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**American Exceptionalism in Market Income Inequality:
An Analysis Based on Microdata
from the Luxembourg Income Study (LIS) Database**

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Abstract

The US has exceptionally high inequality of disposable household income (i.e., income after accounting for taxes and transfers). Among working-age households (those with no persons over age 60), that high level of inequality is caused by a high level of market income inequality (i.e., income before taxes and transfers), paired with a moderate level of redistribution. In this paper, we look more deeply at market income inequality, focusing on its main component – labor income – across a group of 24 OECD countries. We disaggregate the working-age population into household types, defined by the number and gender of the household’s earners and the partnership and parenting status of its members. We concentrate on comparing US results with those of the other OECD countries. Our main finding is that high levels of labor income inequality in the US cut across diverse subgroups. We conclude that within-group inequality of labor incomes in the US is, in almost all groups, high by OECD standards. So it is neither an unusual household composition, nor unusually high mean labor incomes of some groups (nor indirectly, unusually low levels of redistribution), that explain high US disposable income inequality, but instead the fact that high and low labor incomes are universally spread across all household/demographic categories.

JEL Codes: D31, D33

Key words: Wage distribution, earnings distributions, income inequality

1. Introduction

Laying out the problem: market income inequality versus redistribution

It has been known for at least two decades that disposable income – income after accounting for transfers and taxes – is more unequally distributed in the United States than in comparable rich economies (Brandolini and Smeeding 2006; Piketty and Saez 2006; OECD 2011). Broadly speaking, there are two possible underlying explanations. First, market income inequality (i.e., income before transfers and direct taxes are taken into account) may be similar in the US as elsewhere, but US transfers and taxes are less redistributive, either because the overall size of the welfare state is smaller or because the redistribution is less progressive. Second, market income inequality may itself be higher in the US than in many other countries, and thus driving up the high level of inequality even after redistribution is accounted for. The first explanation has generally held sway because market income inequality calculated across households – importantly, households of all ages – is not especially exceptional, across the OECD countries, while disposable income inequality is substantially greater.

To assess which explanation dominates, we analyze microdata from the Luxembourg Income Study (LIS) Database, a database with harmonized microdata, based on household surveys (in some cases, augmented with administrative data). The LIS Database now includes data from over 50 high- and middle-income countries, at nine points in time. For a full description of the microdata, see: www.lisdatacenter.org.) In this paper, we use data from LIS' Wave VIII, which is centered on the year 2010, and we include 24 OECD countries¹.

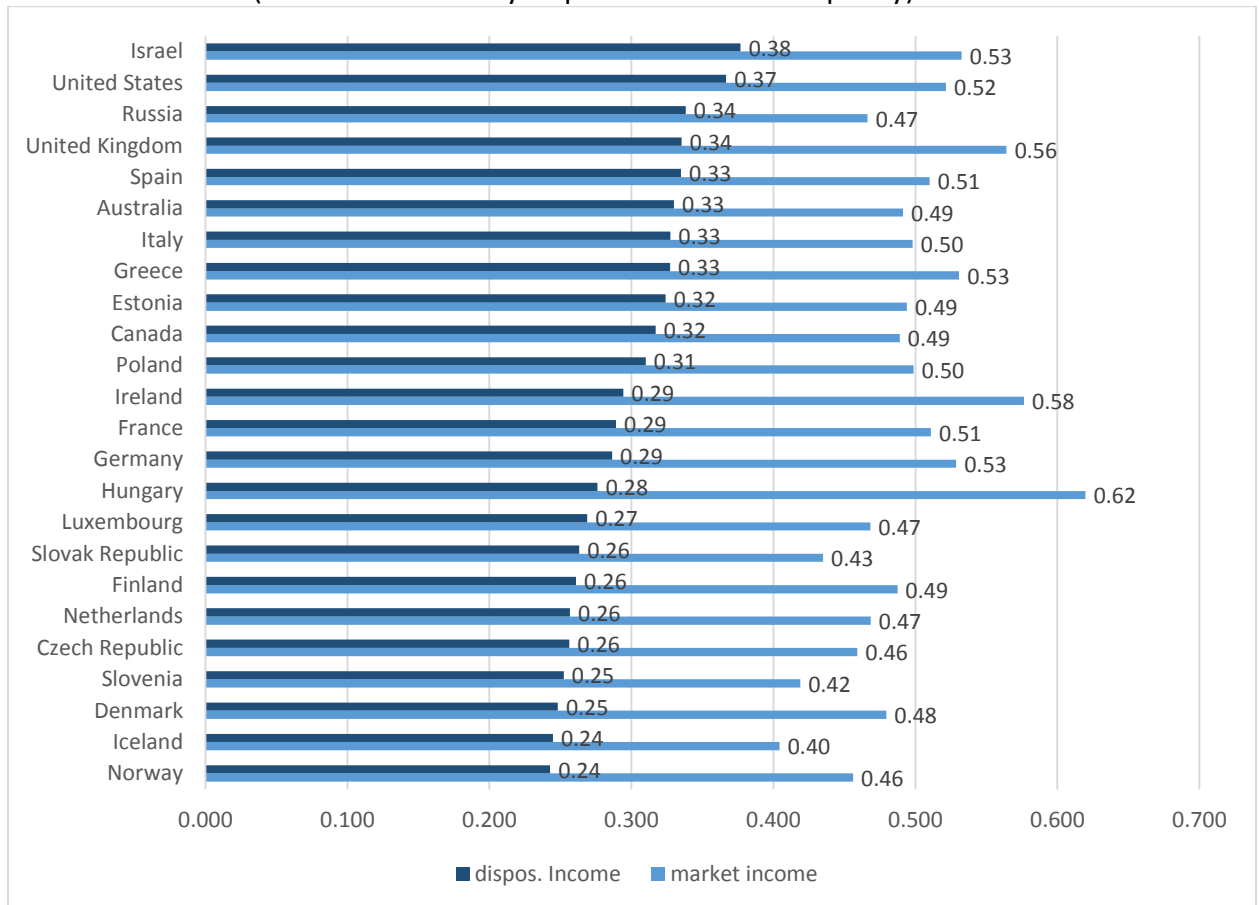
Consider Figure 1, in which these 24 OECD countries are ranked by their level of disposable income inequality across the entire population – that is, including households with persons of all ages.² Considering disposable income (the darker bars), the US is the second most unequal country, just 1 Gini point below the most unequal Israel. The US Gini is almost one-quarter greater than the average Gini calculated across these 24 OECD countries. However, when we consider inequality of market income (the lighter bars), the situation looks a bit different. Inequality of market income, of course, is everywhere greater than inequality of disposable income, but US market income inequality is not exceptionally high. This is indicated by the fact that the US market income Gini is just slightly (5 percent) higher than the average market income Gini, across these countries. It is further confirmed when by the magnitude of government redistribution alone (where redistribution is captured as the differences between the lengths of the two sets of bars). In the US, transfers and taxes reduce market income

¹ Russia is not officially an OECD member state, but a “roadmap to accession” has been approved. For convenience, when we use the term “OECD countries” in this paper, we include Russia.

