2017. In 1999, urban areas received 54% of the income, while rural areas received 45%. By 2017, these shares had nearly reversed, receiving 49% and 51% respectively. This shift in income distribution occurs despite the population share remaining relatively stable between the two periods. This change suggests a significant realignment in income allocation, indicating that while income disparities between urban and rural areas have lessened, the distribution of income has become more balanced over time.

In more detail, how has inequality evolved within regions? Figure 2 plots the initial value of Gini in 1999 for each region and the corresponding change from 1999 to 2017. This indicates i) significant variation in income inequality levels across regions and ii) a notable increase in most regions. Interestingly, a closer look at the regional dynamics reveals that the most influential and unequal governorates are also those that have seen significant reductions, except for the case of Alexandria. Similarly, the surge of income inequality in the more egalitarian regions of Damietta, Beheira, and South Sinai is noticeable, with increases of approximately 9%, 7% and 10% points, respectively.

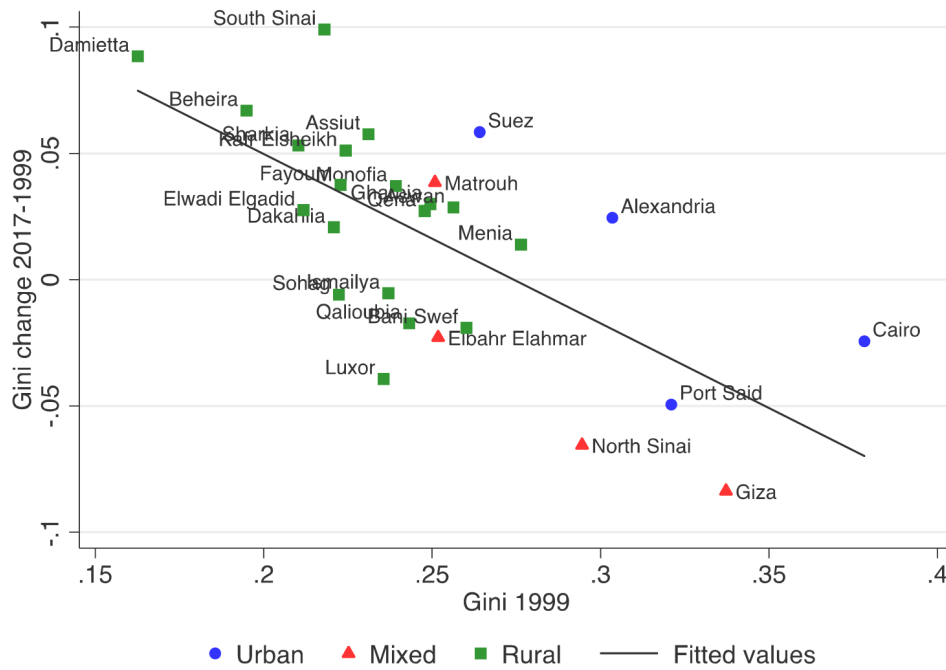
Figure 3 provides a visual indication of the relationship between the initial level of inequality and the 2017-1999 change. The negative linear relationship in the scatter plot shows that regions with higher initial levels of inequality seem to catch up with those having lower initial levels of inequality, thereby indicating that there may have been convergence during the 1999-2017 period.

Figure 2. Initial level of inequality and change over time: Gini, 1999-2017



Notes: Gini index calculated on equivalised disposable household income. Data for Elbahr Elahmar, Elwadi Elgadid, Matrouh, North Sinai and South Sinai are not available for 2017 and refer to 2015.

Figure 3. Initial level of Gini versus Gini change 1999-2017



Notes: Gini index calculated on equivalised disposable household income. Data for Elbahr Elahmar, Elwadi Elgadid, Matrouh, North Sinai and South Sinai are not available for 2017 and refer to 2015.

To test this empirically, we examine whether regions with lower inequality levels tend to experience larger changes in inequality, thereby catching up with regions with higher inequality levels.³ Regression estimates indicate that differences in within-region inequality expressed by the Gini index have reduced since 1999, on average. Specifically, according to the estimates, regions are converging to an average Gini index of 0.27. This test is also repeated for quintile shares of income and the poverty rate measured as the proportion of people living below 50% of median income. Results strongly support the hypothesis of convergence in all parts of income distribution and poverty, with the coefficients for the initial values being negative and statistically significant.

Concluding remarks

Analysing the spatial dimension of income inequality in Egypt over nearly two decades reveals a significant geographical gap largely attributed to urban areas, considerable variation in how income is distributed within regions, and a notable increase in inequality in most regions. However, the evidence also indicates that the gap between urban and rural areas is narrowing, and that differences in within-region income inequality have, on average, reduced since 1999.

The Egyptian case suggests that measuring and monitoring income inequality at the sub-national level matters. If we had only considered the national level, we would have concluded that inequality was moderate and stable. However, the sub-national data reveals that Egyptians experience varying levels of equality depending on their Governorate, with some regions being relatively equal and others more unequal. This is important to assess, for instance, if SDGs progress in reducing inequalities is geographically diffused.

How income is distributed at regional level is also important because a significant part of individuals' experiences of economic inequality often occur at the local level. This affects political and social attitudes and behaviours and, in turn, individuals' well-being (Peters and Jetten,

2023). From this perspective, the lens of regional-level inequality may help explain the "Arab inequality puzzle" — the apparent disconnect between the low and stable national-level inequality reported in the Arab societies and the popular perception of high inequality leading to the Arab Spring uprisings. The increasing regional inequality observed in both relatively equal and unequal regions in Egypt might be at the root of such perception. This aligns with the hypothesis that inequality may have fuelled, among other things, the political uprisings of the Arab Spring.

* This article is an outcome of a research visit carried out in the context of the (LIS)2ER initiative which received funding from the Luxembourg Ministry of Higher Education and Research.

- 1 Another effort to explain the apparent disconnect between inequality and social uprisings points to the deterioration of subjective well-being measures (Devarajan and Ianchovichina 2018).
- 2 The Gini index for Egypt was 0.314 in 1999, 0.293 in the year of the political uprisings in 2010, and 0.291 in 2017.
- 3 The corresponding test of unconditional beta-convergence is a regression of the observed absolute changes over time on a given inequality measure on the measure's initial values across regions. For further details and results related to Egypt, refer to Savoia et al. (2024).

