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Income Inequality in the United States in Cross-National Perspective: Redistribution Revisited

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The [LIS Database](#) has long been used to assess income inequality across households, specifically the extent to which income distributions vary across countries and over time.

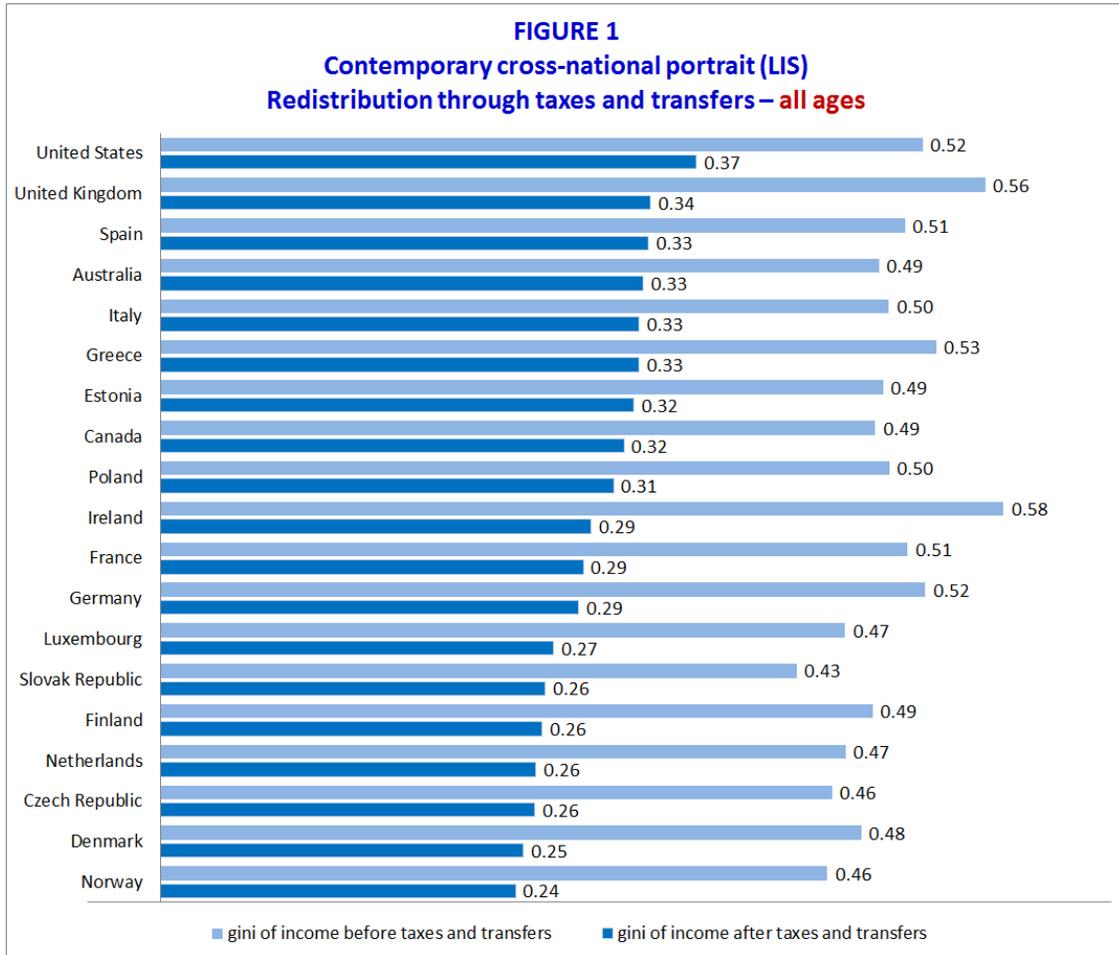
The LIS data are especially well-suited to assessing levels of redistribution, specifically redistribution carried out through income taxes and transfers – that is, through taxes paid out by households combined with transfers received by households. Researchers often capture levels of redistribution as the difference between inequality “before” and “after” these taxes and transfers are taken into account. The “before” measure accounts only for **market income** (“factor income” in the LIS lexicon), that is, income from labor and capital. The “after” measure corresponds to actual **disposable household income** (“dhi” in the LIS data), that is, market income plus income transfers received minus direct taxes paid out.¹