² Income is adjusted for household size using the following formula: equivalized personal income = household income divided by the square root (.5) of the number of household members. This assumes economies of scale midway between perfect economies of scale (parameter = 0) and no economies of scale (parameter = 1).

inequality by 15.5 Gini points, or about 4.5 Gini points less than the average redistribution across this group of countries. So, we would conclude that lower redistribution is the dominant reason driving the exceptionally high inequality of disposable income reported in the US.

Figure 1. Disposable income inequality and market income inequality, in 24 OECD countries, across entire population (countries ranked by disposable income inequality)



Note: Ginis based on equalized incomes, disposable and market, respectively.

However, a closer look at Figure 1 reveals a more complicated result. Note that a number of countries have approximately the same magnitude of redistribution as in the US (measured by the gap between the two bars): Australia, Italy, Estonia, Canada, Slovak Republic, Slovenia. Why they all end up with lower disposable income inequality cannot then be thus entirely explained by redistribution but must also be driven by the fact the US enters the process of redistribution with comparatively high market inequality.

In a recent paper, Gornick and Milanovic (2015) looked more deeply into this particular issue. They began with the insight that market income inequality, when calculated across households of all ages, may be depressed – especially relative to many European countries – because Americans tend to stay in the labor market until later in life, compared with their counterparts

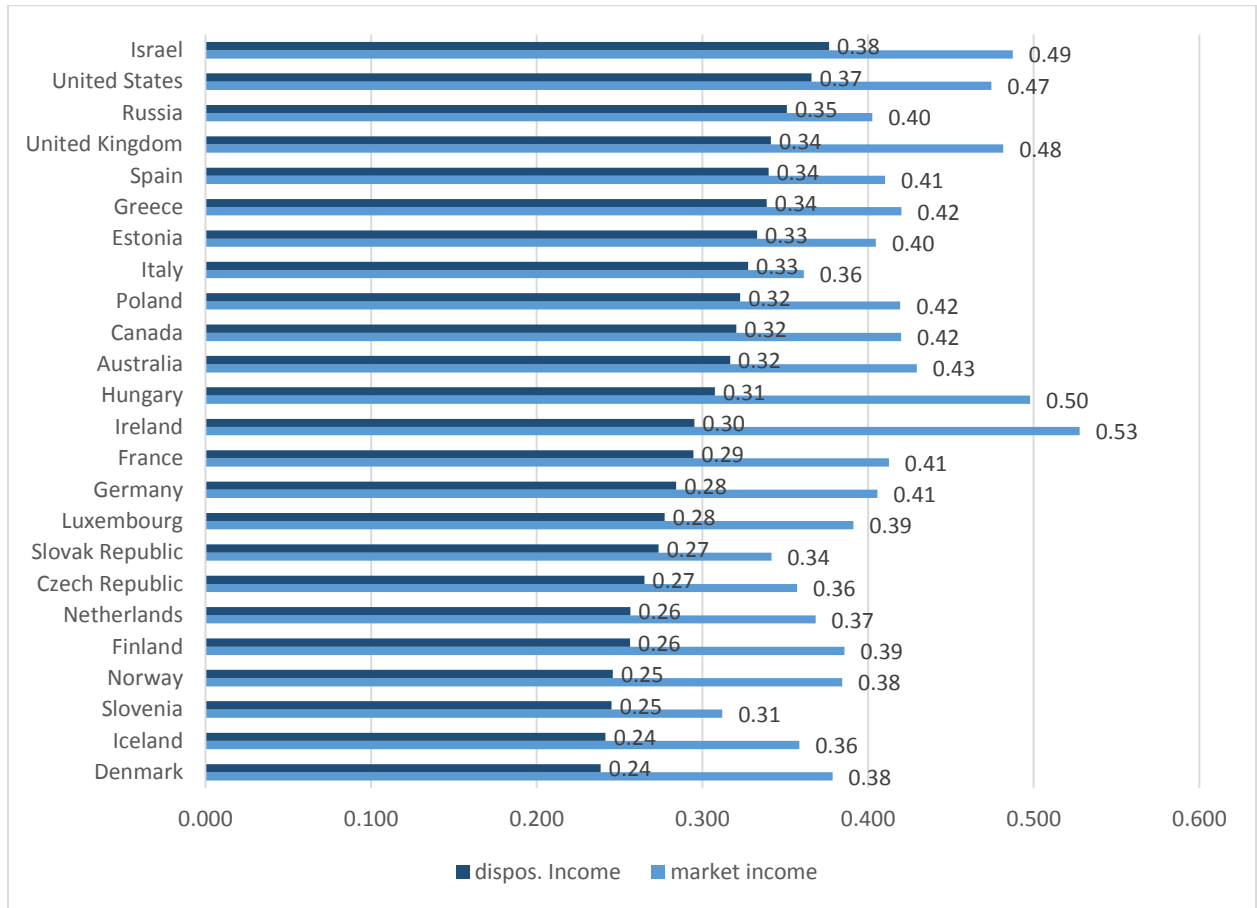
elsewhere. Because the market income in pensioners' households is often very small or zero, the existence of a developed system of social protection paradoxically exaggerates *market* income inequality (among older households) in the rest of OECD and brings the overall market income inequality in line with that reported in the US. Thus, the comparatively high level of US market income inequality – net of older households – is obscured.

Following the logic of that earlier paper³, we recalculate Figure 1 here, but limited to households that contain no persons over age 60. These results, for “working age” households, are shown in Figure 2. When we rank countries by disposable income inequality, the US still remains in the second highest position, but now both disposable income inequality and market income inequality are comparatively high. Ginis for both are 16 and 22 percent greater than for the OECD average. Recall that in Figure 1, we found US market income inequality to be merely 5 percent higher than in the rest of OECD; now it is 16 percent higher. So clearly now, the “cause” of high disposable income inequality is not meager redistribution but high “original” inequality, that is inequality of market income (composed of labor and capital income). This is confirmed when we look at the redistributive function of the state for people under 60 in the US and elsewhere. In the US, redistribution shaves off 10.9 Gini points of market income inequality (the difference between the length of the dark and light bars in Figure 2), which is exactly the OECD average!

We can thus conclude that, for persons under 60 years of age, weaker US redistribution is not the main cause of greater inequality at the disposable income stage. The “problem” is that the distribution of “original” labor and capital incomes is substantially more unequal in the US than elsewhere, and government redistribution, at the average OECD level, does not compensate for the inequality generated in the market.

³ Gornick and Milanovic (2015) studied 19 countries. Figures 1 and 2 in this paper update their findings, and include a somewhat larger group of 24 countries.

Figure 2. Disposable income inequality and market income inequality, in 24 OECD countries, across working-age population (countries ranked by disposable income inequality)



Note: Ginis based on equalized incomes, disposable and market, respectively.

