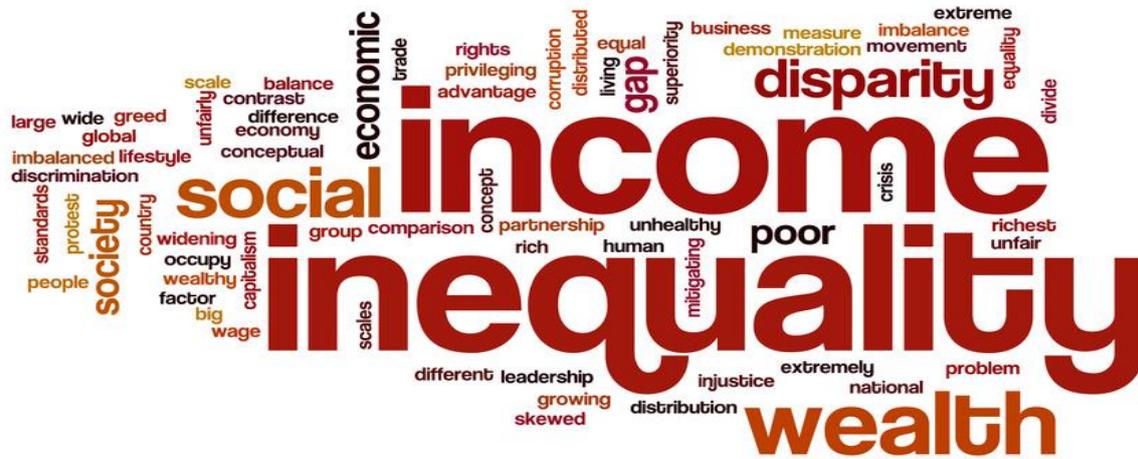


# Inequality Matters

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



## MESSAGE FROM THE EDITOR

Dear readers,

We are currently seeking applications to fill three positions: **one** at LIS and **two** at the National Institute for Statistics and Economic Studies of Luxembourg (STATEC). Please consider applying, when you share the strong passion of data management and cross-national harmonisation with us!

Great news for our LIS Database users – Chinese data CN18 are now available in LISSY! Like the two previous data points from China, the dataset is based on the latest wave of the **Chinese Household Income Project** (CHIP) carried out by the National Bureau of Statistics (NBS) and the China Institute for Income Distribution (CIID). This addition enables analysing socio-economic and demographic changes within the Chinese society and across countries in the more recent period.

Other data addition concerned Austria, Norway, Peru, and the United Kingdom for LIS and Canada, Chile and Norway for LWS.

The *Inequality Matters* section includes this time the following: LIS Aldi Award 2021 winner Xabier García Fuente (Universitat de Barcelona) sheds light on how different welfare states reduce inequality through taxes and transfers. Using all LIS datasets, García Fuente provides several insights into cross-national differences in the world regions, while also supplying various indicators to measure how pro-poor or pro-rich social benefits are.

In Japan, South Korea and Taiwan, child poverty rates are relatively low, despite weak social protection for families with children. This joint work by several authors first focuses on the welfare regime approach in East Asia. However, then the authors present that there are other common characteristics contributing to their relative poverty success.

Peru is one of the Latin American countries that experienced substantial income growth and strongly decreasing intergenerational inequalities since the early 2000s. Analysing the Peruvian data from 2004 to 2019, Gintare Mazeikaite shows how income growth has been especially beneficial for some groups of the society, but how it left other groups behind, the elderly in particular

Enjoy reading!

Jörg Neuschwender

## IN THIS ISSUE

<b>The Paradox of Redistribution in Time</b>	1
by Xabier García Fuente	
<b>Explaining the Child Poverty Outcomes of Japan, South Korea and Taiwan</b>	4
by Bruce Bradbury, Aya Abe, Markus Jäntti, Inhoe Ku, Julia Shu-Huah Wang	
<b>Income Growth in Peru: who is on Board and who is Left Behind?</b>	8
by Gintare Mazeikaite	
<b>Data News / Data Release Schedule</b>	11
<b>Working Papers &amp; Publications</b>	13
<b>News, Events and Updates</b>	14

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### The Paradox of Redistribution in Time

Xabier García Fuente , (Universitat de Barcelona, Barcelona)

#### Introduction

Welfare states reduce inequality through taxes and transfers, but countries differ greatly in how they carry out this function, both in their policies and outcomes. An OECD survey shows that the reduction in inequality ranges from 40% in Ireland to 5% in Chile (Causa and Hermansen, 2017). How can we explain this variance? Social policies shape their own support constituencies and complementary institutions, so, once in place, they tend to be very time persistent. Thus, comparative works need to observe how welfare state institutions shape distributive politics to explain differences in redistribution.

Korpi and Palme (1998) made the first empirical analysis of the redistribution achieved by different policies and suggested the existence of a *paradox of redistribution*. Targeting transfers to the poor may be more redistributive per euro spent, but it generates a zero-sum conflict between the poor and the middle classes, blocking coalitions in favor of welfare state expansion. In contrast, universal programs align the preferences of the poor and the middle classes and receive broader support, leading to higher spending and redistribution. In other words, the *paradox* states that there is a trade-off between the progressivity (the extent to which transfers focus on the poor) and the size of social spending: redistribution increases as transfers become bigger and *less* pro-poor.

However, more recent works argue that there is no trade-off between the size and the progressivity of social transfers: redistribution increases as transfers become *more* pro-poor. According to Kenworthy (2011) and Marx *et al.* (2016), the most redistributive welfare states are those that practice “targeting within universalism”: after securing universal coverage, they are making greater use of programs directed

at the poor. Similarly, Brady and Bostic (2015) and Garay (2017) underline that in elitist welfare systems increasing redistribution requires reaching down the income ladder to include the poor.

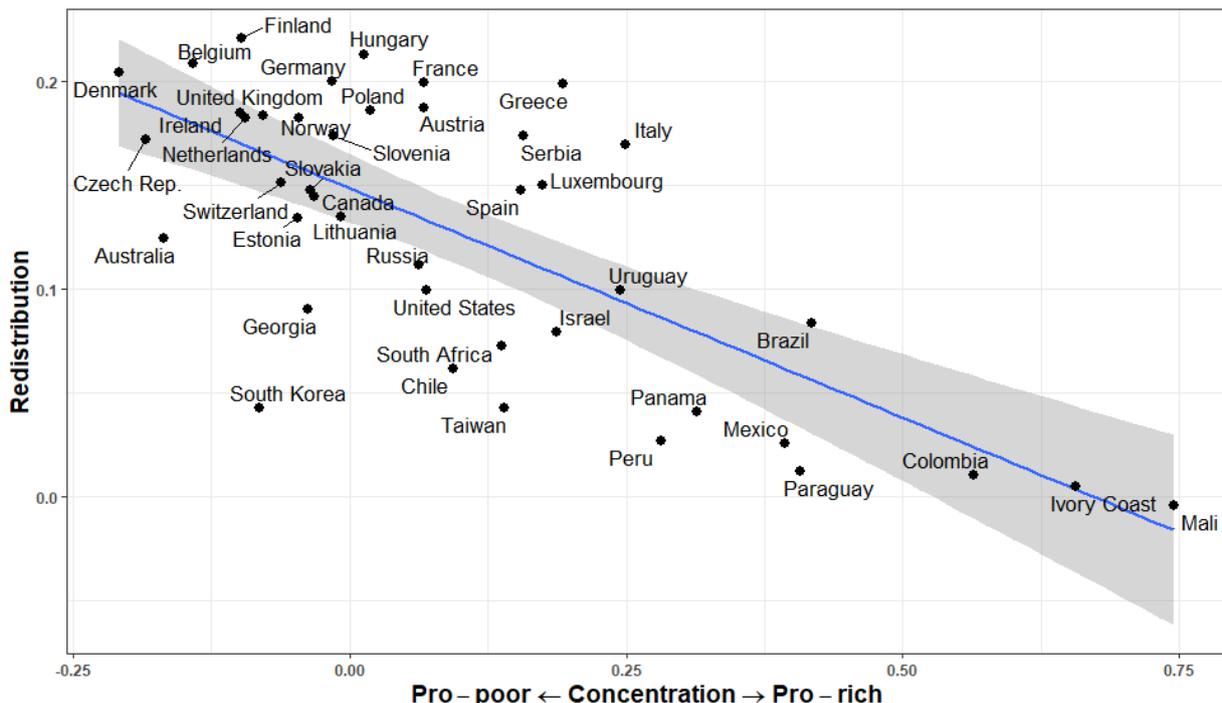
Figure 1 sets redistribution against the concentration of social benefits (a measure of how pro-poor or pro-rich they are) using data from the tenth LIS Wave (2015-2017). As can be seen, more pro-poor transfer systems are more redistributive, which would side with critics of the *paradox*. However, cross-country snapshots alone cannot capture the arguments made by the literature on targeting vs. universalism.