References

Al-Shawarby, S. (2014). The Measurement of Inequality in the Arab Republic of Egypt: A Historical Survey, in P. Verme et al., eds., *Inside inequality in the Arab Republic of Egypt: Facts and perceptions across people, time, and space*. World Bank Studies. Washington, DC: World Bank.

Achcar, G. (2020). On the 'Arab inequality puzzle': The case of Egypt. *Development and Change*, 51(3), 746–770.

Devarajan, S., & Ianchovichina, E. (2018). A broken social contract, not high inequality, led to the Arab Spring. *Review of Income and Wealth*, 64, S5-S25.

Hlasny, V., & Verme, P. (2018). Top incomes and the measurement of inequality in Egypt. *The World Bank Economic Review*, 32(2), 428-455.

Ianchovichina, E., Mottaghi, L., & Devarajan, S. (2015). *Inequality, Uprisings, and Conflict in the Arab World*. Middle East and North Africa Economic Monitor. World Bank, Washington, DC.

Milanovic, B., (2014). Spatial inequality, in P. Verme et al., eds., *Inside inequality in the Arab Republic of Egypt: Facts and perceptions across people, time, and space*. World Bank Studies. Washington, DC: World Bank.

Neugschwender (2020). Top and bottom coding at LIS. *LIS Technical Working Paper Series*, No. 9.


Peters, K., & Jetten, J. (2023). How living in economically unequal societies shapes our minds and our social lives. *British Journal of Psychology*, 114(2), 515-531.

Savoia, F., Bournakis, I., Said, M., & Savoia, A. (2024). Regional income inequality in Egypt: Evolution and implications for Sustainable Development Goal 10. *Oxford Development Studies*, 52(1), 17-33.

Van der Weide, R., Lakner, C., & Ianchovichina, E. (2018). Is inequality underestimated in Egypt? Evidence from house prices. *Review of Income and Wealth*, 64, S55-S79.

Verme, P., Milanovic, B., Al-Shawarby, S., El Tawila, S., Gadallah, M., & El-Majeed, E. A. A. (2014). *Inside inequality in the Arab Republic of Egypt: Facts and perceptions across people, time, and space*. World Bank Studies. Washington, DC: World Bank.

Safety Net or Sieve: The Coverage of Minimum Income Schemes and the New Social Risks*

Alessandro Nardo , (University of Antwerp)

Note: this research partially replicates another analysis on the coverage of minimum income schemes in EU countries by Nardo, Marchal, and Marx (2024). EU-SILC data for 2019 is used.

Reference: Nardo, A, Marchal, M., Marx, I. (2024) "Safety net or sieve: Do Europe's minimum income schemes reach the poor?," Working Papers 2402, Herman Deleeck Centre for Social Policy, University of Antwerp.

1 Understanding the coverage of MIS in light of the new social risks

Today, nearly all European countries have means-tested minimum income schemes (MIS) in place that guarantee a basic level of income support for the least-well off. Scholars have broadly investigated how these schemes of last resort differ in design, function, and overall effectiveness (e.g. Frazer and Marlier, 2016; Marchal et al., 2021; Immervoll et al., 2015; Natili 2020). Heterogenous performances of MIS are the result of multiple factors, including the design of policy as well as to the complementarity of MIS with first-tier benefits of income maintenance (e.g. Clegg, 2013; Pfeifer, 2013). At the same time, previous research has shown that *actual* coverage of MIS in Europe is far from complete, due to limits by design, issues of benefit administration, targeting errors, and *non-take-up* (Figari et al., 2013; Almeida et al., 2022). However, the salience of socio-economic factors has remained underexposed in these studies. Furthermore, the research has mainly focused on macro-level indicators (Tervola et al., 2021; van Vliet and Wang, 2019). Only a marginal literature (Van Mechelen et al., 2016) has empirically explored the link between MIS coverage and the prevalence of social risks among the poor population. This concerns especially the so-called "new social risks", which resulted from the structural transformations of the labor market and family structure at the end of the 20th century, after the welfare state reached maturity in many countries (Bonoli, 2007). Traditional welfare state, and social insurance in particular, have been found to be ill-equipped to offer adequate protection to those affected by these social risks, who are supposed to rely on last resort means-tested income protection. Examples of such risks are a low level of education in post-industrial economies, single parenthood, or precarious labor market attachment. At the same time, young adults having no or insufficient work histories will often lack social insurance entitlements.

Only few comparative analyses have investigated the profiles of MIS beneficiaries at the micro-level (Immervoll et al., 2022). Even less attention has been dedicated to the poor population that is left uncovered from income support. This poses an important gap in our understanding of the effectiveness of MIS and of the actual targeting of these benefits.

2 Methodology of the research

Using the micro-data from the Luxembourg Income Study (LIS) Database for 17 European countries¹, we explore the reciprocity (also known as the *effective* or *actual* coverage – van Oorschot, 2013) of last resort means-tested income support. For this purpose, we define the reciprocity rate of MIS as the ratio of MIS beneficiaries among the pre-transfer poor working-age population, setting the poverty threshold at 60% of the median equivalized household income. First, we show to what extent MIS succeed in covering the gaps left by the welfare state – especially social insurance – or whether substantial numbers are left unprotected. Then, we focus on the profiles of both

MIS beneficiaries and the uncovered poor. As such, we investigate the prevalence of a selection of *new* social risks (single-parenthood, foreign citizenship, low education, non-standard employment, and young age) and one typical *old* social risk (disability) among different groups of the pre-transfer poor population.

As eligibility and generosity of the transfers generally depend on household-level characteristics and living conditions, and as the information about MIS resources is only provided at household level, we consider all individuals in a beneficiary household as MIS recipients. While, in principle, this choice could amount to an overestimation of benefit coverage (Otto, 2018), such potential effect is reduced by our choice of considering only the working-age population (between 16 and 64 years-old). We consider a household to be beneficiary when the income from the relevant social assistance variable is higher than zero (Tervola et al., 2021).