Gornick and Milanovic’s (2015) analysis had precursors in the work of Larry Mishel (2015) who argued that weaker redistribution in the US could not alone explain the entire disposable income inequality gap between the US and the rest of the OECD countries. The underlying market income distribution, most importantly the earnings distribution, in the US, they argued, is highly unequal in cross-national terms. These analysts pointed to, on the bottom end of the earnings distribution, the low US minimum wage and the high prevalence of low-paid jobs, and, on the upper end, the extremely high earnings of managers, doctors, lawyers, CEOs and the financial sector in general. The exceptionally large gap between CEOs’ salaries in the US and in the rest of OECD countries is indeed well-documented (see Piketty, 2014; Mishel and Davies 2015; Gabaix and Landler, 2008). Indeed, the findings in Gornick and Milanovic (2015) – and in Figures 1 and 2 above – confirm that market income inequality is major explanation for comparatively high levels of disposable income inequality in the US.

The current paper

The objective of this paper is to investigate the nature of this higher market income inequality in the US. In the analyses that follow, we take the comparative analysis of US market income inequality a step further. We do that by disaggregating our findings across subgroups, drawn from the larger working-age population. Because the major component of market income is labor income, we focus exclusively on it – disregarding income from capital, which is a relatively minor component in the market income package of working-age households in these countries.⁴

Focusing on inequality of labor income, we assess inequality that exists both within and between various household types (based on the number and gender of earners and on family structure), and we compare the results for the US with those in other OECD economies. Our objective is to establish whether the greater underlying US market income inequality is the result of (a) higher earnings inequality within each of the relevant groups, (b) an unusual composition (for example, a high share of groups where earnings inequality is either high or low), or (c) large gaps between groups in mean earnings.⁵

2. Labor income inequality across various household types

In our decomposition, we focus on inequality of labor income. To assess labor income, we use the LIS harmonized variable *hil* (that is, household income from labor) which include earnings from all kinds of employment (full-time or “casual”), fringe benefits, non-monetary bonuses and self-employment income.⁶ Since we are interested in how earnings inequality ultimately affects disposable income inequality among households, our unit of observation is not an individual worker (earner) but the household. Thus total household earnings are summed and expressed in equivalent units where the equivalence scale parameter is (as it was in Figures 1 and 2) set at 0.5, i.e., total household earnings are divided by the square root of the number of household members. Thus, we arrive at a variable that measures potential individual welfare (assuming equal division of earnings within the households) derived from labor income.

⁴ We emphasize that Figures 1 and 2 report inequality in market income (labor income plus capital income), whereas Figure 3, and the rest of the paper, assess labor income only. Among the working-age population, and in the countries included here, income from labor accounts, on average, for 97 percent of total market income. In no country is the labor income share of market income less than 93 percent.

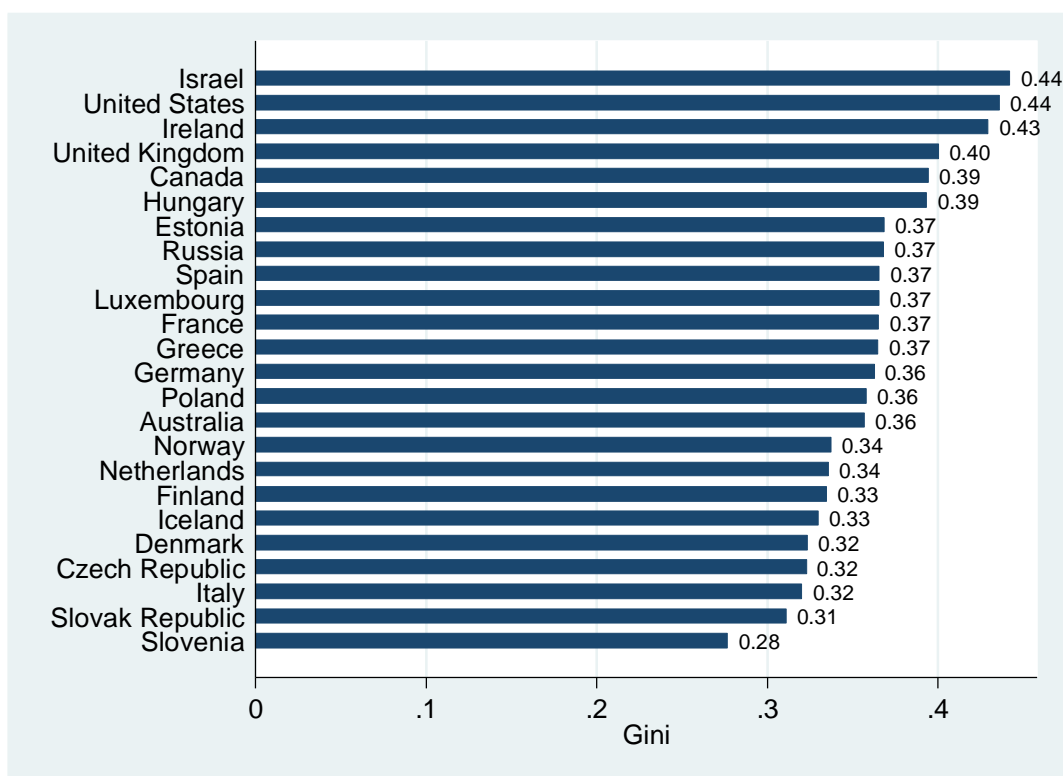
⁵ In this paper, we use the terms “labor income”, “earnings”, and “wages” interchangeably.

⁶ The variable includes: (1) wages and salaries from employment, including the value of goods/services received in lieu of cash wages; (2) wages or other income that results from irregular or “casual” employment; (3) wage supplements including bonuses and non-monetary benefits such as services paid in part or fully by the employer (meals, electricity expenses, automobile expenses, housing expenses, etc. where applicable), and (4) self-employment income, including profit/loss from farm production and non-farm self-employment business activities.

The analysis is conducted only across households whose all members are below 60 years of age and who have at least one member reporting income from labor. We carry out the analysis for 24 economies included in the LIS Database. In all cases, but one, the data are from the year 2010; the exception is Hungary, for which we have 2009 data. Annex 1 reports the list of countries and datasets used. As our measure of inequality, we use the Gini coefficient. The Gini is preferred largely because it enables us to easily relate our results about inequality within different demographic groups to the well-known Gini values of disposable and market income inequality in the US and elsewhere (such as those reported in Figures 1 and 2).

In Figure 3, we report inequality of labor incomes. We find there a result very similar to the one in Figure 2, that is, that the English-speaking countries and Israel report noticeably higher inequality than in the rest of these OECD countries. The five countries with the most unequal earnings distributions (at the household level) are Israel and four Anglophone countries; the US is ranked second highest. The labor income Ginis range from between 0.28-0.31 for the highly egalitarian Slovakia and Slovenia to 0.44 in the US and Israel. The median and mean labor income Gini is about 0.36. This can be compared with the median Gini of market income of 0.41; the market income Gini would be expected to differ from the labor income Gini because the former also includes capital income. The US thus has labor income inequality that is 20 percent higher than the OECD average (and market income inequality that is 21 percent higher). Thus, we establish immediately that market income inequality in the US – based on its dominant component, labor income -- is, relative to other OECD standards, on the high end.