Figure 1 is a classic presentation of this line of analysis. This figure, which reports inequality in income received during 2010, includes the United States and 18 other high-income countries – Australia, Canada, and 16 European countries.² The longer bars represent inequality of market income and the

¹ **Factor income** (what we refer to as “market income” in this note) is the sum of household income from labor, which includes both paid employment and self-employment income, and household income from capital, which includes income from interest and dividends, voluntary individual pensions, rental income, and royalties. **Disposable household income** includes factor income plus social security transfers (work-related insurance transfers, universal benefits, and assistance benefits), and private transfers (merit-based educational transfers, transfers from nonprofit institutions, and inter-household transfers such as alimony, child support and remittances), minus income taxes and social security contributions paid. We term the difference between the two as **redistribution**. While the latter (disposable household income) “adds” to factor income both public and private transfers, in most households, the great majority of that “added” income is either funding from public programs or funding, such as child support, that is publicly-regulated.

² As of mid-April 2015, the LIS Database’ Wave VIII (year 2010) includes datasets from 30 countries. For this research note, we chose to include only 19 – the US, Australia, Canada and 16 European countries. We limited our country selection so that we could easily situate our findings in the existing LIS literature on income inequality and redistribution, most of which is limited to high-income countries (although we expect that to change soon). Clearly, many of the countries that we did not include – e.g., several from Latin America, as well as India, South Africa,

shorter bars represent inequality of disposable income; both are captured using the well-known Gini coefficient.



Source: Calculations by Gornick and Milanovic; results based on LIS data (Wave VIII), year 2010; countries ranked by inequality of disposable household income (darker bars).

The story that emerges from Figure 1 – in particular what it tells us about the United States – is, by now, well-known:

- ★ Among these 19 countries, inequality of market income is high in the US (.52) but – in cross-national terms – it is not off the charts. Several other countries have similar or higher levels of market income inequality. When market inequality is ranked high to low, across these countries, the US (at .52) is tied at fourth place. Moreover, nine countries – about half of this group – report market income inequality at the level of .50 or higher. To sum up, the US has high market income inequality but it is not especially exceptional among the rich countries of the world.³

China, Taiwan, Japan, Israel, and Iceland – have different social, economic, and political characteristics. Including them in future work is a crucial next step.

³ When we calculate **disposable household income**, we adhere to the methodological practices used to produce the LIS *Key Figures*. Households where disposable income is missing, or exactly equal to zero, are excluded. Bottom

- ★ In contrast, when we consider inequality of disposable income, the US rises to the top – with inequality at .37.
- ★ What Figure 1 tells us is that it is not an exceptionally high level of market income inequality that makes US disposable income inequality high (in fact, highest among these countries); it is the relatively meager level of redistribution. A reconfiguration of the results in Figure 1 underscores this conclusion. When we calculate the level of redistribution as the difference between the lengths of the two bars – in effect, the number of Gini points “removed” via redistribution – the US (at 15 Gini points) is ranked 19th out of 19.

Selected country cases further illustrate this finding. We see, in Figure 1, that the US and Germany report the same level of market income inequality: .52. As noted, redistribution in the US “removes” 15 Gini points, resulting in disposable income inequality at .37. In contrast, redistribution in Germany “removes” a full 23 Gini points, bringing disposable income inequality down to .29 – substantially below the US level. An even starker example is Ireland, where market income inequality (.58) is six points higher than in the US; however, the tax-and-transfer system “removes” fully 29 Gini points – and the result is disposable income inequality at .29, eight points lower than the level in the US.

This finding – that US exceptionalism in income inequality is largely driven by comparatively weak income redistribution – has long been a strong and consistent finding.