#### The model

The *paradox of redistribution* and its critics propose arguments about political dynamics at the country level, so we need a longitudinal perspective to capture the effect of institutional persistence and policy feedback and to observe how redistribution increases over time. Does redistribution increase as countries make their social benefits more pro-rich or more pro-poor?

This research note further elaborates on the data presented in García-Fuente (2021), where I argue that the relationship between redistribution and progressivity (how benefits are distributed) depends on the policy position a country is departing from, i.e., what its initial progressivity level is. This ties in with studies that show that progressivity mediates the relationship between income and preferences for redistribution (see e.g., Beramendi and Rehm, 2016; Holland, 2018). Progressivity determines what groups emerge as net fiscal winners or losers when social spending increases—who benefits and who pays—, which crucially affects the viability and direction of policy change.

Figure 1. Concentration of social transfers and redistribution, LIS Wave X (2015-2017)



Source: LIS Wave X, own elaboration.  
 Note: Concentration coefficient of net social transfers over disposable income.  
 Redistribution = Gini net factor income - Gini disposable income

In countries with pro-poor transfer systems, increasing social spending involves extending coverage *up* the income ladder to include richer constituencies. This reduces the number of net fiscal losers (people who pay more taxes than what they receive in benefits), easing the political constraints to increase spending and redistribution. The expansion of advanced welfare states fits this trajectory: departing from relatively pro-poor policies, many countries added earning-related supplements to keep the better-off in public insurance mechanisms (see e.g. Baldwin, 1990). However, as benefits become more pro-rich—or if the upper classes rely on private insurance—the margin to leverage this progressivity-size trade-off narrows.

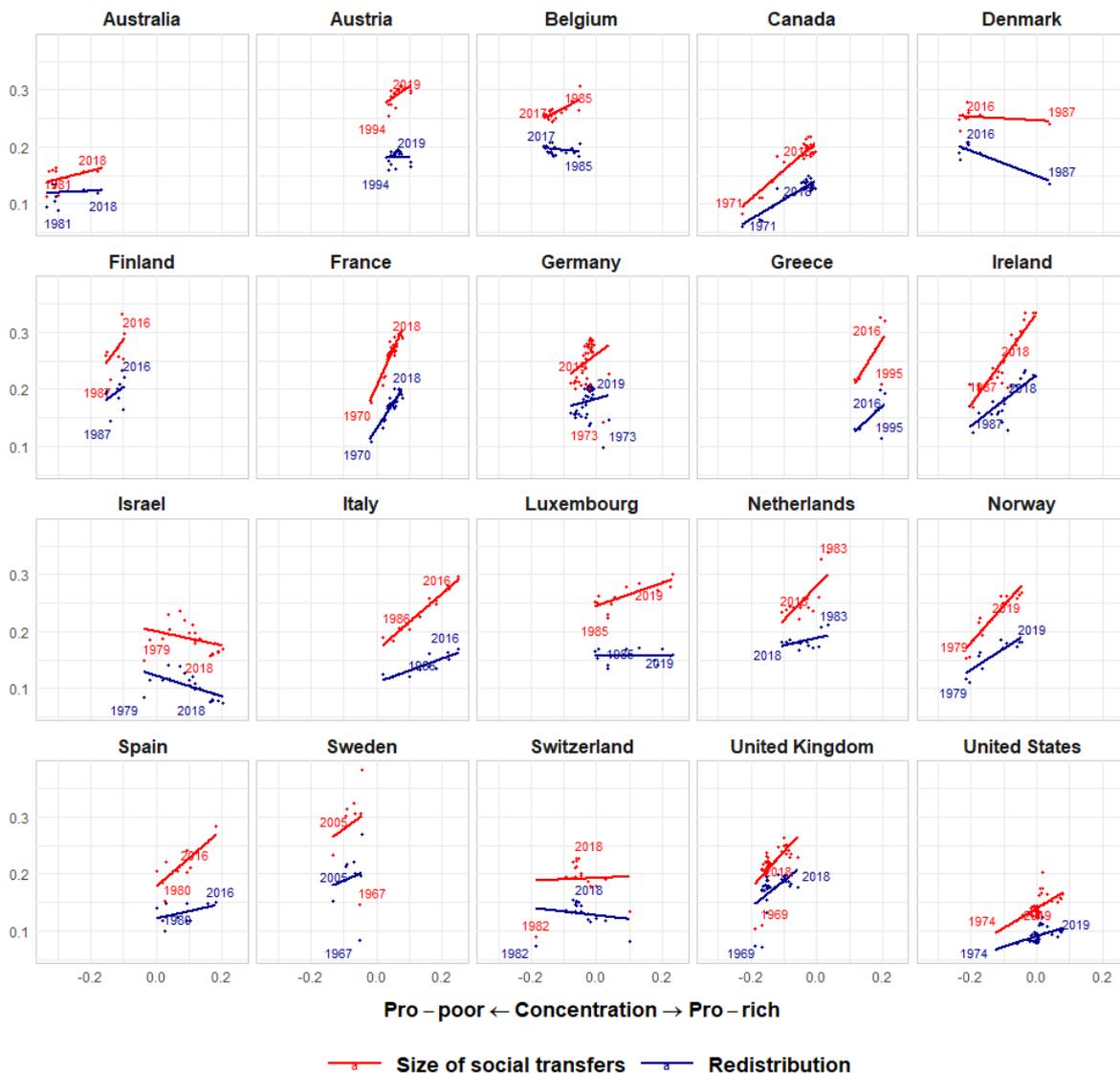
In countries with pro-rich transfer systems, increasing social spending involves extending coverage *down* the income ladder to include the poor. Launching programs for the poor requires raising taxes or cutting the benefits of privileged insiders, which turns distributive politics into a zero-sum game: there is a clearly delineated gap between fiscal losers and winners, and increasing redistribution is politically costly. Latin American countries are representative of these dynamics, as rural and informal workers pay few taxes and benefits are captured by middle-class insiders.

**Data and indicators**

To conduct my analysis, I have extracted data for all LIS datasets available in July of 2022, totaling 646 surveys from 53 countries. To make all surveys comparable, I “net-down” social transfers in gross datasets following Nieuwenhuis *et al.* (2017). I measure redistribution as the change in the Gini coefficient from the distribution of net factor income (after direct taxes and social contributions, before transfers) to the distribution of disposable income. This isolates the redistributive impact of transfers, treating them as if they were last in the fiscal sequence (it excludes the effect of taxes and in-kind benefits, such as health care). Finally, I include the redistributive effect of pensions in my analysis—I do not consider them market income as other works do.

In what follows, I use several indicators to measure how pro-poor or pro-rich social benefits are, like the concentration index or their distribution across income quintiles. More significantly, I take the distribution of *disposable income* (after direct taxes and transfers) as the reference point. Models of redistribution based on the median voter theorem link political behavior to market income (before taxes and transfers), but, unless uncertainty over fiscal policy is high,

**Figure 2. Concentration, size and redistribution of social transfers in 20 rich countries**



Source: LIS, own elaboration

political power and preferences are linked to disposable income. For instance, recipients of generous public pensions might be at the bottom of the market income distribution, but they are not poor in any politically meaningful sense. It is only in relation to disposable income that we can establish how pro-poor or pro-rich benefits are.

**Results**

Figure 2 shows the relationship between the concentration of social transfers, their size (in red) and the redistribution they achieve (in blue). In most of them, redistribution is either uncorrelated with concentration or correlated with more pro-rich transfers. The relationship between concentration and the size of social transfers is clearer: higher spending is tied to more pro-rich transfers in most countries. Thus, there is a trade-off between the size and the progressivity of social benefits, which matches the predictions of the *paradox*.