Figure 3. Inequality of labor income
in 24 OECD countries, across working-age households,
(countries ranked by labor income inequality)



Note: Ginis based on equivalized labor income. Source: See Annex 2.

But we still do not know what exactly lies behind that high inequality and for that we need to disaggregate the working-age population into several demographic groups (defined below) and to look at labor income inequality within each of them. As is well-known, the Gini decomposition when the population is divided into different groups is composed of three terms: a weighted-sum of within-group inequalities, inequality which is the result of differences in mean incomes between the groups, and an overlap (residual) terms that reflects the homogeneity of the underlying populations. To understand the meaning of the latter, note that when incomes of the groups into which we have divided the population are so different that there is absolutely no overlap (e.g., all individuals from a mean-richer group have higher incomes than all individuals from a mean-poorer group), the overlap term becomes zero. It increases as there is more overlap between the incomes of individuals belonging to different groups. The overlap terms moves together with the narrowly defined within-inequality, and we shall treat them together.

We can write the Gini decomposition across recipients belonging to groups i (1, 2,... r) as

$$G = \frac{1}{\mu} \sum_{i=1}^r \sum_{j>i}^r (\bar{y}_j - \bar{y}_i) p_i p_j + \sum_{i=1}^r p_i s_i G_i + L \quad (1)$$

where μ = overall mean income, \bar{y}_i = mean income of i -th group, p_i = population share of i -th group, s_i = share of i -th group in total income, and L = the overlap term. The first term in (1) is the between-group inequality, the second term, the narrowly-defined within-group inequality, the third, the overlap term.

We can now see that higher overall US labor income Gini (G) may be the result of greater group Ginis (G_i), or greater share (s_i) of groups that have higher inequality of earnings, or finally, may be due to large mean income gaps between the groups (that is, to the between-component). In Annex 2, we show a formal decomposition of US earnings inequality against earnings inequality of other 23 countries, but here we focus first on within-group inequalities.

Disaggregating into household types – based on the number and gender of earners

In all countries, we divide the population into six main groups, based on the number and the gender of the earners in their households: households that contain (1) one female earner, (2) one male earner, (3) one male and one female earner, (4) two female earners, (5) two male earners and, finally, (6) three or more earners. Groups (1), (2), and (3) will be further subdivided into demographic groups, based on partnership and parenting status. (Note that, throughout this paper, all results are presented at the person level. When we refer to various household types, either their prevalence or their outcomes, we are reporting results about the persons who live in those household types).

Diagram 1 summarizes our typology of households. Earners are defined as people who report having received non-zero labor income during the year. Table 1 reports the composition of the working-age population, across the six household types, in these study countries.

Diagram 1. Typology of household types based on number and gender of earners, further disaggregated by demographic groups based on partnership and parenting status

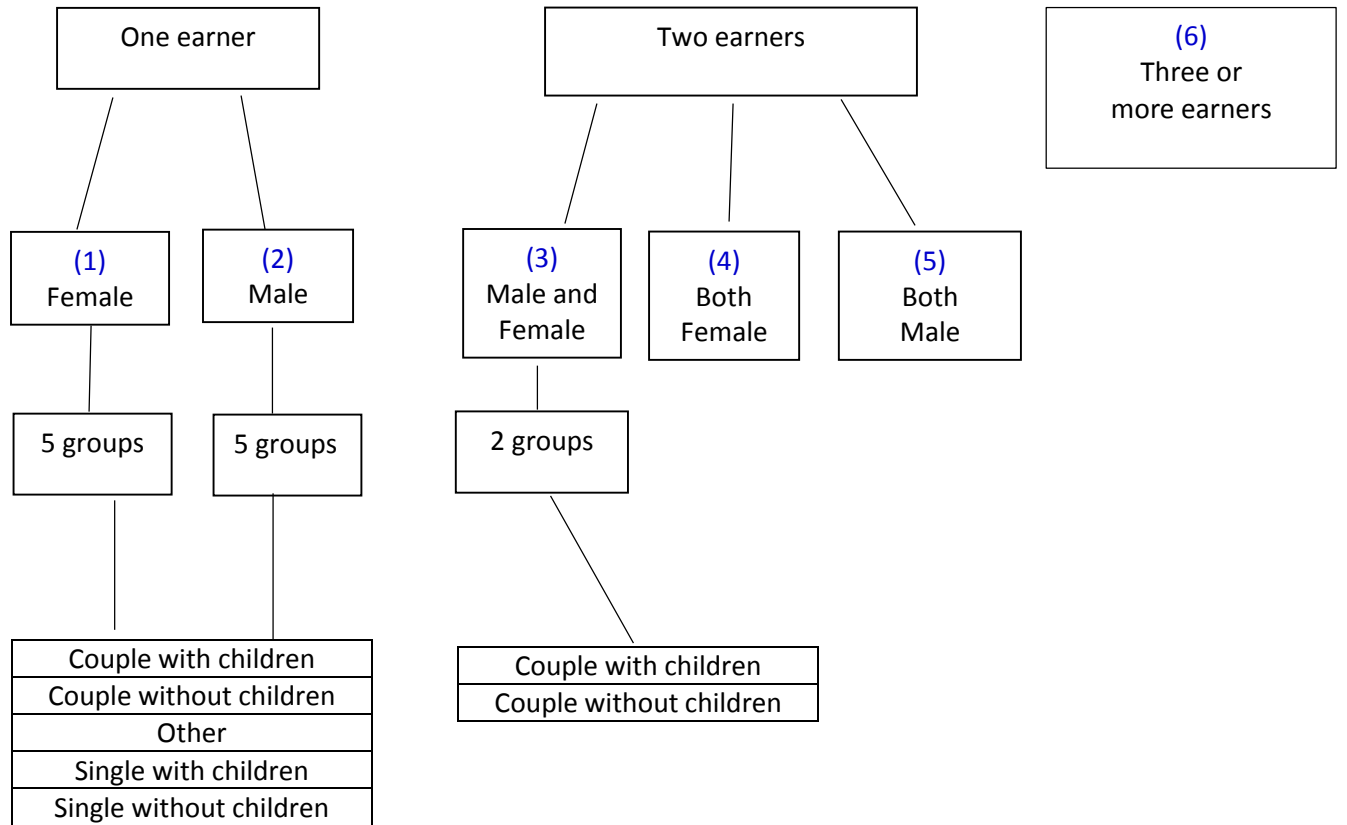


Table 1. Composition of working-age population, across six main household types
(where household types are based on the number and gender of earners)