In this research, we principally distinguish between those receiving general minimum income support (MIS) and those receiving social insurance (SI). Some income replacement benefits cannot be categorized as fully functionally equivalent to a minimal last resort benefit, nor as contributory social insurance benefits. We therefore include an additional category, of those covered by "other income assistance" benefits. To identify the uncovered, we zoom in on those of the working age pre-transfer poor population that do not receive any of the three aforementioned types of income replacement benefits. That does however not preclude them from receiving minor, supplementary benefits, especially universal transfers whose receipt is independent from the living conditions of the household.

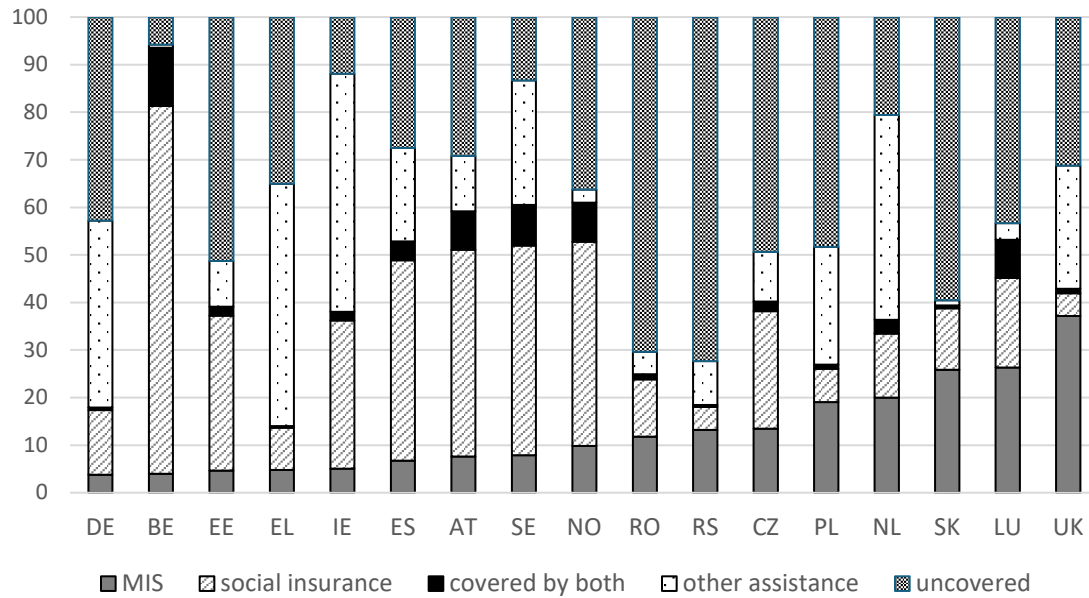
3 Results and discussion

a. The coverage of MIS in European welfare states

Figure 1 splits the working-age population at risk of poverty before receiving social benefits in five categories: i) individuals receiving only last-resort income replacement benefits (MIS), ii) only insurance-based income replacement support (SI), including pensions, sickness, disability, survivor, and unemployment benefits, iii) receiving both MIS and SI income replacement, iv) other assistance-based cash benefits and v) individuals left uncovered by any of these benefits. We find important variation in the way national welfare states cover the pre-transfer poor of working-age.

A first observation from Figure 1 is the large variation in MI coverage rates (dark-grey bars): in most countries, the scope of MIS is very limited, covering – alone – less than the 10% of the pre-transfer poor population. However, in a limited set of countries – specifically Austria, Belgium, Luxembourg, Norway, Sweden – a sizable share of the pre-transfer poor population is covered by a combination of social insurance and MI benefits (black bars). This points towards a different role that MI may play in these countries, as a benefit that is also intended to top-up low incomes, whether those are from work or from (partial) social insurance benefits. MIS play a more relevant role in the UK, Luxembourg, Slovakia, and, less, in the Netherlands and Poland. The share of (pre-transfer) poor individuals not covered by income replacement benefits differs quite substantially between countries, ranging from less than 10% (Belgium) to 70% (Romania and Serbia), with many countries covering less than 60% of the pre-

Figure 1. Share of pre-transfer poor population left uncovered by income replacement and composition of income support for those covered in 27 European countries



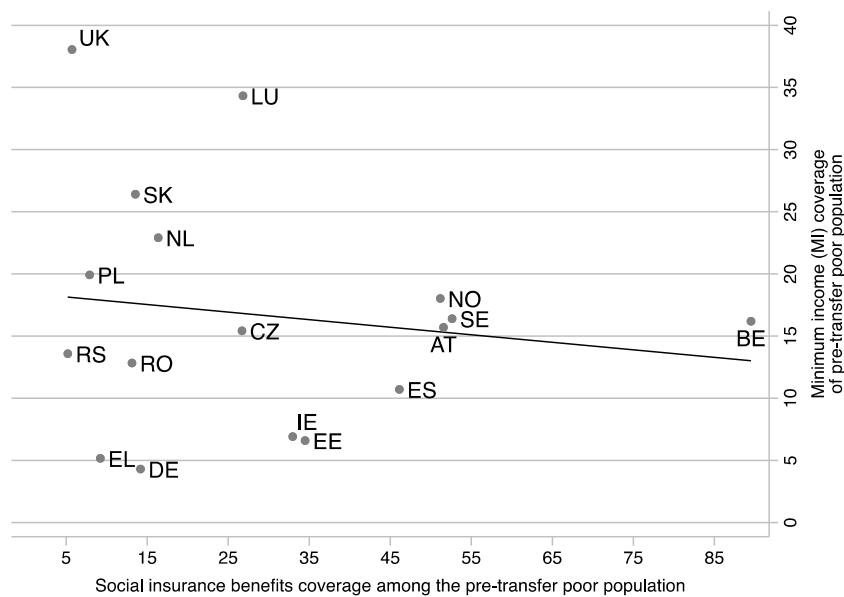
Note: The countries are ordered by the share of pre-transfer poor receiving only minimum income benefits ("MIS").

Source: own calculations based on LIS data (2016-2019).

transfer poor population with income replacement benefits. Contrarily to what could be expected, the coverage rate of last resort income support and the share of uncovered poor are not inversely correlated. In fact, in most countries, the (large) majority of the covered pre-transfer poor is catered for either by social insurance-

based benefits (dashed bars) or by other forms of social assistance. To complement this picture, Figure 2 shows only partial evidence for the expectation that social insurance (SI) and MI act as "communicating vessels" (Pfeifer, 2013), so that MIS only take a relevant role in those welfare states where first-tier benefits are less generous.