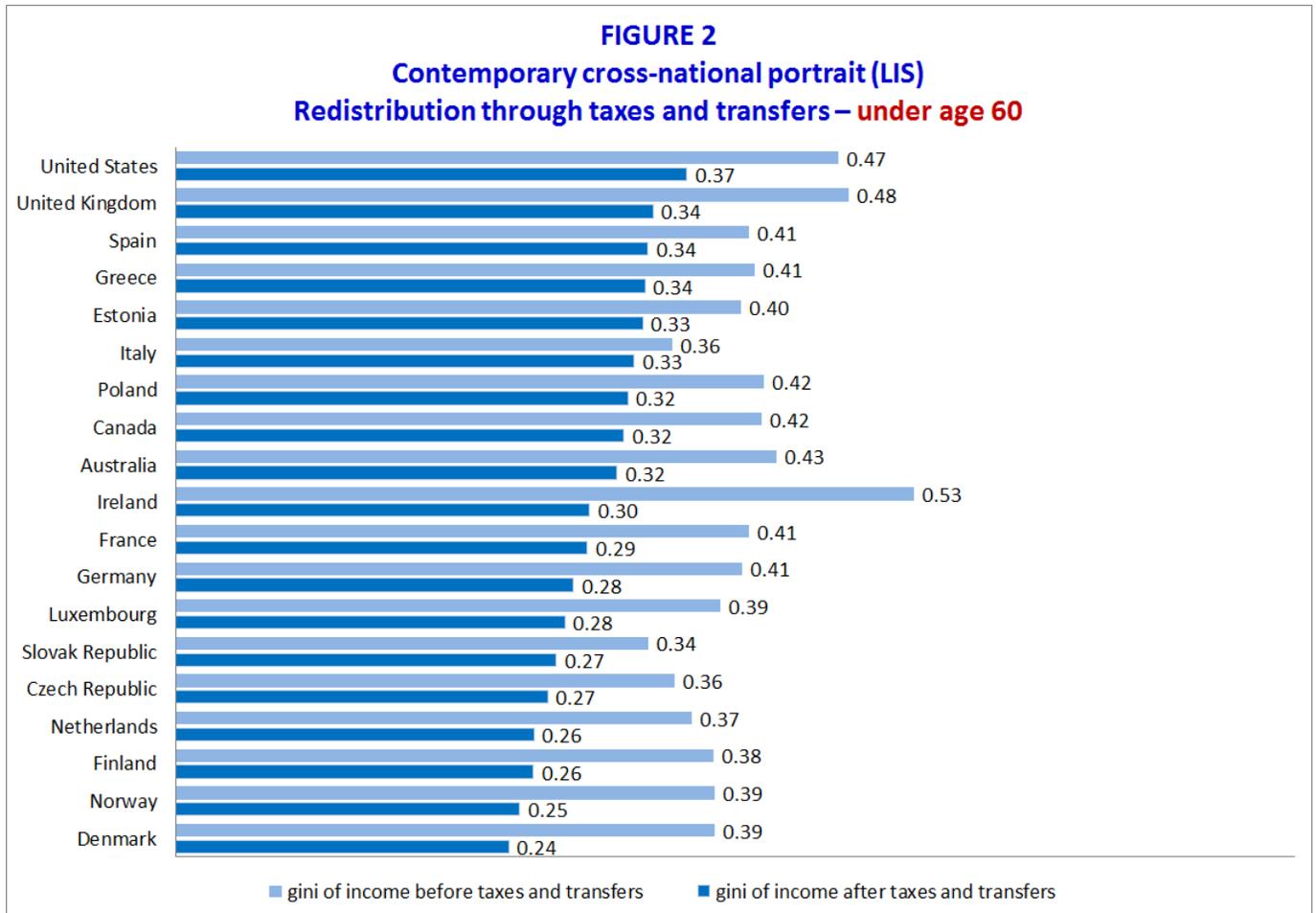
At the same time, it is well-established that the US wage distribution is more unequal than wage distributions in many other – especially European – countries. The US’ high level of wage inequality is due to both relatively low wages at the bottom and extremely high wages at the top. Wage inequality and market income inequality are not directly comparable, because wage inequality is calculated across wage earners only, while the market income distribution is calculated across households (including those with zero market income) and it includes some capital income. Nevertheless, we recognized that there was some tension between the two sets of findings about the US in cross-national perspective – that is, a comparatively high level of wage dispersion but a moderate level of market income inequality.