	1	2	3	4	5	6	7
Country	1 Female Earner	1 Male Earner	1 Male, 1 Female Earner	2 Female Earners	2 Male Earners	3+ Earners	Sum of columns 2+3+6
Australia	9.2	21.6	39.7	2.3	3.6	22.7	83.9
Canada	9.5	14.7	43.5	2.5	3.2	25.5	83.8
Czech Republic	8.6	23.3	47.7	1.5	2.2	16.8	87.7
Denmark	11.8	13.4	47.8	2.1	2.1	22.1	83.3
Estonia	16.0	20.3	47.4	2.7	1.3	12.3	79.9
Finland	12.0	15.5	53.1	1.4	0.7	17.2	85.8
France	14.7	19.7	55.8	1.1	1.4	6.8	82.3
Germany	14.0	19.7	48.6	1.0	1.7	15.0	83.3
Greece	8.2	30.9	48.6	0.9	2.3	7.3	86.8
Hungary	17.6	24.7	39.6	1.6	0.7	9.1	73.4
Iceland	10.1	11.1	45.3	2.1	1.0	30.4	86.8
Ireland	18.2	23.6	41.1	2.2	3.9	11.0	75.7
Israel	10.7	24.1	40.8	1.9	3.1	19.2	84.1
Italy	10.1	34.0	44.8	0.8	4.0	6.3	85.1
Luxembourg	10.7	25.0	51.5	0.7	2.3	9.7	86.2
Netherlands	9.3	15.6	51.7	1.3	2.2	18.8	86.1
Norway	12.0	15.0	48.3	1.4	1.5	20.2	83.5
Poland	14.0	28.7	42.3	1.5	3.3	10.2	81.2
Russia	16.9	17.3	39.6	2.9	2.6	20.7	77.6
Slovak Republic	8.3	14.4	43.4	1.4	1.9	30.5	88.3
Slovenia	9.3	15.8	50.6	1.4	1.9	21.1	87.4
Spain	10.8	25.7	46.6	1.5	2.9	10.0	82.3
United Kingdom	13.2	21.2	46.6	1.8	2.2	14.7	82.5
United States	14.8	22.1	42.2	2.3	3.0	15.3	79.6
<i>Average</i>	<i>12.1</i>	<i>20.7</i>	<i>46.1</i>	<i>1.7</i>	<i>2.3</i>	<i>16.4</i>	<i>83.2</i>

As can be expected, three household types (based on earnings configurations) dominate to the extent that they include more than 80 percent of all persons in all counties -- except for

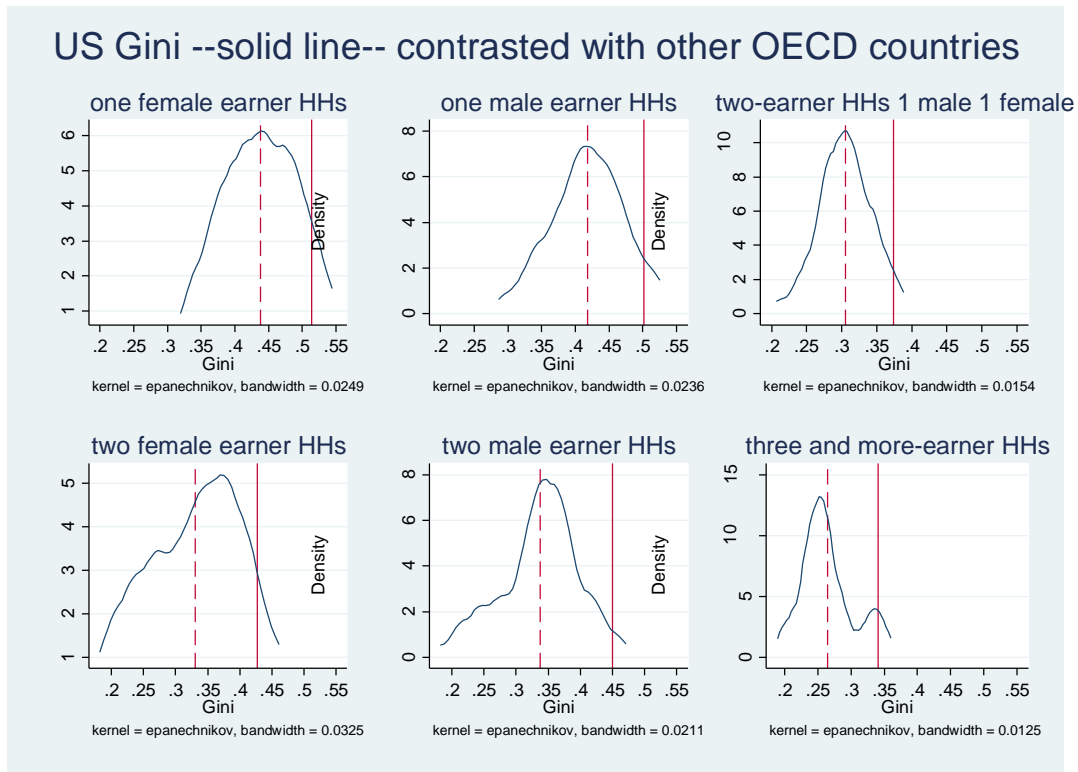
Hungary, Ireland and Russia.⁷ The three dominant groups are: the “traditional”⁸ two-earner households composed of one female and one male earner (with a cross-country average share of more than 46 percent), one-male-earner households with an average share of 21 percent, and households with three or more earners, with 16.6 percent. The other three groups are less prevalent, although households with only one female earner (cross-country average share of 12 percent) do play, as we shall see below, an important role.

In Figure 4, we take a first look at US labor income inequality within each of these household types in comparative context. For each type, the figure indicates the distribution of Gini coefficients across 24 countries, the position of the US Gini within that distribution (the solid line) and the mean cross-country Gini (the broken line). For example, the Gini for one-female-earner households ranges from about 0.35 in Slovenia and Italy (country names not shown) to just under 0.52 in the US and Canada (see leftmost graph in the upper row). The US Gini, at slightly under 0.52, is close to the maximum level of inequality that exists for such households in OECD (i.e., it is second to Canada).

⁷ In all three countries, the reason is an unusually high presence of one-female-earner households.

⁸ When referring to two-earner households, we use the term “traditional” to denote that one of these earners is male and one is female (as opposed to two earners of the same gender).

Figure 4. Inequality in six main household types, (where household types are based on the number and gender of earners)



Note: Each graph shows the distribution of Gini coefficients for a given household type across 24 OECD countries. The distribution (density) function is a smoothed histogram. The unweighted country mean Gini for 24 countries is shown by the dashed line. US Gini is shown by the solid line. The interpretation is as follows: if the US line is to the right of the dashed line, this means that US displays (for that particular household type) higher inequality than is usual for OECD countries. The more the US line to the right the higher US inequality compared to the rest of OECD. The opposite of course is true when the US line is to the left of the dashed line and closer to the beginning of the distribution. Source: see Annex 2.