This pattern is especially strong in Ireland, Canada, the United Kingdom and Norway. Starting from markedly pro-poor positions, these countries have improved redistribution increasing spending and reducing their focus on the poor. For instance, redistribution through social transfers in the United Kingdom increased from 7 Gini points in 1974 to 18 Gini points in 2018, while the share of total transfers received by the poorest quintile decreased from 37% to 16%. However, this trade-off is not limited to the most progressive welfare states: Spain, Italy and Greece—which were not very pro-poor to begin with—have also increased redistribution by making their transfers bigger and more pro-rich. Overall, other than Denmark—the poster child of “targeting within universalism”—and Israel, there are no examples of countries in which redistribution is higher when benefits are more pro-poor.

On the opposite side of the policy spectrum, social transfers in Latin America are very pro-rich (their concentration indexes are significantly higher than in advanced welfare states) and achieve little

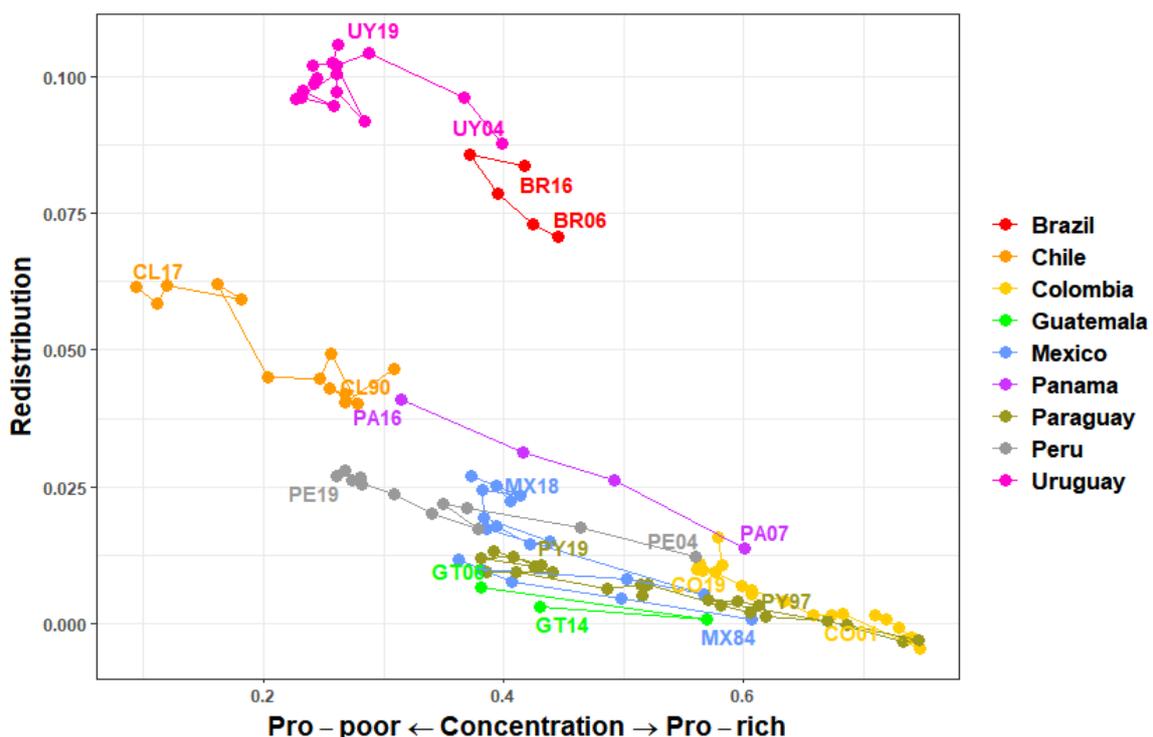
redistribution (see Figure 3). Their trajectories show that they are slowly becoming more pro-poor, but this has translated into small improvements in redistribution. In Mexico, for example, between 1984 and 2018 the share of total social transfers obtained by the poorest quintile went from 2% to 10%, while the share received by the richest quintile decreased from 66% to 52%. Yet, redistribution through social transfers remains very low (2.2 Gini points in 2018, from 0.1 Gini points in 1984).

The results above show that the relationship between the progressivity, size and redistributive impact of social transfers varies depending on the policy position a country is departing from, which is consistent with the model of distributive politics described above. In many advanced welfare states, higher spending and redistribution are correlated with transfers being more pro-rich, which matches the *paradox of redistribution*. In contrast, the *paradox* does not capture the relationship between progressivity and redistribution when social policies focus on the rich. Spending more is not sufficient in countries with pro-rich programs—they would also have to direct a growing share of their social transfers to the poor to increase redistribution.

Taking this into account, the achievements of advanced welfare states in the postwar era might not be replicable in Latin America and other middle-income countries. Figure 4 shows data on concentration and redistribution for all the observations in my sample. Latin American and other developing welfare states (in orange) start from a position that is significantly more biased towards the rich, which questions their capacity to match the redistributive levels of advanced welfare states.

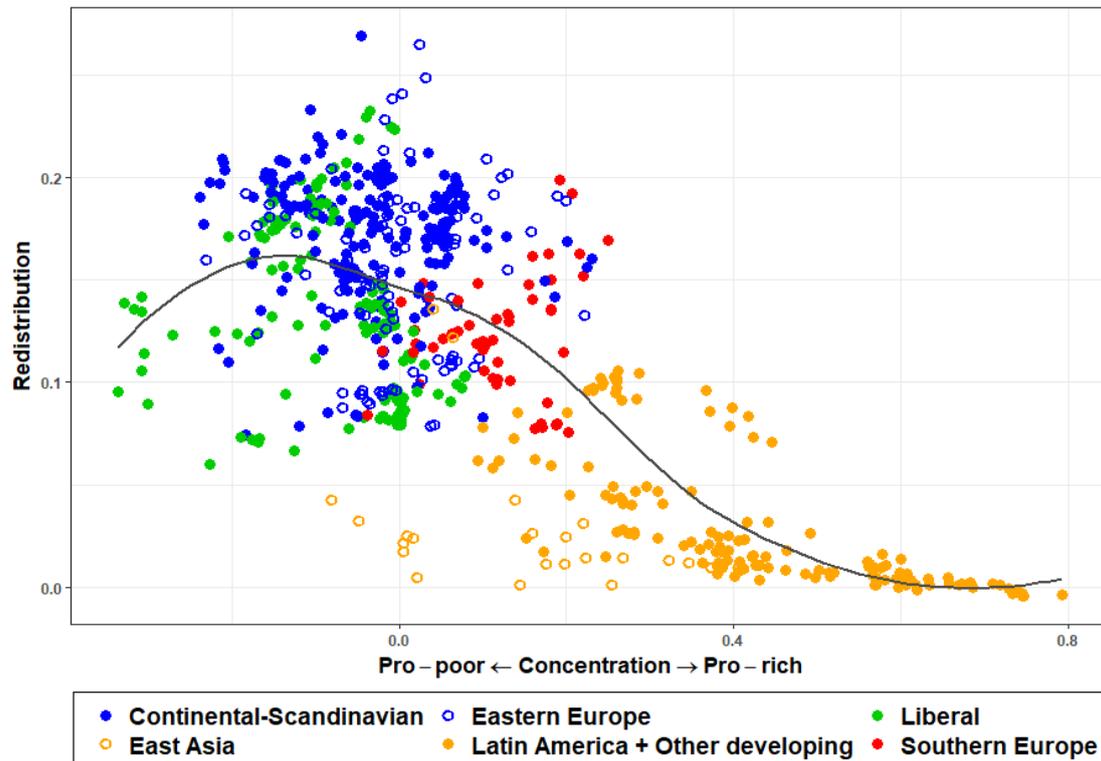
Existing welfare policies play a key role in this regard. Developing countries have expanded social assistance and other non-contributory provisions in the last decades, but it has been difficult to scale them up to achieve truly universal outcomes. The upper-middle classes block the expansion of programs that are fiscally costly and exit those

**Figure 3. Concentration of social transfers and redistribution in Latin America**



Source: LIS, own elaboration

Figure 4. Concentration of social transfers and redistribution by region (1967-2019)



Source: LIS, own elaboration

that are less generous or dilute their entitlements, whereas the poor are often not supportive of government intervention and prefer low taxes and informal employment instead (for a detailed review of these issues see Holland and Schneider, 2017; Franzoni and Sánchez-Ancochea, 2016).

### Concluding remarks

The main takeaway from this research note is that welfare state institutions condition the expansion of social spending and the possibilities for inequality reduction. Two points are worth emphasizing.