Figure 2. Correlation among the coverage rates of Social Insurance - x-axis - and of Minimum Income - y-axis - among the pre-transfer poor in working-age



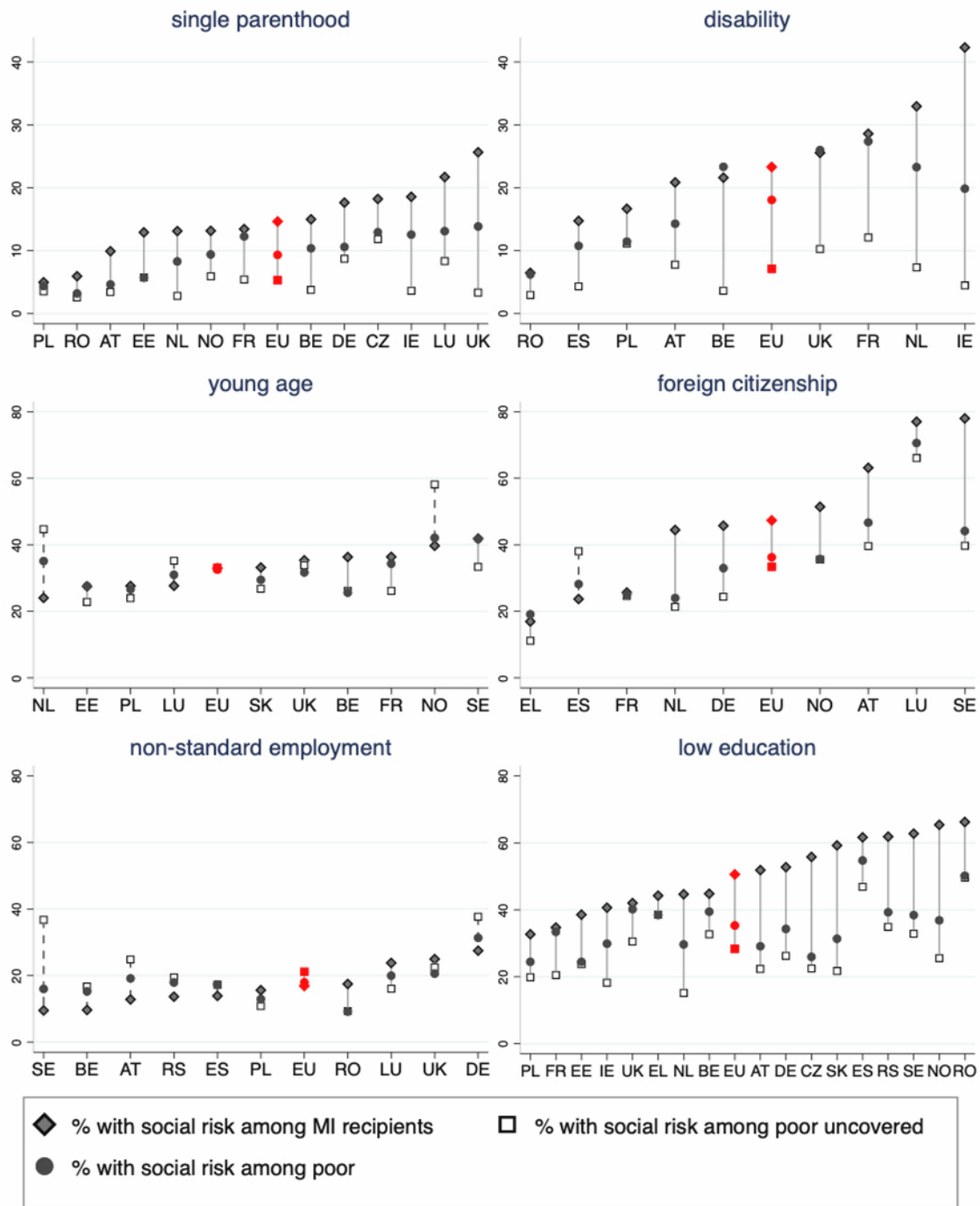
Source: own calculations based on LIS data (2016-2019).

b. The coverage of MIS in light of the “new social risks”: a safety net or sieve?

Next, we adopt a social risk lens to gain a deeper understanding of the profiles of those (un)covered by MI. Figure 3 shows the extent to which new risk groups are represented among those taking up MI and among the uncovered, relative to their presence in the pre-transfer poor population². Overall, MI receipt among young people, non-standard workers, and – to a lower extent – single parents are in line

with their shares among the pre-transfer poor population. Interestingly, those with low education are overrepresented among the MI population, as are – for some countries – those with foreign citizenship. On the other side, those with new social risks are often underrepresented among the uncovered, again relatively to their shares in the pre-transfer poor population. The cases of the young individuals and those in non-standard work represent the main exceptions. We find that that the young are overrepresented among

Figure 3. Share of working-age individuals experiencing a social risk among different segments of the pre-transfer poor working age population



Note. The European: average (“EU”, but including extra-EU countries) is calculated for the countries included in each graph. Disability: persons with self-assessed severe activity limitation; Young age: working-age persons < 30 years; Foreign citizenship: citizenship differs from country of residence; Single parenthood: living without a partner and with one or more children below age 25; Non-standard employment: part-time; self-employed; working as pupil, student, further training, unpaid work experience, or those with temporary contracts. Low-education: no higher secondary education.

Source: own calculations based on LIS data (2016-2019).

the uncovered in Norway, the Netherlands, and Luxembourg. We also see large country differences in coverage for those in non-standard employment, although it is hard to draw firm conclusions from this.

Figure 3 also reveals interesting deviations from the general pattern for those with foreign citizenship. In most countries, those with foreign citizenship represent larger shares of the social assistance population as compared to the uncovered (Spain is the only exception). Yet the extent to which this is true varies greatly. Sweden stands out as a country with a very high share of social assistance recipients having a foreign citizenship, far higher than their share among the poor population, and especially than the uncovered. A similar pattern, though far less explicitly so, appears in the Netherlands, Germany, and Austria.