The interpretation is the same for other graphs. The closer the solid line, giving the position of the US Gini, to the end of the distribution, the more of an outlier is the US level of inequality. (Another way to look at it is to compare the solid line to the broken line, giving the mean Gini calculated across countries for a given type of household). For three household types (one-male-earner, one male and one female earner, and two male earners), the US has the most unequal distribution of all countries; for the other three household types, the US distribution is the second most unequal.⁹ In no case, as can be readily checked from Figure 4, is US Gini even close to the mean Gini for a given household type, much less lower than it.

⁹ Note that the Ginis of these various household types differ substantially in these countries. Labor income inequality among “traditional” two-earner households is within a rather narrow range between 0.2 and 0.4 whereas, for example, one-female-earner and one-male-earner households display much

Therefore, breaking the overall labor earnings distribution into household types reinforces our previous finding: US labor income is very unequally distributed, not only in the aggregate, but *within* each household type we select.

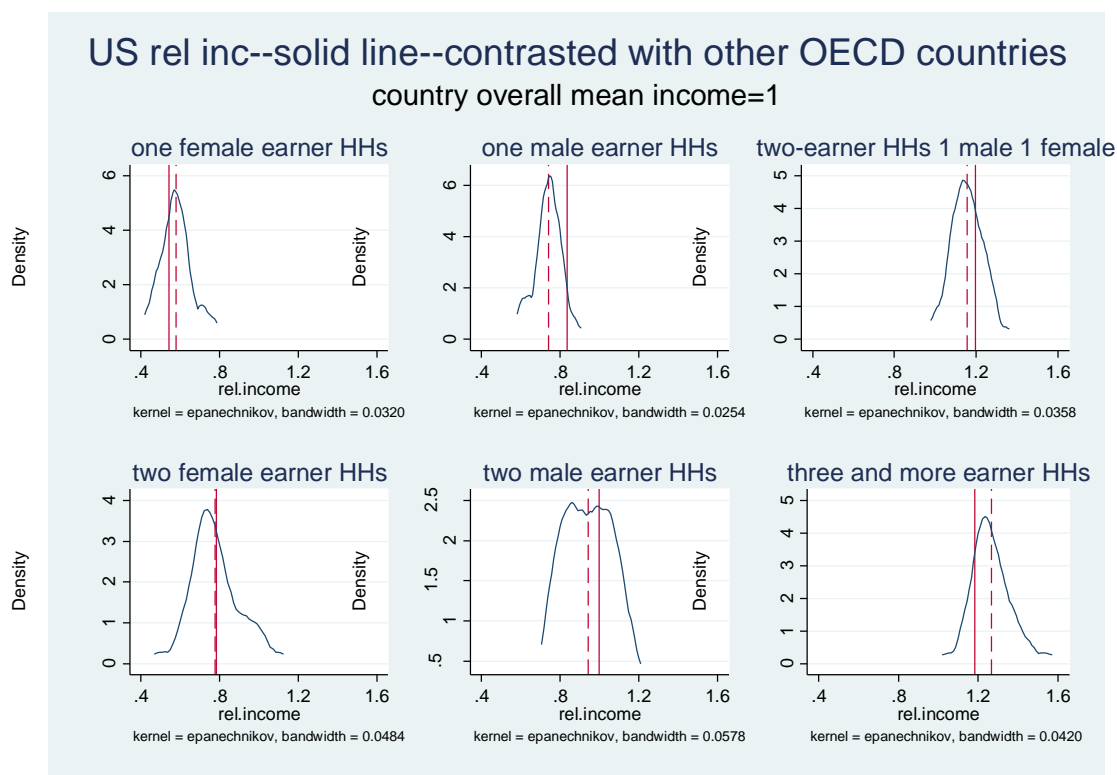
But to confirm this finding, we still need to look at *between*-group inequality (that is, between the six household types). Consider now Figure 5 which is constructed similarly to Figure 4 but where we look at the distributions of relative earning levels for a given household type. For example, one-female-earner households' relative earnings¹⁰ range from only 45 percent of the country mean (in Israel) to 75 percent of the country mean (in Hungary). The broken line, as before, shows the median value for the 24 countries (e.g., for one-female-earner households, it is 58 percent), and, again as before, the solid line shows the position of the US. Just a glance suffices to show that relative group mean earnings in the US are very similar to the median values for the 24 countries (with the exception of one-male-earner households whose US relative earnings are the second highest of all countries).

In other words, when it comes to the relative earnings of various demographic groups, the US is far from being an outlier: groups' relative earning levels track very closely to other rich countries' averages. This in turn implies that the origin of high labor income inequality in the US is not to be found in unusually high earnings of some demographic groups, and unusually low earnings of others, but in systematically high earnings inequalities *within* each individual household type.

greater ranges of inequality. However, this is not the topic with which we are concerned here. Our objective here is find the sources of differences between the US and comparable countries.

¹⁰ Note that this is household-size-adjusted (equivalent) labor income.

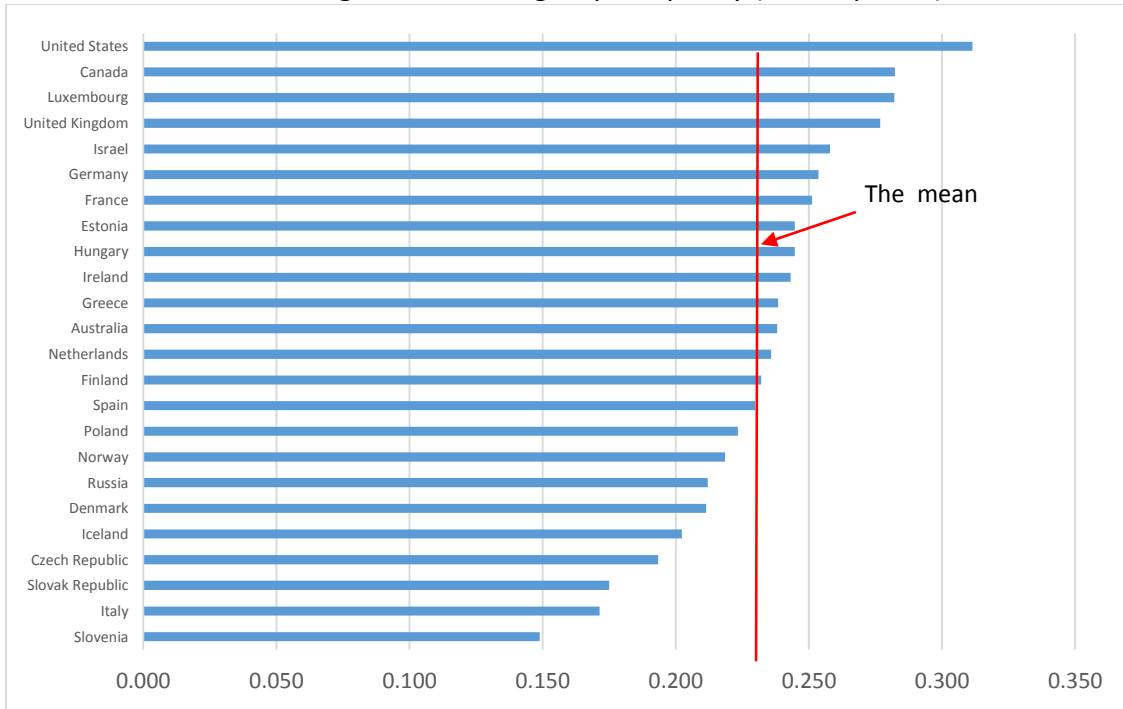
Figure 5. Relative income of six main household types



Note: US value: solid line. Mean for 24 countries: broken line. Source: see Annex 2.