First, the experience of advanced welfare states shows that increases in redistribution come almost invariably from making social transfers bigger and less pro-poor. However, distributive conflicts around the expansion of social protections unfold very differently in countries with pro-rich programs. Thus, the policies and political strategies employed in the expansion of advanced welfare states—and the theoretical models that describe them—might not be directly applicable in cases where distributive politics is zero-sum. For instance, issues of timing and sequence—who gets what, but also *when*—are essential to understanding differences between welfare states. A necessary factor for the small redistributive power of developing regions is that generous social insurance for the middle classes developed *before* the extension of universal safety nets, precluding the kind of expansion that characterized advanced welfare states.

Second, the same level of inequality reduction can have very different social and normative implications depending on which needs and groups are getting recognized and which are not. In theory, a system of generous contributory pensions and a comprehensive social assistance program can achieve the same level of redistribution. Redistribution by itself does not tell us how egalitarian or inclusive a

welfare state is. However, this does not mean that redistribution is a poor yardstick for comparative analysis and policymaking, or that we need to narrow it by excluding the effect of pensions and social security programs, as some works do. Instead, we must supplement data on redistribution with measures of coverage and the distribution of social benefits to obtain a more precise estimation of what needs slip through the net.

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**Explaining the Child Poverty Outcomes of Japan, South Korea and Taiwan**

Bruce Bradbury , (UNSW Sydney)  
 Aya Abe, (Tokyo Metropolitan University)  
 Markus Jäntti, (Stockholm University)  
 Inhoe Ku, (Seoul National University)  
 Julia Shu-Huah Wang, (University of Hong Kong)

(LIS WP840: Revised version forthcoming in Ku, Inhoe and Peter Saunders (eds) *Poverty and Inequality in East Asia*. Edward Elgar Publishing)

In Japan, South Korea and Taiwan, child poverty rates are relatively low, despite weak social protection for families with children. Why is this so?

In **LIS Working Paper No.840** we compare child poverty patterns in these three societies with those in Western countries using data from the Luxembourg Income Study (LIS) Database and national datasets. We look at relative poverty rates and the incomes of the poorest one-fifth of children in each society.

Distinguishing them from the various models in Western welfare states, the welfare regimes of East Asia have in the past been described as ‘productivist’ or ‘developmental’. Under this model, government resources are directed to economic development rather than social expenditure, families are assumed to provide strong support for their members regardless of co-residence status, there are strong gender disparities in employment, and labour movements (trade unions) are weak. The key role of social insurance in these systems is to enhance productivity by supporting the workforce critical to economic development.

While there are differences between the three societies, all three have low levels of social transfers to disadvantaged families, and relative child poverty rates are low. Korea and Taiwan, in particular, have poverty rates significantly below those of most Western countries. While our preferred dataset for Japan shows a higher poverty rate

than that used in previous cross-national research, it is still not high, and is near the Western average.

A large part of our explanation for these results stems from demographic patterns. Total fertility is low (especially in Korea and Taiwan), family size is small, parents are older and lone parent families uncommon. Controlling for these influences, Korea and Taiwan would have Western-typical poverty rates, and Japan one of the higher poverty rates in Western countries. In the light of low social transfers, high parental employment rates are also important for ensuring that poverty rates are not even higher.

To achieve these low poverty outcomes in these societies, access to parenthood is restricted, lone parent families have restricted options and employment is essentially a requirement of parenthood.

**Poverty outcomes and income sources**

Figure 1 shows several indicators of disadvantage for children and their families in Japan, Korea and Taiwan, as well as in seven comparison Western nations. Most of the results are from the Luxembourg Income Study (LIS) Database, but we also present results from the Japanese Comprehensive Survey of Living Conditions (CSLC) conducted by the Ministry of Health, Labor and Welfare. Compared to the LIS data (based on the Japan Household Panel Survey), it has a larger sample size and is a cross-sectional rather than panel survey - and so not subject to any attrition bias. The CLSC is the data used by the Japanese government for the calculation of poverty rates and thus our results using this data are more comparable to those used in the

**Figure 1: Child Poverty Indicators**

			Poorest 20% of children		
			Relative poverty rate (% below half population median)	Mean household disposable income (equiv 2017 USD PPP)	Mean relative to population median
Japan	2013		8.3		0.48
Japan (CSLC)	2018		13.9		0.37
South Korea	2016		7.1		0.51
Taiwan	2016		6.9		0.52
Australia	2014		11.0		0.45
Canada	2017		14.8		0.42
Germany	2016		14.5		0.41
Italy	2016		27.8		0.22
Norway	2013		7.9		0.50
United Kingdom	2017		15.9		0.42
United States	2018		21.9		0.33

Source: Luxembourg Income Study (LIS) Database except for Japan (CSLC).

national poverty debate. For all these reasons, it is our preferred dataset and our discussion below focuses on results from it. It provides estimates of child poverty outcomes that are less favourable than those from the dataset used in LIS.

The first panel of the figure presents conventional relative poverty rates (see WP840 for details). This is supplemented by two measures for the poorest one-fifth of children, their mean (PPP adjusted) income, and this mean relative to the population median.

While the real incomes of the most disadvantaged Japanese children are lower than most of the Western countries (using the CSLC data), their relative poverty rate is similar to that in Canada, Germany and the UK. Korea and Taiwan have lower relative poverty rates - similar to that of Norway.

One explanation for this lies in the lower incomes of the elderly in the East Asian societies. If we were to calculate poverty relative to the median income of children, rather than of all families, the comparative poverty outcome in Japan in particular would be less favourable. Using this metric, Japan would have a poverty rate almost as high as the US (WP840, Table 1).

Even so, the poverty outcomes in all three societies are surprising given the low level of social transfers received by disadvantaged families with children. Figure 2 shows the sources of income for the most disadvantaged fifth of children in each of our societies. Standing out is the low share of income from social transfers in the East Asian societies; only 7 per cent in Korea up to 21 per cent in Japan. This is similar to what we find in Italy, but much lower than the other Western societies, where around half the household income of the poorest fifth of children comes from social transfers (44% in the US to 60% in Canada).

**Explanations**

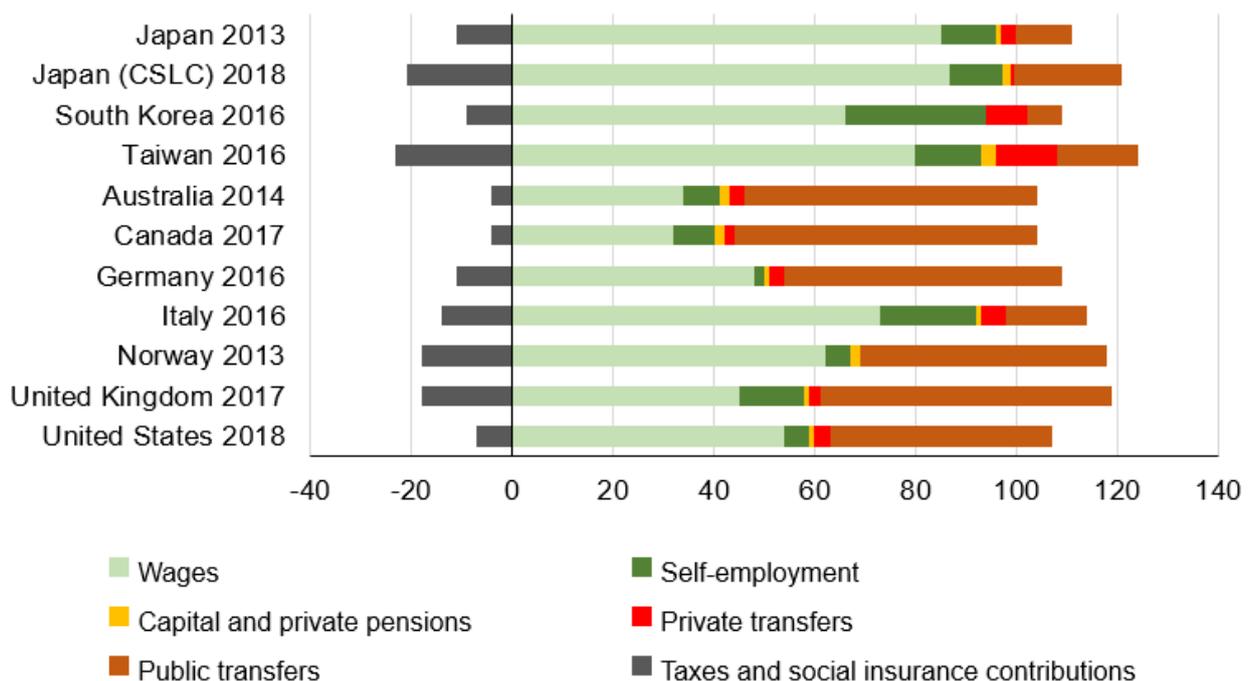
Despite very low levels of social transfers, Korea and Taiwan have relative child poverty levels similar to those of societies like Norway with high welfare expenditures. Moreover, while our preferred data for Japan does not suggest the same anti-poverty success, it nonetheless has very low social transfers accompanied by child poverty outcomes similar to the average Western society. Why are these East Asian societies so successful in preventing child poverty?