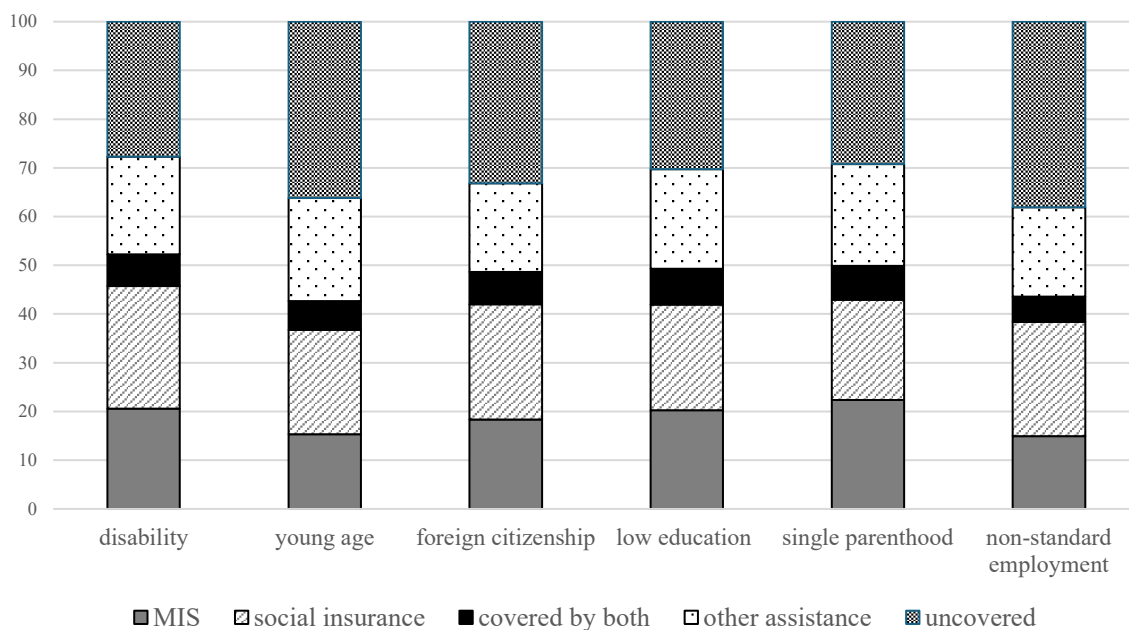
Finally, those with a disability, who we included as a “typical old social risk” reference group, only represent a very small share of the uncovered, but constitute far larger shares of those covered by MI.

In Figure 4 we show to what extent social risks are covered by different types of provisions (MI, SI, combinations or other) or if, instead, they are left uncovered. For illustration purpose, we show the average results at European level, including all the countries with valid results for the relevant variables (see the cross-country results in [online Annex](#)). In line with the above observations, the disabled poor are generally more covered, and more frequently by social insurance. Risks that one could think of as new social risks, are in general less often covered, and if they are, this is more often through MIS. This seems to be especially the case for the population groups low-education and single-parenthood. Interestingly, and again in line with the observations above, coverage rates for non-standard employment and young age are lower than those for single parents, low education and foreign citizenship.

4 Conclusions

This research uses LIS data to shed new light on the reciprocity of last resort minimum income support (MIS) among the working-aged people in Europe who are at risk of poverty. First, we show that the share of pre-transfer poor individuals effectively covered by means-tested income support varies a lot, being well below 20 per cent in about half of the European countries. Then, large shares of the needy are uncovered by either scheme. The share of pre-transfer poor individuals who are left uncovered by both social insurance and minimum income benefits ranges from less than 20 per cent in Belgium to over 70 per cent in Romania. In many countries less than 50 per cent of the pre-transfer poor population is uncovered by any of the income replacement benefits included in this study. Finally, we do find that those confronted with new social risks form a large part of the MI beneficiary population. Still, and importantly, they are also overrepresented among the uncovered, specifically in the case of young people and those in non-standard employment. Yet patterns are not very consistent, pointing to manifold national idiosyncrasies in coverage mechanisms. Therefore, a more detailed focus on each national case is needed to understand the factors explaining the differences here spotted. Furthermore, the reasons behind the gaps in the coverage of MIS for people experiencing new social risks should be explored. In that sense, the national institutional features – e.g. the setting of national welfare states and the design of MIS – and of contextual dynamics are of crucial importance to understand the outputs and outcomes of MIS. Methodologically, this will require both the use of microsimulation techniques and further investigation of the reciprocity of social benefits.

Figure 4. Coverage among the pre-transfer poor confronted with a social risk by different types of social benefits, average among 19 European countries



Note. The average is calculated including all the countries with valid results for each social group (see figure A.4 in [Annex](#)). The average is calculated among 18 countries for foreign citizenship (RO missing) and non-standard employment (NO missing). See the note for Figure 3 for the definition and operationalization of the social risks.

Source: own calculations based on LIS data (2016-2019).

* This article is an outcome of a research visit carried out in the context of the (LIS)2ER initiative which received funding from the Luxembourg Ministry of Higher Education and Research.

¹ For each country, we use the last version of the data released before the Covid-19 pandemic (2020). The versions of the data range from 2016 to 2019.

² Figure 3 shows also the average (“EU”) for those countries for which we find significant differences in the presence of persons confronted with specific social risks among the (pre-transfer poor) MI and uncovered population ($p < 0.05$; t-test).