That is what we set out to investigate in more detail.

What Figure 1 does not reveal is that the cross-national portrait of market income inequality – and the US’ comparative position in particular – shifts when we consider only those households that we expect to be most heavily reliant on market income. Those would be households whose adult members have, for the most part, not yet reached the age when they shift from their “employment years” (i.e., greater reliance on the market) to their “retirement years” (i.e., greater reliance on income transfers).

coding is set at 1 percent of equivalized mean and top coding at 10 times the unequivalized median. Income is adjusted for household size, applying the widely-used square-root scale. When we calculate household **factor income**, we start with the same universe of households as for disposable income; negative values are converted to zeros and the few cases where factor income is missing are excluded. No bottom or top-coding is used. Income is equivalized using the square-root scale.

To assess this more closely, we re-ran the analysis shown in Figure 1, now including only households without persons aged 60 or over. We present those results in **Figure 2**.⁴ Like Figure 1, the light and dark bars report inequality in market and disposable income, respectively, and countries are ranked by inequality in disposable income.



Source: Calculations by Gornick and Milanovic; results based on LIS data (Wave VIII), year 2010; countries ranked by inequality of disposable household income (darker bars).

As we suspected it would, the story now shapes up differently:

- ★ Overall, market income inequality falls, on average across the 19 countries, by nearly 10 Gini points. That is largely because many older households – with zero or low market income – are no longer included in the analysis. Excluding these households raises the bottom of the market income distributions.
- ★ The US now reports the third highest market income inequality (at .47) among the 19 countries, lagging only the UK (.48) and Ireland (.53). Inequality in these three Anglophone countries is

⁴ We thank John Stephens (University of North Carolina, Chapel Hill) and Larry Mishel (Economic Policy Institute) for urging us to revisit Figure 1 by limiting it to non-elderly households. We also thank Nathaniel Johnson (CUNY Graduate Center) for excellent research assistance.

substantially higher than in the other 16 countries. The fourth most unequal country – Australia, another English-speaking country – reports market income inequality at .43, and inequality of market income in the remaining 14 countries falls below that level.

- ★ When we consider inequality of disposable income, the US is again (as in Figure 1) in the top position, at .37. But, now US market income inequality is also exceptionally high – not the highest among these 19 countries, but nearly so. What this suggests is that, among these younger households – defined as those with no household members aged 60 or older – the very high level of disposable income inequality is, in fact, driven upwards largely by comparatively high market income inequality.
- ★ Again, a reconfiguration of the results in the figure underscores that conclusion. The US' level of redistribution (in Gini points) is now less meager in comparative terms. With about 11 Gini points “removed”, US redistribution falls squarely in the middle of the pack. Seven countries are more redistributive; three are tied with the US, and eight are less redistributive.

All told, when we shift from Figure 1 to Figure 2, the story of US exceptionalism changes markedly. Among American working-age households, in cross-national terms, market income inequality is comparatively high (not moderate) and the level of redistribution is, in fact, moderate (not low).