In many respects, patterns in these East Asian societies are similar to those in Italy - our exemplar of the Mediterranean welfare state model. Among the poorest families, social transfers are low, the share of income from employment and especially self-employment is high, there are substantial private transfers and lone parent families are less common. But these East Asian societies do not experience the corresponding high child poverty rates and low real incomes of Italian families with children.

Even if we were to use the median income of (the families of) children as our poverty reference point, child poverty rates in Korea and Taiwan would still be at the lower end of the Western distribution. For Japan, child poverty relative to the child median income would be at the higher end, but still below that in Italy and the US.

The immediate driver of these favourable poverty outcomes is the amount of income other than social transfers - especially earnings - received by families with children. Among the poorest fifth of children in our East Asian societies, the share of income from earnings is around 100 per cent of disposable income, with the remaining income sources offset by taxes and social insurance contributions. This is much higher than in Western societies (other than Italy). Private income transfers are also important in East Asia. Correspondingly, employment levels are high in these three societies.

**Figure 2: Poorest fifth of children: Shares of household income from different sources**



Source: Luxembourg Income Study (LIS) Database except for Japan (CSLC).

Lone parenthood is also less prevalent in these societies (along with Italy). However, even though lone parents tend to have higher poverty rates, this lower prevalence contributes little to the lower overall poverty rate in Korea and Taiwan. We undertake a counter-factual calculation where we apply the UK family type distribution to the three societies. This would tend to increase the overall poverty rate in Korea, Taiwan and Japan because the UK has more lone parents, and children in lone parent families are more likely to be poor. But the UK has fewer children in 'other' three-generation households, where poverty rates are high in Korea and Taiwan. This cancels out the lone-parent effect for these two societies. For Japan, on the other hand, poverty rates among lone mother families is particularly high, and so if they had the UK family type distribution their poverty rate would be almost as high as in the US.

As well as having different family structures, the three East Asian societies have very different fertility patterns to the Western model (though again, Italy is similar to the East Asian pattern). Fertility rates are much lower (well below replacement), family sizes are smaller and few parents are very young. Both the family size and parental age difference would be expected to reduce poverty rates (the former reduces consumption needs, while the latter is associated with higher earnings). If we control for family size and parental age, we find that the gap between Korean and Taiwanese versus Western poverty rates narrows significantly, and narrows further again if we control for family composition. Nonetheless, even after controlling for these factors, poverty rates in Korea and Taiwan remain at the lower end of Western estimates.

Japan has an observed poverty rate that is towards the middle of the Western range. However, we estimate that if family size, parental age and household composition were the same across countries, the Japanese rate would be the second-highest in our sample - slightly higher than both the US and UK, though still well below that of Italy.

### Conclusion

These outcome differences provide a challenge to the concept of a single 'East Asian' welfare regime. Nonetheless, these three societies

do share some common characteristics contributing to their relative poverty success: families with children have benefited from recent economic growth more than the older population, parents have high employment levels, lone parent families are uncommon (but multi-generation families are more common and have high poverty levels), and private between-household income transfers are more common.

In addition, the demographics of parenthood are very different in these societies and this explains much of the divergence in poverty outcomes. Nonetheless, without the high employment rates in these three societies, poverty would be much higher.

We speculate that the low levels of social transfers in these three societies are important drivers of these responses. In the absence of adequate social benefits, having a first child, or subsequent children, is economically risky. While the broader family can, and does, provide some support, it is not surprising that fertility is extremely low (especially in Korea and Taiwan) and that prospective parents are more likely to delay child rearing until their incomes are higher and have fewer children overall. Similarly, lone parenthood is infrequent and multi-generational families are common.

These parental demographic characteristics are part of the reason for the high employment levels of parents in these three East Asian societies. Selection into parenthood itself, where only people with strong earning potential become parents, might also be a factor, though we have not investigated this.

So, while these three societies have been able to maintain child poverty rates at low or modest rates - despite low levels of social protection - our results suggest that this has had other impacts on parental, and possibly child, well-being. Access to parenthood is restricted, private transfer support is necessary, lone parent families have restricted options and employment is essentially a requirement of parenthood. It is not surprising, therefore, that recent family policy discussions in all three societies have generally been developed through the lens of increasing fertility.

**Income Growth in Peru: who is on Board and who is Left Behind?**

Gintare Mazeikaite ✉, (LIS)

In their recent LIS working paper (Guaitoli and Pancrazi, 2022) and the follow-up LIS *Inequality Matters* article, the authors observed different trends in intergenerational income inequality in high-income, transition and developing economies. Developing countries experienced decreasing intergenerational inequalities, with the disposable income of individuals at the beginning of their careers catching up or overtaking the income of individuals at the end of their careers. Uneven expansion of education may explain eroding intergenerational inequalities in some of these countries: young people are the first to benefit from increased schooling and secure better-paid jobs in the medium run. However, the effects of rapid income growth and structural changes in the economy on different age cohorts are far less clear when individual countries are concerned. In particular, the development of incomes of elderly individuals depends on the interplay of factors such as informality in the labour market, public transfers and an often-overlooked factor of household composition.

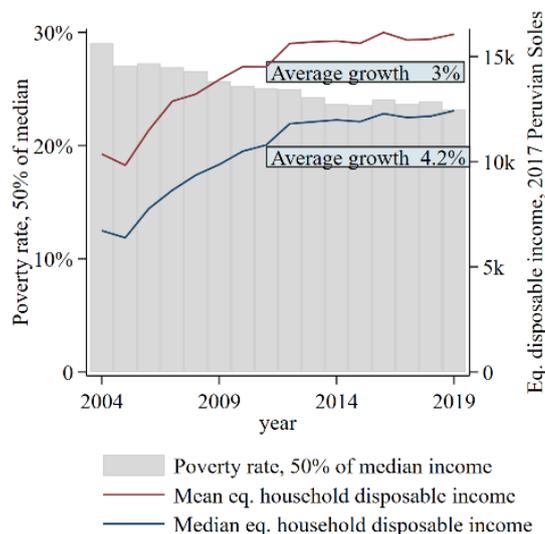
In this article, we examine trends in intergenerational inequalities in disposable income in Peru using newly available annual data in the LIS database from 2004 to 2019. Peru is one of the developing countries experiencing rapid structural changes, and a country with one of the largest informal sectors among Latin America and the Caribbean countries (OECD, 2016). Before the 2020 pandemic, Peru had positive real GDP growth, averaging 4% per year between 2004 and 2019 (World Bank<sup>1</sup>). In the same period, average household disposable income (accounted for household size using the LIS equivalence scale<sup>2</sup>) grew by 3%, and the median income grew by 4.2% annually (Figure 1). As Figure 1 and LIS Key Figures suggest, income growth in Peru in the period of 2004 to 2019 contributed favourably to reducing overall inequality and poverty in the country.

Concerning the working age population, disposable income grew faster than average among individuals under 35 years of age, and a bit slower among those between 35 and 64 years (Table 2). Structural

changes in education and industry in the period of 2004 to 2019 do not provide a clear explanation for the observed trends, yet they suggest that some of the highest-paying industries may be favouring younger workers (Table 1). Concerning education, there have been larger increases in tertiary education attainment (2.3-3.4% annually) compared to upper secondary and post-secondary education (less than 2% annually) among individuals below 35 years of age. The reverse was true for older individuals, who saw the largest increases in upper secondary education. While individuals with tertiary education were receiving twice as much in hourly wages (13.4 Peruvian Soles in 2019) than individuals with upper secondary education (6.6 Peruvian Soles), average wages grew fastest among the least educated (3.4% annually compared to 0.7-2.5% among the more educated). Concerning industry, employment in agriculture as well as mining and manufacturing sectors declined between 2004 and 2019 among all age groups. On the other hand, employment in various service sub-sectors did not grow uniformly. For example, the largest paying sector of financial intermediation employed mostly individuals at the beginning of their careers (16 to 34 years of age). Despite the differences in remuneration across industries, average wages in the main employment grew in all sectors apart from the mining and manufacturing sectors, with the highest increases in agriculture (3.5%), construction (3.5%), and other services (4.7%) annually.