References

- Almeida V, Poli S, and Hernández A (2022). *The effectiveness of Minimum Income schemes in the EU*.
- Bahle T, Hubl V, and Pfeifer M (2011). *The last safety net. A handbook of minimum income protection in Europe*, Bristol Policy Press.
- Bonoli G (2007). Time Matters: Postindustrialization, New Social Risks, and Welfare State Adaptation in Advanced Industrial Democracies. *Comparative Political Studies*, 40(5), 495–520.
- Clegg D (2013). Dynamics and varieties of active inclusion: A five-country comparison. *Deliverable D5*, 6.
- Figari F, Matsaganis M, and Sutherland H (2013). Are European social safety nets tight enough? Coverage and adequacy of Minimum Income schemes in 14 EU countries: Are European social safety nets tight enough? *International Journal of Social Welfare*, 22(1), 3–14.
- Frazer H and Marlier E (2016). *Minimum income schemes in Europe: A study of national policies 2015*. Publications Office.
- Immervoll H, Hye R, Fernandez R, and Lee J (2022). How Reliable are Social Safety Nets? Value and Accessibility in Situations of Acute Economic Need. *SSRN Electronic Journal*.
- Immervoll H, Jenkins SP, and Königs S (2015). Are Recipients of Social Assistance ‘Benefit Dependent’? Concepts, Measurement and Results for Selected Countries. *SSRN Electronic Journal*.
- Kauppinen TM, Angelin A, Lorentzen T, Bäckman O, Salonen T, Moio P, and Dahl E (2014). Social background and life-course risks as determinants of social assistance receipt among young adults in Sweden, Norway and Finland. *Journal of European Social Policy*, 24(3), 273–288.
- Marchal S, Kuypers S, Marx I, and Verbist G (2021). But what about that nice house you own? The impact of asset tests in minimum income schemes in Europe: An empirical exploration. *Journal of European Social Policy*, 31(1), 44–61.
- Natili M (2020). Worlds of last-resort safety nets? A proposed typology of minimum income schemes in Europe. *Journal of International and Comparative Social Policy*, 36(1), 57–75.
- Otto A (2018). A Benefit Reciprocity Approach to Analysing Differences and Similarities in European Welfare Provision. *Social Indicators Research*, 137(2), 765–788.
- Pfeifer M (2013). Comparing unemployment protection and social assistance in 14 European countries. Four worlds of protection for people of working age. *International Journal of Social Welfare*, 21(1), 13–25.
- Taylor-Gooby P (2004). New risks and social change. New Risks, New Welfare: The Transformation of the European Welfare State, 1–28.
- Tervola J, Mesiäislehto M, and Ollonqvist J (2021). Smaller net or just fewer to catch? Disentangling the causes for the varying sizes of minimum income schemes. *International Journal of Social Welfare*.
- Van Mechelen N, Zamora D, and Cantillon B (2016). De groei en diversificatie van de bijstandspopulatie. In *40 jaar OCMW en bijstand.-Leuven, 2016* (pp. 13–32).
- Van Oorschot W (2013). Comparative Welfare State Analysis with Survey-Based Benefit: Reciprocity Data: The ‘Dependent Variable Problem’ Revisited. *European Journal of Social Security*, 15(3), 224–248.
- van Vliet O, and Wang J (2019). The political economy of social assistance and minimum income benefits: A comparative analysis across 26 OECD countries. *Comparative European Politics*, 17(1), 49–71.

Data News / Data Release Schedule



Updates and enhancements to the LIS and LWS databases underway

LIS has temporarily paused the addition of new data during this quarter in preparation of an upcoming update to its *LIS* and *LWS databases*. We are pleased to announce that we have been working on several updates and additions to the *LIS* and *LWS databases*, aimed at improving data quality and consistency. We appreciate the feedback received from the LIS user community, which contributed to enhancing the variable list to support *state-of-the-art* research projects. The following sections are concerned.

- **Household composition and living arrangements:** Several new variables will be added, including i) an additional household type variable, ii) several variables on single parenthood, dependent children, mother/father/partner pointers which will enrich the *LIS* and *LWS databases*. These new variables will be accompanied with the restructuring of the living arrangements variables, where variables *relation* and *marital* will be slightly updated in the whole databases for ensuring better consistency across datasets.
- **Geography:** New variables on standardized regions will be introduced to more effectively select datasets complying to the *Nomenclature of Territorial Units for Statistics (NUTS)*; the new variables will refer to the latest version of *NUTS1/NUTS2/NUTS3*, whenever applicable.
- **Labour market variables:** Two new variables *wage1* (monthly wage, main job) and *hwage1* (hourly wage, main job) will replace the variables *gross1/net1* in the *LIS* and *LWS databases*. This will allow users to more smoothly run analyses on the current job characteristics. A new variable, *occc1*, will exclusively refer to the ISCO-08 standard, whereas the existing variable, *occb1*, will refer solely to the ISCO-88 standard.
- **Balance Sheet (LWS Database):** Several new variables will be added to the balance sheet that will allow users of the *LWS* data to i) distinguish *transaction accounts and cash* from *saving accounts*, ii) distinguish *publicly traded stocks* from *unlisted shares and other equity*, and iii) analyse separately *money owed to household*.

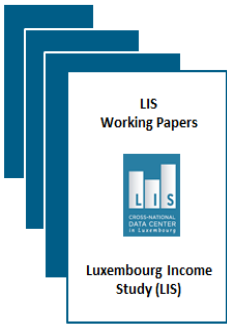
The work for this update is currently ongoing and we plan to update the *LIS* and *LWS databases* and the relevant documentation including METIS within the next months, so that users can work with the updated data and documentation as soon as possible.

Stay tuned for our exciting database update in the last quarter of 2024!

LIS/LWS Data Release Schedule

	Winter 2024	Spring 2025
LIS Database		
Australia		AU20
Brazil	BR76-BR99	
Canada	CA20	
Georgia	GE22	
Greece	GR03-GR21	
Lithuania	LT21	
Norway		NO22
Russia	RU22	
Spain	ES20, ES21	
United States		US23
LWS Database		
Chile	CL21	
France	FR03, FR09, FR14, FR17, FR20	
Mexico	MX19	
Norway		NO22
ERFLIS Database		
Egypt	EG19	

Working Papers & Publications



Focus on [The Luxembourg Consumption Study \(LCS\): Feasibility and First Steps](#) [🔗] LIS Technical WP No. 14 by Giulia Mancini (University of Sassari) and Giovanni Vecchi (Tor Vergata University of Rome)

In 2022, the Luxembourg Income Study (LIS) started to explore the feasibility of creating a Luxembourg Consumption Study (LCS) database. The aim of such exploration was to assess the feasibility of extending comparative distributional analysis by using a consumption-based well-being measure throughout high to middle and low-income countries. Such a measure would extend the potential joint distributional study of income, consumption and wealth immensely. For this feasibility study, Mancini and Vecchi (2023) authored this paper to identify current “best practices” in constructing a consumption-based well-being indicator. The initial phase of the LCS feasibility study focused on assessing the feasibility of compiling a repository of household-level harmonized consumption data that allows for comparisons across low, middle, and high-income countries.