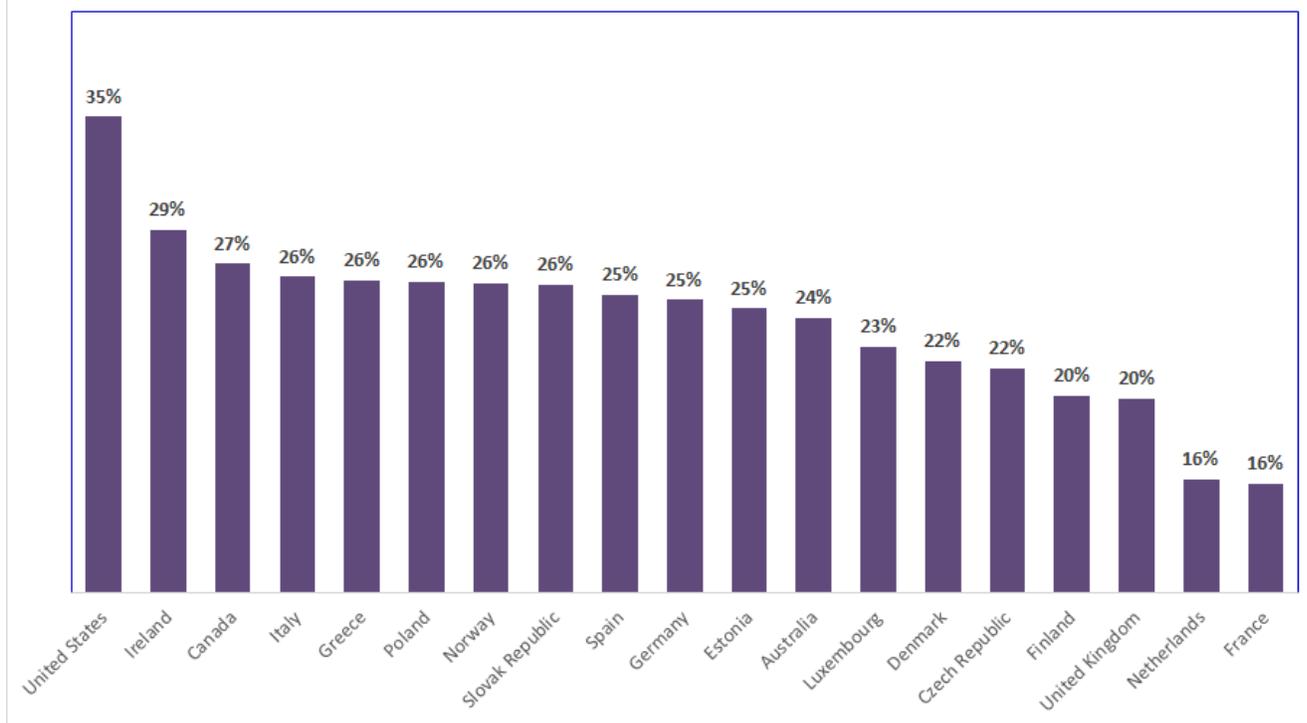
With Figure 2 in hand, we now look back at Figure 1 and see the US “story” with fresh eyes. We are now attentive to a crucial fact that is obscured in Figure 1: Americans, overall, shift from reliance on market income to reliance on income transfers later in life and/or less fully than do their counterparts in many other rich countries.

A separate analysis that we carried out demonstrates this. We calculated the share of older households – those containing persons aged 60 and older – whose market income exceeds median market income among all households in their home country (see **Figure 3**). If older households behaved the same as working-age households (i.e., suppose older persons remained in the labor market until death), we would expect that the share of over-age-60 households with market income higher than the median would be about 50 percent. If, at the other extreme, persons aged 60 and over all relied exclusively on income transfers, we would expect the share of older households with above-median market income to be very low.⁵

⁵ We assessed the possibility that the variation in Figure 3 – and, specifically, the US result – might be driven by factors other than cross-national variation in the labor force attachment of older persons. Clearly, variation in household structure will also shape the results in Figure 3. Note that there are many ways to operationalize “older households”. In this note, we defined them as households with at least one member aged 60 or over; while some of these households will contain exclusively older persons, some will also contain persons under age 60. We know, of course, that household structure – specifically the prevalence of multi-generational households – also varies across countries, and that variation will affect Figure 3. (Variation in capital income might also matter, but we are laying that aside for now, and considering market income to be mainly income from labor).