For people over 65 years of age, income growth was the lowest among age groups, averaging 1.9% per year compared to 3% in the overall population. According to the LIS Key Figures, the relative poverty rate remained stable or increased slightly among the elderly in the same period. However, individuals over 65 years of age were increasingly more likely to appear among the poorest 20% of the country's population (Figure 2). Between 2004 and 2019, the share of elderly individuals belonging to the poorest fifth of the disposable income distribution rose from 27% to 33%.

**Figure 1. Disposable income growth and relative poverty in Peru**



**Table 1. Growth in education and industry shares among age groups and gross hourly wage<sup>3</sup> by education and industry in 2019**

	Annualised growth rate in education and industry shares among age groups, 2004-2019				Gross hourly wage, 2019	Yearly growth rate 2004-2019
	16-24	25-34	35-49	50-64		
<b>Education</b>						
Low	-3.3%	-3.4%	-1.8%	-2.0%	5.0 S/	3.4%
Medium	1.7%	1.2%	1.7%	3.4%	6.6 S/	2.5%
High	3.4%	2.3%	1.0%	2.5%	13.4 S/	0.7%
<b>Industry</b>						
Agriculture	-3.1%	-3.0%	-1.4%	-2.4%	4.57 S/	3.5%
Mining and manufacturing	-0.9%	-0.3%	-0.1%	-0.5%	8.16 S/	-0.2%
Construction	3.8%	3.8%	2.8%	2.1%	7.82 S/	3.5%
Wholesale and retail	1.8%	0.5%	-0.2%	0.6%	5.92 S/	3.0%
Transport & communications	1.2%	2.4%	3.0%	2.2%	7.82 S/	2.4%
Financial intermediation	7.1%	6.3%	2.7%	3.0%	14.28 S/	2.7%
Real estate & business	3.1%	2.2%	3.9%	2.8%	8.80 S/	1.7%
Public services	2.6%	0.8%	-0.9%	3.2%	13.33 S/	2.0%
Other services	-0.6%	-1.0%	0.7%	1.7%	6.74 S/	4.7%

Source: Luxembourg Income Study (LIS) Database.

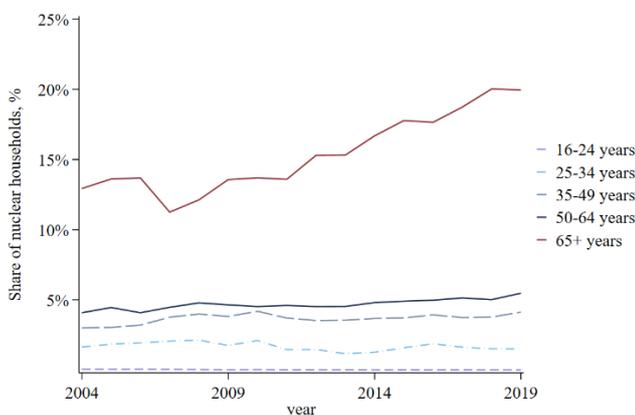
**Table 2. Growth in disposable income in 2004-2019**

Age groups	Equivalent household disposable income 2004-2019	
	Annualised growth rate	Overall growth rate
Below 15 years	3.21%	60.7%
16-24 years	3.09%	57.9%
25-34 years	3.11%	58.3%
35-49 years	2.49%	44.6%
50-64 years	2.72%	49.5%
65 years and older	1.90%	32.7%
All population	2.96%	55.0%

Source: Luxembourg Income Study (LIS) Database.

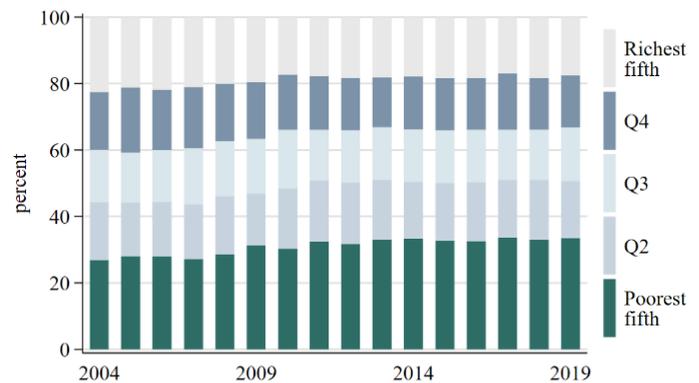
There are two main reasons why the elderly may stay disproportionately represented among the poorest fifth of the population in the medium run. First, work activity in the informal sector remains high in Peru. According to the LIS data, among those dependent employed, self-employed or contributing to family work, 60.4% worked in the informal sector<sup>4</sup>. Other sources reported the size of the informal sector of 72.8% of total employment in 2014, one of the highest in Latin America and the Caribbean countries (OECD, 2016). Moreover, according to the report, informal labour was particularly high among workers aged 65 or older and among individuals residing in households most vulnerable to poverty. Having a large informal sector means that many people are not entitled to social security in old age. As a result, elderly individuals tend to rely on labour income more than on pension income (Table 3). We find an increase in labour market activity among the elderly between 2004 and 2019 but no increase in the share receiving public contributory pensions. To combat poverty among the elderly in Peru, a social assistance pension (Pension 65) was rolled out in 2011, which serves elderly individuals in extreme poverty who are not eligible for the public contributory pension. However, as Table 3 suggests, the adequacy of social assistance pensions remains low compared to contributory pensions. In addition to this, public contributory and assistance pensions combined reached less than half of the elderly population in Peru in 2019, 26.1% received contributory pensions and 21.1% social assistance pensions.

**Figure 3. Share of individuals living in nuclear households by age in Peru**



Source: Luxembourg Income Study (LIS) Database.

**Figure 2. Distribution of elderly individuals across income quintiles**



Second, an often-overlooked factor is the changes in household composition. This affects not only the sharing of income among relatives but also the conditions in which people live. Figure 3 shows that the elderly are increasingly more likely to live alone or with their spouse without extended family members. In addition to this, the share of the population over 65 years of age living in households receiving some form of remittances has nearly halved in 2004-2019 (Table 3). The same trend holds for the elderly living alone or with their spouse. This means that retired individuals in Peru not only lack adequate social security in old age but also are less able to rely on income from extended family members. These trends are concerning: for example, Olivera & Clausen (2014) previously found that the most vulnerable individuals over 65 years of age in Peru resided in households with one or two members<sup>5</sup>.

To sum up, a glimpse at the annual Peru data for the years 2004 to 2019 shows that income growth has decreased overall poverty and inequality, but amplified intergenerational disposable income inequalities. Working-age individuals at the beginning of their careers had larger increases in disposable income compared to individuals at the end of their careers. Structural changes in education and sector employment might have contributed to these changes but not in obvious ways. On the other hand, people over 65 years of age were not participating equally in income growth, and some of them were more likely to live in small households and without social insurance

**Table 3. Average income and share of recipients (>65 years)**

Year	Average, 2017 Peruvian Soles	Share of recipients >65 years	Average, 2017 Peruvian Soles	Share of recipients >65 years
	Public contributory pensions		Public non-contributory pensions	
2004	10729	25.5%	-	-
2019	9571	26.1%	1449	21.1%
Year	Employment income		Self-employment income	
	2014	10139	4.7%	3480
2019	14323	9.3%	5349	34.6%
Year	Remittances <sup>6</sup>		Remittances in small households <sup>7</sup>	
	2014	1810	54.0%	1887
2019	2898	29.3%	3118	26.9%

transfers. In addition to this, the cohort of individuals between 50 and 64 years who are currently benefitting from income growth is likely to face the same issues as the current cohort of elderly individuals while the informal sector remains large and the dependence on family networks is eroding. In the medium run, a pension reform might ensure that the elderly in Peru are not entirely left behind during times of sustained economic growth.

<sup>1</sup> World Bank. GDP per capita, PPP (constant 2017 international \$)<sup>1</sup> World Development Indicators. The World Bank Group, 2022, <https://data.worldbank.org/indicator/NY.GDP.PCAP.PP.KD>. Accessed 10 Sep. 2022.

<sup>2</sup> Square root of the number of household members.