Mancini and Vecchi suggest that the methodologies used to estimate consumption *do not need to be* identical, as long as they achieve the same goal, conceptually. Therefore, the framework adopted the concept of *operational comparability*, which means here that LIS is not standardizing the approach to estimate the ‘flow of services from owner occupied housing’, simply documenting its cross-national differences.

The feasibility study by Mancini and Vecchi was sequentially trifold, starting with outlining a conceptual framework for the construction of the household level consumption aggregate. Second, establishing an initial repository of countries/surveys. This step aimed at answering two main questions: The first one concerns data availability, asking whether the available survey provides the necessary information to construct a harmonized consumption-based well-being measure; and second concerning data quality, whether the available data are reliable and accurate enough to meet a comparable standard. The study argued, if both questions are answered in the affirmative for enough surveys, then the construction of an LCS database could begin.

The third section of the report assesses the impact of variations in the definition of the consumption aggregate—specifically, differences in the estimation of consumption flows for owner-occupied dwellings and durable goods—on key poverty estimates, with a particular focus on poverty profiles. A sensitivity exercise was carried out using recent household surveys from four countries: Bhutan, Italy, Malawi, and Peru. For each survey, three alternative consumption aggregates were constructed: food and non-food non-durable expenditure components were computed in the same way for each version, while the housing and durables components were obtained using different methods. In each case, the estimates indicated an overall robustness of poverty profiles to variations in the definition of the consumption aggregate.

LIS working papers series

LIS working papers series - No. 887 [🔗]

[The Myth of the Middle Class Squeeze: Employment and Income by Class in Six Western Countries, 1980-2020](#)

by Jad Moawad, Daniel Oesch

Published in *Comparative Political Studies*,

<https://doi.org/10.1177/00104140241271166>

LWS working papers series

LWS working papers series - No. 46 [🔗]

[The Equally Distributed Equivalent Income as the Upper Limit of Poverty Lines](#)

by Stanislaw Maciej Kot, Piotr Paradowski

Technical working papers series

Technical working papers series - No. 14 [🔗]

[The Luxembourg Consumption Study \(LCS\): Feasibility and First Steps](#)
by Giovanni Vecchi, Giulia Mancini

News, Events and Updates

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

Only a few days remain to submit your papers / extended abstracts for the 2nd III/LIS Conference on Comparative Economic Inequality, taking place on **February 27-28, 2025**, at the University of Luxembourg. This event will feature keynote speakers **Nora Lustig**, Tulane University, and **Fabian Pfeffer**, LMU Munich.

We welcome submissions from scholars at all career stages who are exploring the vast field of comparative economic inequality. We're particularly interested in papers that tackle innovative approaches to measuring inequality in areas such as income, wealth, or debt, across different genders, racialized groups, classes, or regions. Submissions that leverage LIS/LWS or similar datasets to examine cross-country differences are especially encouraged, though we also value comparative studies within countries across various socio-demographic or socio-economic groups. Both theoretical and empirical works are welcome.

The deadline for submissions (working papers or extended abstracts) is **September 15, 2024**. Notifications of acceptance will be sent out after **October 15, 2024**.

Please send the abstract or any questions surrounding the conference to iiii.lis@lisdatacenter.org.

More information about the conference is available [here](#).

Special Event: 'Visions of Inequality: From the French Revolution to the End of the Cold War'

As part of the 2nd III/LIS Comparative Economic Inequality Conference, LIS is pleased to invite you to the book presentation of *Visions of Inequality: From the French Revolution to the End of the Cold War*, the highly praised recent new work by **Professor Branko Milanovic** of the Stone Center on Socio-Economic Inequality at the Graduate Center of the City University of New York. Professor Milanovic will present highlights from his most recent book.

This event will be moderated by Professor Francisco Ferreira from the International Inequalities Institute at the London School of Economics and Professor Janet Gornick of the Stone Center. Together, they will lead an engaging and insightful discussion on the historical dynamics of inequality.

Stay tuned for more information on how to participate in this unique opportunity to engage with leading experts as they delve into the themes and insights of Professor Milanovic's ground-breaking new book.

(LIS)²ER Initiative Welcomes Kun Lee as the New Research Associate



The (LIS)²ER initiative is pleased to announce that starting from this September, Kun Lee has been appointed as the initiative's **Research Associate**. Kun will be mainly working on pension wealth inequality and old-age poverty across advanced democracies. Prior to joining the initiative, Kun completed his

PhD and master's in social policy at the University of Oxford and BA in social welfare and economics at Seoul National University.

Upcoming 5th (LIS)²ER Workshop: "Policies to Fight Inequality" – December 11-13

LIS Cross-national Data Center and LISER are pleased to announce the fifth international scientific workshop under the (LIS)²ER initiative. This year's theme is *"Fighting Poverty: Measurement and Policy Challenges."*

The workshop will focus on research related to poverty measurement and the development of policies to combat poverty across both advanced and low- to middle-income countries. It will take place from the afternoon of Wednesday, December 11, to mid-afternoon on Friday, December 13, at the Belval Campus in Luxembourg.

The program will feature 12–15 invited academic presentations, starting with a presentation on the World Bank's upcoming *Poverty Report* by Christoph Lakner on Wednesday evening. The event will conclude with a policy roundtable on Friday afternoon, featuring speakers from a range of organizations including the World Bank, OECD, and LISER.

Those interested in participating in the workshop and presenting their related work are invited to contact lis2er@lisdatacenter.org.

Organizing Committee: Alessio Fusco (Senior Research Scientist, LISER), Kun Lee ((LIS)²ER Research Associate), Philippe Van Kerm (University of Luxembourg and LIS), Teresa Munzi (LIS), Eugenio Peluso (LISER).

2024 International Francophone Colloque on Sample Surveys

STATEC, the **University of Luxembourg** and the **Luxembourg Statistical Society** are hosting the 13th *International Francophone Colloque on Sample Surveys from Wednesday 6 to Friday 8 November 2024* on the campus of the University of Luxembourg in Esch-Belval. **Tuesday November 5th 2024** will be dedicated to the training workshops proposed to the participants. One of the training workshops will be focused on the usage of the LIS Databases; the training workshop named "Research methods on poverty and inequality: classic approaches and innovations through the use of comparative data from the Luxembourg Income Study (LIS)" will be given by Professors Louis Chauvel and Philippe Van Kerm (University of Luxembourg), with the participation of the LIS staff.