In order to disentangle the effect of these two factors, labor market attachment and household structure, we reran Figure 3 on households in which every person is aged 60 or over. The results (not shown) indicate that market activity is the dominant driver – certainly in the US case. In households with only older persons, the US remains in “first place” (in the far left position in the figure), with 23 percent of these American households reporting market income above their national median. As we expected, some countries – e.g., Italy, Spain, and Greece – shifted to the right in this new figure. In countries such as these three, there is a higher prevalence of multi-generational

FIGURE 3
Contemporary cross-national portrait (LIS)
Percentage of older households (age 60 and over)
with market income above their
country's median market Income (all ages)



Source: Calculations by Gornick and Milanovic; results based on LIS data (Wave VIII), year 2010.

Indeed, the results confirm that older US households are substantially more reliant on market income than are their counterparts in the rest of our study countries. Fully 35 percent of older US households report above-median market income, compared to – for example – 29 percent in Ireland, 26 in Italy and Norway, 24 in Australia, 22 in Denmark and the Czech Republic, 20 in Finland and the UK, and a remarkably low 16 percent in the Netherlands and France. More research is needed to unravel why these levels vary so markedly; surely, this variation in older households’ market activity is shaped by – and shapes – an array of labor market institutions and social policies that vary across countries.

In the end, our conclusion is that, while Figure 1 is technically accurate, Figures 1 and 2 considered together tell a more nuanced – and more complete – story about income inequality in the US in cross-national perspective, especially about the comparative strength (or weakness) of redistribution in the US through taxes and transfers.

households. The market income contributed by younger household members pushes these countries leftward in Figure 3. Summing up, we constructed and extended Figure 3 to help uncover the difference between Figures 1 and 2 – especially regarding the US case; this clarified that the dominant explanation in the US, in fact, rests on high market income among older persons and not co-residence with younger earners.

Our key point is that, when we estimate population-wide redistribution levels (as in Figure 1), the lesser reliance on income transfers by older American households reduces the overall level of redistribution in the US relative to other countries. Once older households are removed, market income inequality (for the working age population) in the US is seen to be comparatively high – higher than we would conclude from Figure 1 alone.⁶

As we reflect on this adjusted story – indicated by these three figures taken together – we are, in fact, not surprised. As mentioned above, we know from a large research literature that, relative to other high-income countries, the US has an exceptionally large low-wage labor market. We also know that the US, in cross-national perspective, has a large share of top earners, many of whom also have high levels of capital income. The results seen in Figure 2 – which pertain to those households most reliant on market income – are consistent with these features of the American market income distribution.

When we consider the US in cross-national perspective, the conclusions that flow from the results for working-age households should prompt us to shift more attention to policy and institutional factors that influence market income distributions. Those factors would include, of course, some that affect the prevalence and/or level of low wages (e.g., minimum wage provisions, regulations that shape worker representation) as well as those that might rein in the top (e.g., tax rates high enough to deter excessive compensation levels, direct regulation of high pay). Household income taxes and transfers matter, of course – and they matter a lot – but, if we wish to effectively address inequality of disposable income in the US, we need to consider a broader array of institutions, including those that squarely affect market income distributions.

⁶ One more analysis clarifies this further. Consider the population in Figure 3 – households with at least one member over age 60. The correlation between the values in Figure 3 and the Gini coefficient of household income in that subgroup (not shown) is -.64. That is, among these older households, higher levels of market activity are associated with lower levels of market income inequality because there are fewer households with zero market income. The result is that in countries where older persons are employed more than elsewhere – with the US being the extreme case – removing older households from the overall population (as we have done when going from Figure 1 to Figure 2) reduces the market income Gini by less than it does in other countries. Thus, the US appears, at the market income stage, comparatively equal in Figure 1 and comparatively unequal in Figure 2.