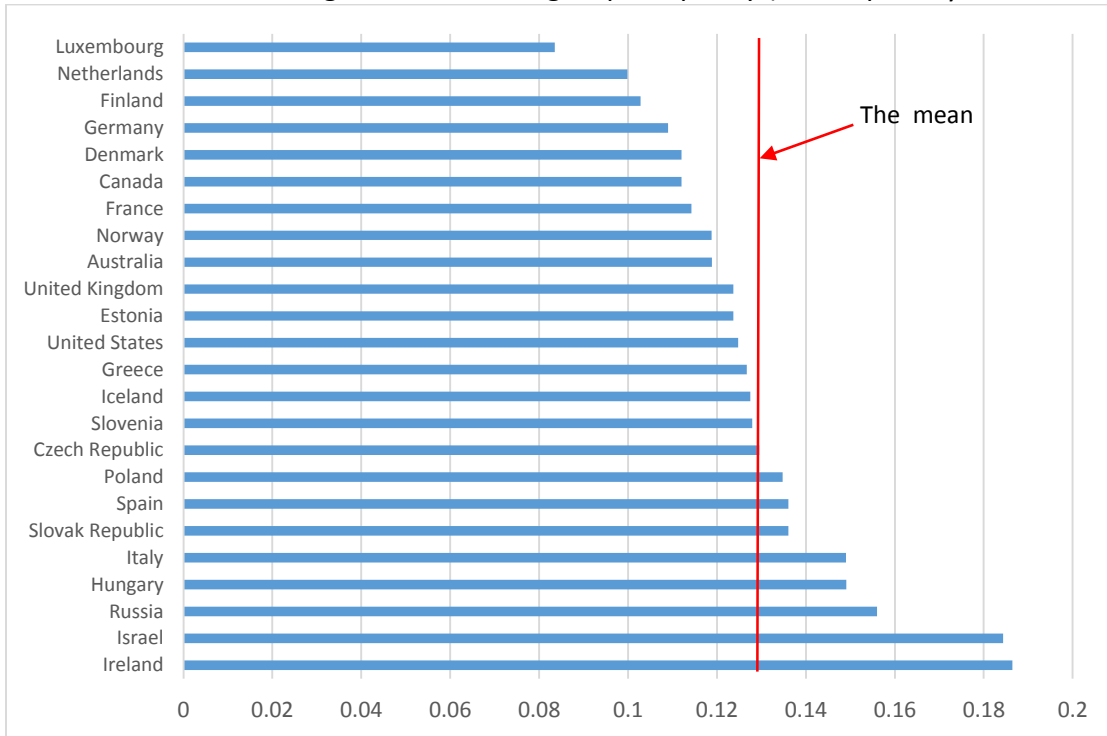
We confirm our conclusion by looking at Figures 6 and 7 (see the values in Annex 2) that show between- and within-group inequalities when individual data for 24 countries are decomposed into the six main household types. In Figure 6, countries are ranked by their within-group inequality (terms (2) and (3) from equation 1), and the US is far by the most unequal. The Gini value of 0.31 for the US implies that even if all mean earnings of the 6 household types were exactly equal, the overall labor income inequality would be 0.31. Adding between-group inequality does, of course, increase that inequality, but, as Figure 7 shows, the US is far from exceptional: its between-group inequality is almost exactly the same as the average for the 24 countries.

Figure 6. Within-group inequality (in Gini points)



Note: countries ranked by within-group inequality.

Figure 7. Between-group inequality (in Gini points)



We have thus established that US labor income inequality is, together with Israel's, the highest among all of these OECD countries, and that the source of that inequality is not to be found in vastly different mean labor incomes across different household types, but in the consistently higher inequality with which labor incomes are distributed within each household type. We now continue with our investigation by looking in greater detail into three household types: one-female-earner households, one-male-earner households, and two earner "traditional" households (which contain one female and one male earner).

3. Earnings inequality within one-earner and "traditional" households: Further disaggregation by partnership and parenting status

We begin by looking at households that contain only a single earner – one who is female. The prevalence of these household across the countries included here is very uneven: at the low end are Greece, Slovakia, and the Czech Republic where fewer than 9 percent of households contain only one earner, who is female. At the other end (as mentioned earlier) are Ireland, Hungary, Russia, and Estonia, which each contain more than 16 percent of households of this type. The US falls in the upper range, with the share of one-female-earner households being 15 percent.

In our next analysis, we divide one-female-earner households into five demographic subgroups, corresponding to the households in which they live: couple-headed households with one or more children, couple-headed households without children, single-headed¹¹ households with children, single-headed household without children, and others. The most common type among one-female-earner households in the US, and across the 24 countries included here, is a single-headed household with children. The next most prevalent types are couple-headed households with children (where, by definition, a female is the only earner), and a single-female-headed household with children. In the US, these three household types comprise almost 90 percent of one-female-earner households.

But is the distribution of labor income in such American households more unequal than in the other countries? Figure 8, with the same interpretation as above, provides an answer. In all cases, US inequality is greater than the mean inequality among 24 countries, and for single-headed one-female-earner households with and without children, the US' inequality ranking is fourth from the top. Particularly interesting is the situation of single-headed one-female-earner households with children where the US Gini is (a high) 0.48, nearly the same as Germany's and Ireland's and is overtaken only by Canada's Gini of 0.56. (The mean Gini across countries, for this type of household, is 0.40).

Very high inequality among single-headed one-female-earner households, both with and without children, in the US, clearly implies that they are economically and socially diverse. We find similar high heterogeneity among single one-male-earner households without children.

¹¹ Throughout this paper, we use the word "single" to mean, exclusively, a person who is not married/partnered. We do not use it to refer to the number of earners or persons in a household.

Next we look at relative incomes (see Figure 9). The situation here is familiar: US relative subgroup mean incomes are not dissimilar from the average situation in 24 countries. The differences are minimal (e.g., for a couple with a child, the average labor income is 41 percent of US overall mean vs. 45 percent in 24 countries). The only exception is the low income level of one-female-earner households with children: their relative income in the US is 40 percent of the overall mean while the countries' average is 50 percent. An ethnic/racial component may be important here, as we find (not shown in the graphs) that these households, when headed by Hispanics and African-Americans, have mean labor incomes that are only about 30 percent of overall US mean.