The training will consist of three main parts 1) introduction to LIS/LWS data, income and wealth concepts and definitions, 2) Theoretical session on measuring inequalities and poverty, 3) Practical session (data exercises – with replication of existing research papers).

More information about the event, can be found [here](#).

LIS Co-organised a Session at IARIW 38th Conference

LIS has recently co-organised a theme as part of the **38th General Conference for the International Association for Research in Income and Wealth (IARIW)** at Kings College, London, August 26-30, 2024. The theme "Furthering Improving Household Distributional Results" was split over four sessions throughout the conference.

Synopsis of the LIS Summer Workshop 2024

Last July marked the 32nd edition of the LIS Introductory Workshop since its inception in 1988. Held from July 1-5 at the University of Luxembourg, Belval Campus, the workshop attracted scholars eager to utilise the LIS and LWS databases.

As with recent editions, this year's event was a collaborative effort with the University of Luxembourg and the Luxembourg Institute of Socio-Economic Research (LISER). Professors Louis Chauvel and Philippe Van Kerm from the University of Luxembourg guided participants through methods for analysing inequality using LIS and LWS data, while Professor Eugenio Peluso (LISER) delivered lectures on inequality and risk assessment from a multidimensional perspective.

The workshop brought together 25 participants from 13 countries—Belgium, Brazil, China, Colombia, the Dominican Republic, Germany, Italy, Luxembourg, Poland, South Korea, Romania, Spain, and the United States. These attendees represented a diverse array of research interests and academic backgrounds, including Economics, Sociology, Statistics, Social Science, Political Science, and Social Work.



Over the five-day workshop, participants engaged in a mix of lectures and hands-on lab sessions. In addition to the traditional Stata-based labs, LIS introduced sessions using the R programming language. During these labs, participants became familiar with the LISSY system interface and its coding best practices, gradually advancing to more sophisticated techniques for working with the LIS/LWS databases.

LIS Summer Lecture 2024



On the 1st of July, Ravi Kanbur, T. H. Lee Professor of World Affairs, International Professor of Applied Economics and Management, and Professor of Economics at Cornell University, presented the LIS Summer Lecture: **Predistribution vs Redistribution**.

In this lecture, it was discussed that over the last 25 years, there has been a notable shift in the focus of analytical and policy discussions. Instead of emphasizing the redistribution of market incomes through tax-transfer systems, the emphasis has moved toward "predistribution"—improving pre-market productivity through education and human capital development. This shift is driven by three main arguments: the technical and economic challenges of redistribution, the perceived moral superiority of equalizing opportunities over outcomes, and the greater political acceptability of predistribution. However, these arguments may not be as strong as they seem, and the move away from redistribution needs careful reconsideration, particularly in light of growing inequalities.

(LIS)²ER Visitors Programme 2024

The period June to July witnessed the visit of 5 more researchers within the scope of the (LIS)²ER visitors program.

Davide Gritti (University of Trento) spent around three weeks working on *"Migrant wealth gaps across countries: the role of citizenship and housing institutions"*. Vladimír Hlsany (United Nations Economic and Social Commission for Western Asia "ESCWA") was hosted for two weeks to work on *"Modeling of the distribution of net personal wealth using a tractable distribution function"*. Sylwia Radomska from the Institute of Economics, Polish Academy of Sciences has been working on *"wealth, income and education of single-parents households in the light of different education policies"* during her three-weeks stay at LIS. The last two short-term visitors were Deepak Malgan, and Supriya Lakhtakia (IIM Bangalore), both were working on a joint project on *"Assortative Mating and Interhousehold Gender Inequality: A Global Portrait"*.

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

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

Internships at LIS

Over the past few months, LIS has hosted two interns, Amir Talebi and Tommaso Reali. Amir completed his internship as part of the Master in Data Science program at the Faculty of Science, Technology, and Medicine, University of Luxembourg. During his six-month internship, Amir developed advanced skills in creating R Shiny dashboard applications and managing databases. He also wrote his master thesis based on the work he conducted at LIS during his internship. Tommaso, from Erasmus University Rotterdam, spent the month of July at LIS. During his internship, he was introduced to the LIS/LWS databases, attended the LIS Summer Workshop, studied and applied the basics of Stata software, and worked on various tasks, including screening various documentation files from the datasets in LIS to explore the feasibility of adding new variables to the LIS databases.

LIS Team Participation in Conferences/Workshops

On July 4th, Piotr Paradowski gave a presentation on "Luxembourg Wealth Data: an international database of wealth microdata" during an in-depth training workshop that was co-organised by the World Bank, in collaboration with LIS and the Bank of Italy. This training targeted experts and researchers from National Statistical Offices or ministries involved in statistics production in low- and middle-income countries. The goal is to equip them with the skills to collect and analyse wealth data effectively.

On August 29-30, Teresa Munzi and Jörg Neugschwender attended the IARIW 38th conference and co-presented a LIS co-authored paper with BLS colleagues on **Building a Comparable Measure of Consumption: Concepts and Measurement Challenges Faced by Emerging and Advanced Economies**.

The Stone Center – New Call for Two Postdocs – deadline October 30, 2024

The Stone Center at the CUNY Graduate Center has posted **the call for its seventh cohort of postdoctoral scholars**. This year's call invites applications for two different positions; qualified applicants may apply to both.

The first position is open to candidates who conduct research on wealth inequality. Priority will be given to candidates who conduct research in the following areas: distribution of wealth, wealth inequality, and/or wealth concentration; intergroup wealth disparities; determinants and consequences of wealth concentration; estate, inheritance, gift, and wealth taxation, and/or other policies that shape wealth accumulation and wealth transfers.

For the second position, priority will be given to candidates who carry out quantitative, empirical research on one or more of the following: disparities in labor market outcomes; inequalities and insufficiencies related to household income or wealth; economic disparities within or between groups; policy, institutional, and other determinants of multiple forms of economic inequality/insufficiency.

The two postdocs will be in residence at the CUNY Graduate Center in New York City, from September 2025 through August 2027. The application deadline is October 30, 2024.