<sup>3</sup> Gross hourly wage in main occupation, LIS variable *gross1*.

<sup>4</sup> LIS variable *informal* flags individuals who reported not having an employment contract.

<sup>5</sup> The findings referred to year 2011, before the introduction of social assistance pensions.

<sup>6</sup> Remittances were available at the household level only and were accounted for household size using the LIS equivalence scale.

<sup>7</sup> Defined as households comprising of only the head and spouse.

## References

- Guaitoli, G., & Pancrazi, R. (2022). Global Trends in Intergenerational Income Inequality? LIS Working Paper Series, No. 828.
- Olivera, J., & Clausen, J. (2014). Las características del adulto mayor peruano y las políticas de protección social. *Economía*, 37(73), 75-113.
- OECD (2016). Multi-dimensional Review of Peru: Volume 2. In-depth Analysis and Recommendations, OECD Development Pathways, OECD Publishing, Paris, <https://doi.org/10.1787/9789264264670-en>

## Data News / Data Release Schedule



### LIS is happy to announce the following data updates:

- Austria** – Further annualisation of the country series back to 1994 for the LIS Database (3 new and 4 revised).
- China** – Addition of one data point **CN18** to the LIS Database (1 new and 1 revised).
- Norway** – One new data point for Norway (**NO20**) added to both the LIS and LWS Databases (1 new).
- Peru** – Further annualisation of the country series back to 2004 for the LIS Database (4 new and 12 revised).
- United Kingdom** – Addition of two new data points (**UK19/20**) to the LIS Database (2 new and 19 revised).
- Canada** – Addition of **CA19** to the LWS Database (1 new and 1 revised).
- Chile** – Addition of 2 new data points for the Chilean series on the LWS Database (2 new and 1 revised).

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

#### Austria

The whole Austrian series of the **European Community Household Panel** (ECHP) spanning from 1995 to 2001 and carried out by **Statistics Austria** following **Eurostat** guidelines, was fully harmonized and added to the LIS Database. As a result, **AT96**, **AT98** and **AT99** were added, while new versions of **AT94**, **AT95**, **AT97** and **AT00** replaced previously existing ones. The old **AT87** data point, which was the only remaining one based on the Microcensus, was removed due to partial income information.

#### China

A new data point for China (**CN18**) has been added to the LIS Database. The data is based on the latest wave of the **Chinese Household Income Project** (CHIP) carried out by the **National Bureau of Statistics** (NBS) and the **China Institute for Income Distribution** (CIID). **CN13** was also slightly revised for consistency with the newest data point. Variable *grossnet* was changed from gross to net as all the household level incomes are reported net, whereas the individual ones are gross.

#### Norway

A new data point from Norway (**NO20**) has been added to the LIS Database. The dataset is based on the latest wave of data from the **Household Income and Wealth Statistics** carried out by **Statistics Norway** (SSB).

#### Peru

The annualisation of the Peruvian series was continued further back to 2004 with the inclusion of the **PE05**, **PE06**, **PE08** and **PE09** data points, also based on the **National Household Survey** (ENAHO) from the **National Institute of Statistics and Informatics** (INEI). In addition, the whole series was further reviewed for consistency, involving notably variables *ethnic\_c* (now available), *informal* and some consumption variables, with very minor revisions in the incomes that have negligible impact on the final household disposable income.

#### United Kingdom

Two new data points for the United Kingdom (**UK19** and **UK20**) were added to the LIS Database. The datasets are based on the **Family Resources Survey** (FRS) from the **Department for Work and Pensions** (DWP) and the **Office for National Statistics** (ONS). In addition, a correction to the taxes and contributions (which were previously underestimated) impacting the final household disposable income was applied to **UK00-UK09**, while other consistency revisions were applied to **UK08-UK18** (variables *immigr*, *health\_c* and for UK18 only, the education variables).

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

#### Canada

A new data point from Canada (**CA19**) has been added to the LWS Database. The dataset is based on the **Canadian Income Survey** (CIS) carried out by **Statistics Canada**. In addition, **CA16** was revised for consistency with the new dataset.

#### Chile

Two new datasets for Chile were added to the LWS Database (**CL07** and **CL14**). Similarly to the other data point recently added for Chile, those datasets are based on the **Household Financial Survey** (EFH) carried out by the **Central Bank of Chile**. **CL17** was also slightly revised for consistency.

#### Norway

Alongside the addition of the newest data point for LIS, one new data point has been added to the LWS Database as well (**NO20**). The LWS data is based on the same source as for LIS, namely the **Household Income and Wealth Statistics** carried out by **Statistics Norway** (SSB).

**Data Revisions –LIS Database**

**Australia**

**AU16** was revised in order to fill variable *hcexp*.

**United States**

A revision of **US18/19/20** was applied to correct a mistake in variable *gross1* (some values were previously wrongly multiplied by 100).

**Uruguay**

The whole series was rerun following the uncovering of an error in variable *marital*, which also partly affected the construction of variable *relation*.

**Data Revisions –LWS Database**

**Australia**

**AU16** was revised in order to fill variable *hcexp*.

**United States**

A revision of **US19** was applied to correct a mistake in variable *bafr2\_c* (which now rightly includes information on financial risk taking).

**Replicate weights files**

A standardised naming convention for the variables of the replicate weights has implied a revision of various replicate weights files. The variables are now called *hrwgt1-hrwgtn* (where *n* is the maximum number of replicate weights in each dataset) for all LWS files.

**LIS/LWS Data Release Schedule**

	Winter 2022/23	Spring 2023
<b>LIS Database</b>		
Belgium		BE18/19/20
Canada	Annual data CA81-CA95	
Ireland	IE19/IE20	
Luxembourg	Annual data LU85-LU20	
Spain	ES93-ES19	
United Kingdom	UK68-UK93	
Vietnam	VN92/97/01/03	
<b>LWS Database</b>		
United Kingdom	UK19	

## Working Papers &amp; Publications



**Focus on Is Income Inequality Converging at the Regional Level? Evidence from LIS Data [LIS WP No.841](#) by Philipp Erfurth [✉](#) (CUNY Graduate Center)**

This study provides new insights into regional income inequality convergence across and within countries, building on the increased availability of Luxembourg Income Study (LIS) data. It finds evidence of regional income inequality convergence across countries, but finds heterogeneous trends within countries. The study also explores the impact of state systems on regional income inequality convergence, providing evidence that the state system (federal, unitary or hybrid) matters for income inequality convergence, with unitary states being associated with regional income inequality convergence.

### LIS working papers series

**LIS working papers series - No. 841 [LIS WP](#)**

**Is Income Inequality Converging at the Regional Level? Evidence from LIS Data**

by Philipp Erfurth

**LIS working papers series - No. 842 [LIS WP](#)**

**What Makes Old-Age Poverty in East Asian Societies so High?**

by Inhoe Ku, Wonjin Lee, Aya Abe, Zhu Mengbing, Li Shi, Chungyang Yeh, Dongjin Kim

**LIS working papers series - No. 843 [LIS WP](#)**

**Couples Division of Paid Work and Rising Home Income Inequality: A Cross-Country Comparison, 1994-2013**

by Efrat Herzberg-Druke

**LIS working papers series - No. 844 [LIS WP](#)**

**Poverty among Young Adults in East Asia – A Comparative Study**

by Geumsun Byun, Mihee Park, Hyejin K

**P:** A revised version of this paper will be published Geumsun Byun, Mihee Park, and Hyejin Ko (2022, forthcoming), "Poverty among Young Adults in East Asia – A Comparative Study" in Ku, Inhoe and Peter Saunders (eds) Poverty and Inequality in East Asia Edward Elgar Publishing ISBN: 978 1 80088897 5. <https://www.e-elgar.com/shop/gbp/poverty-and-inequality-in-east-asia-9781800888975.html>

**LIS working papers series - No. 845 [LIS WP](#)**

**Income and Wealth as Salient Gradational Aspects of Stratification**

by David Brady

**P:** Social Stratification, 5th Edition, edited by D. Grusky. New York: Routledge

**LIS working papers series - No. 846 [LIS WP](#)**

**The Consequences of Social Policy for Subjective Well-Being: A New Paradox?**

by Naoki Akaeda

**LIS working papers series - No. 847 [LIS WP](#)**

**Household Earnings in Putin's Russia: Distributional Changes across Socioeconomic Groups, 2000–2016**

by Vladimir Hlasny

## News, Events and Updates

### LIS is Now Hiring!

LIS is seeking applications for the following three positions:

#### A Microdata Expert to join the LIS Data team - REF: LIS-2022-1

The position involves joining a dynamic team of 10 people based in Luxembourg to produce harmonised datasets. This includes evaluating the original datasets structure and quality (possibly working with data providers), harmonising original variables, documenting harmonisation methods and dataset specificities, assisting and instructing users.

#### Contract:

2-year fixed-term contract (may lead to a permanent contract)

Full time (40h a week)

#### Candidate's profile

- Advanced degree in in statistics, sociology, economics, demography, or another social science.
- Extensive experience in data management, preferably large micro datasets with a focus on income, consumption or wealth.
- Advanced knowledge of Stata is required; knowledge of R is an asset, as is experience working with the LIS data.
- Excellent command of English is required (office language), other languages are an asset.
- Strong quantitative skills, ability to pay attention to detail and to work closely within a team in a cooperative way.

For more information about this job posting, please visit this [page](#).

#### 2 Microdata Experts to Support STATEC

##### #1. Microdata Expert (2-year contract) REF: LIS-STATEC-50%

#### Contract

2-year fixed-term contract (may lead to a permanent contract)

Half time (20h a week)

##### #2. Microdata Expert (2-year contract) REF: LIS-STATEC-100%

#### Contract

2-year fixed-term contract (may lead to a permanent contract)

Full time (40h a week)

The position involves supporting the National Statistical Office of Luxembourg (STATEC) in the production of the national EU-SILC data. Also, it involves contributing to methodological work using microdata from other STATEC surveys

#### Candidate's profile

- The successful candidate will have an MA in statistics, sociology, economics, econometrics, demography, or another social science.
- Familiarity with the EU-SILC data and the commonly agreed EU indicators is a strong asset.
- Extensive experience working with microdata using SAS, STATA or R statistical software, so as attention to detail.
- Command of spoken English is required. Luxembourgish and French are an asset.

For more information about this job posting, please visit this [page](#).

#### Interested in any of the three positions?

Applicants should submit a cover letter and a Curriculum Vitae to Ms. Lucie Scapoli, [search@lisdatacenter.org](mailto:search@lisdatacenter.org).

**Please make sure to specify the REF of the job position in the subject of your email.**

### Synopsis of the LIS Summer Workshop 2022

This summer marked the 30<sup>th</sup> edition of the LIS Summer Workshop since its start in 1988, and coincided the return of the workshop back on site in Luxembourg. The workshop took place between 4-8 July at the University of Luxembourg, Belval Campus.

The workshop targeted scholars interested in using the LIS and LWS databases. Like in the past couple of workshops, this year's event was a joint effort with the Luxembourg Institute of Socio-Economic Research (LISER) and the University of Luxembourg. Prof. Louis Chauvel and Prof. Philippe Van Kerm taught methods for analysing inequality with LIS and LWS data. LIS also hosted Professor Cecilia García-Peñalosa from Aix Marseille School of Economics for the 11<sup>th</sup> LIS Summer Lecture that took place during the workshop.

The participants of the workshop joined from 8 countries around the world. They had different research interests and different academic backgrounds; including: Economics, Sociology, Statistics, Social Science, Political Science, and Social Work.



The workshop consisted of five days, divided between lectures and hands-on lab sessions. LIS introduced, besides Stata based lab sessions, also R programming language sessions. During the lab sessions, participants were introduced to the LISSY system interface and its coding best practices; gradually they were trained on how to apply more advanced techniques on LIS/LWS Databases.

The workshop has as well hosted notable talks of two esteemed scholars at the CUNY Graduate Center; namely Prof. Janet Gornick and Prof. Branko Milanovic. The presentations covered various interesting perspectives on the usage of the LIS & LWS data.

### LIS Summer Lecture 2022

On July 4, 2022, Cecilia García-Peñalosa, Professor of Economics at Aix Marseille School of Economics, presented the 2022 LIS Summer Lecture titled: **The geography of income mobility**. The presentation explored recent evidence showing that there are significant differences in the degree of upwards mobility across location. The LIS Summer Lecture has been initially launched in 2009 and invites distinguished scholars from all around the world. More information on the LIS Summer Lecture series can be found [here](#).



## Upcoming (LIS)<sup>2</sup>ER Workshop on: “Inflation, energy prices and tax policy: Effects on consumption and welfare”, 1-2 December 2022

LIS Cross-national Data Center and LISER convene the third international scientific workshop in the realm of the (LIS)<sup>2</sup>ER initiative on “[Inflation, energy prices and tax policy: Effects on consumption and welfare](#)”.

Inflation has recently reached levels that have not been seen in many industrialized countries for decades. Spikes in energy prices, notably, raised concern about the livelihoods of families living on a tight budget. In this context, the 2022 (LIS)<sup>2</sup>ER workshop on policies to fight inequality—organized annually by the LIS Cross-national Data Center LIS and LISER—aims to discuss research on inequality and distributive impacts of exposure to price variations. Emerging research on ‘inflation inequality’ has revealed the unequal exposure of households to price variations by income level, and notably a double pain with low income households facing higher inflation than high income households. However, knowledge remains limited as traditional measurement of inflation typically assumes that all agents face the same set of prices and detailed analysis requires fine-grain data. Vulnerability to price variations may also be linked to other dimensions such as gender, occupation or age. The workshop aims to offer a forum to discuss novel research and insights on these questions and provide scholars with an opportunity to meet and exchange ideas.

The workshop will take place on 1-2 December 2022 at the Luxembourg University, Belval Campus.

Organizing Committee - Teresa Munzi (LIS) - Eugenio Peluso (LISER) - Petra Sauer (LIS, LISER) - Denisa Sologon / Jules Linden (LISER) - Philippe Van Kerm (LISER, University of Luxembourg)

Stay tuned for further information on the Call for Papers, registration details, and the workshop programme.

More information on the previous workshops carried out through the (LIS)<sup>2</sup>ER initiative, can be found [here](#) for the 2021 edition, and [here](#) for the 2020 edition.

## LIS team participation in conferences

On August 26<sup>th</sup>, Teresa Munzi has participated at the 37<sup>th</sup> IARIW General conference which took place in Luxembourg August 22-26, 2022. She discussed a paper entitled “[Closing the gap. A method for \(re\)capturing income data lost after administrative changes. Experiences from the Norwegian Household Income Statistics](#)”.

## The Stone Center – New Call for Two Postdocs – deadline November 1, 2022

The Stone Center just [posted the call for its fifth cohort of postdoctoral scholars](#). This year’s call requests applications for two different positions. The first is for applicants whose work concerns distributions of wealth, wealth inequality, and wealth concentration; intergroup wealth disparities; determinants (including public policies) and consequences of wealth accumulation; and estate, inheritance, and gift taxation. For the second position, priority will be given to candidates whose work focuses on inequality in the U.S. or other labor markets, especially disparities by gender, race, and/or ethnicity or migration status. The two postdocs will be in residence at the CUNY Graduate Center in New York City, from September 2023 through August 2025.

The application deadline is 1 November 2022.

## Another initiative funded by the Stone Foundation has been launched.

On 8 September 2022, an eighth inequality research initiative – six in the US, one in France, and one in the UK – has been launched with funding from James and Cathleen Stone. The newest center, named the Stone Center for Research on Wealth Inequality and Mobility is based in the University of Chicago Harris School of Public Policy. The Center will be led by [Steven Durlauf](#) who serves as Steans Professor in Educational Policy at The Harris School; his work highlights that socioeconomic segregation enhances inequalities, so that experiences of affluent and less affluent children differ, ultimately leading to a lack of mobility and persistence of socioeconomic status. Durlauf is joined by two associate directors: [Damon Jones](#), an economist who has done substantial work understanding the racial wealth gap, and [Geoffrey Wodtke](#), a sociologist and statistician working on the impact of neighborhood poverty on child development and the link between private business ownership and income inequality. The Stone Center in NYC expects to collaborate with the new center in Chicago.

## UK Satellite Office news

The final list of papers for the upcoming III-LIS Conference has been selected. The conference will be held on February 23-24, 2023 at the International Inequalities Institute, London School of Economics focusing on comparative economic inequality, broadly interpreted. Confirmed Keynote Speakers are Regina Baker (University of Pennsylvania) and Andrea Brandolini (Bank of Italy).

The Virtual Desktop is being used by the III-affiliates. The LIS Virtual Desktop is an important channel to increase the usage of the LIS databases.