We now move to one-male-earner households where we keep the same household classification as for one-female-earner households. The prevalence of these households varies markedly across these countries. At the low end, in Iceland, Denmark, Canada, and Slovakia, their share is less than 15 percent. But at the high end, Italy and Greece have more than 30 percent of one-male-earner households. The US result falls near median with the share of such households being 22 percent.¹²

The results for inequality are familiar (see Figure 10): US households have a much greater labor income inequality than in the rest of the study countries, and for two groups in particular (couple-headed households with and without children) US inequality is the highest of all. But it is among the highest in the other three types of one-male-earner households as well.

Figure 11 indicates the results for relative income. Here again, US relative mean incomes by household/demographic type are similar to what we find in other countries with the exception of one-male-earner couple-headed households whose relative income is greater than the overall US, while in the rest of the countries it is, on the average, some 20 percent below the country mean. In effect, the US and Luxembourg have the highest relative income for this particular group.

For "traditional" (one male earner and one female earner) households, which comprise the largest share of all households, from 40 percent in Hungary and Russia to 55 percent in France (US with 42 percent is on the low side here), we look at only two subgroups: "traditional" households with, or without, children. US inequality is again very high (see Figure 12): either the highest of all countries (for couples with children with a Gini of 0.37 vs. the cross-country average Gini of less than 0.3), or the second highest (for couples without children). When it comes to relative incomes (see Figure 13), US relative labor income for two-earner households with children is almost exactly the same as the mean for 24 countries; it is higher than the mean however for couples without children.

¹² Note that the share of one-female-earner households across these OECD countries ranges from 8 to 18 percent. The share of one-male-earner households varies from 15 to 30 percent. The corresponding US values are 15 and 22 percent. Thus, neither US value is exceptional.

Figure 8. Inequality of 5 subgroups among one-female-earner households

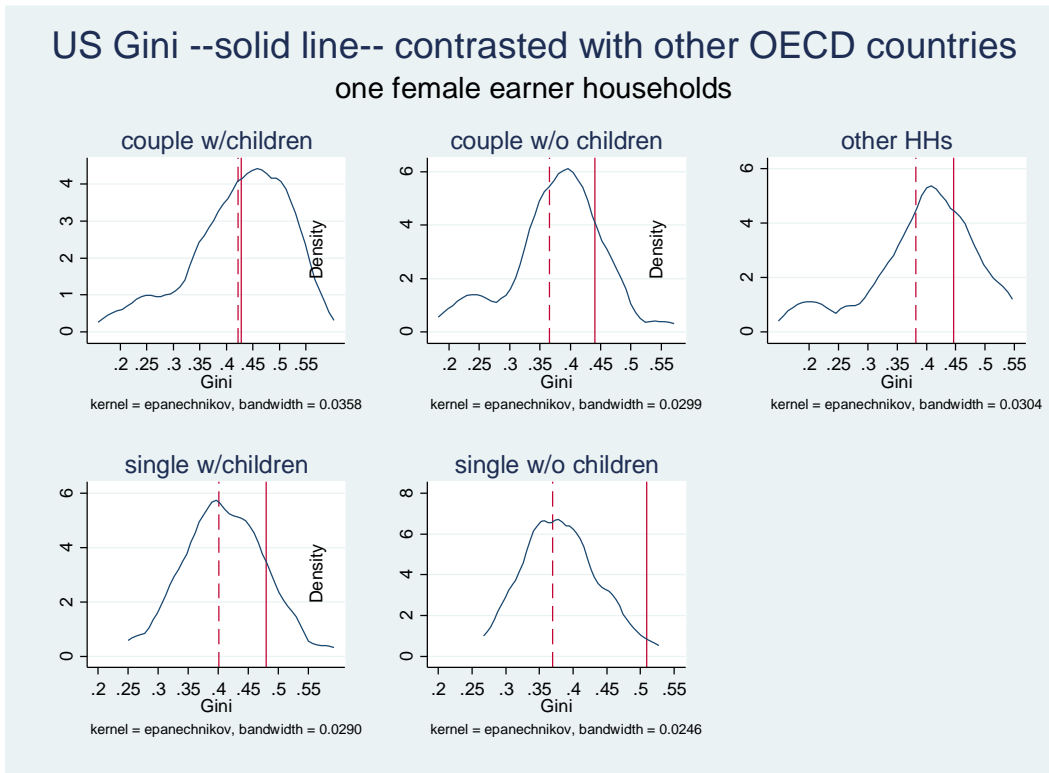
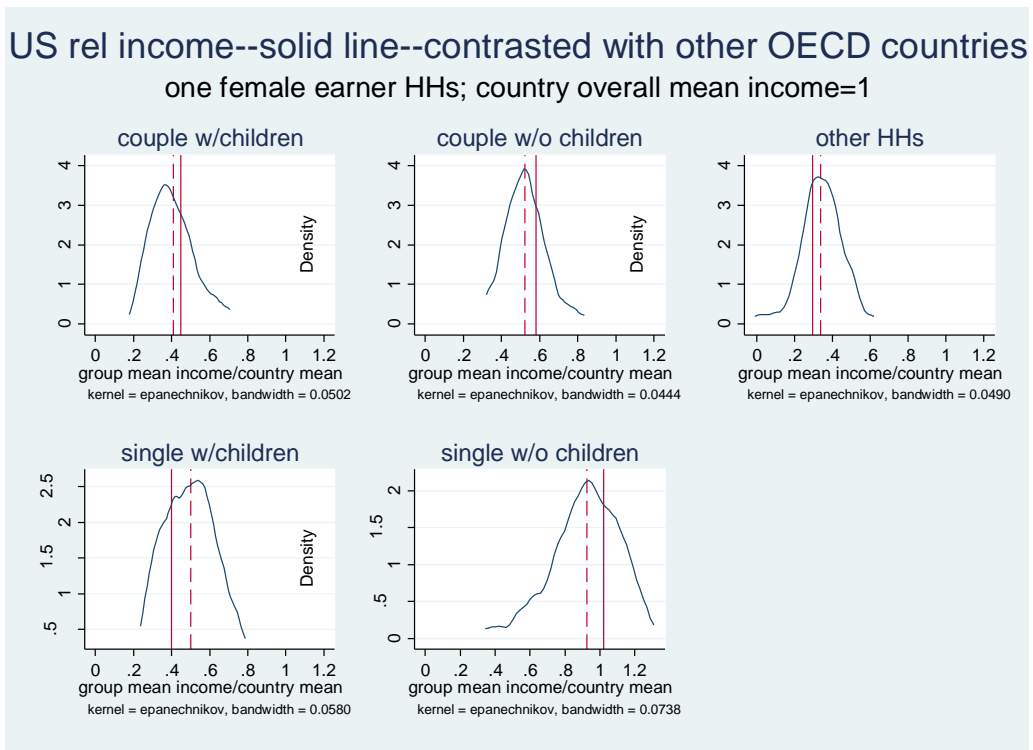


Figure 9. Relative income of 5 subgroups among one-female-earner households



Note: US value: solid line. Mean for 24 countries: broken line. Source: see Annex 2.

Figure 10. Inequality of 5 subgroups among one-male-earner households

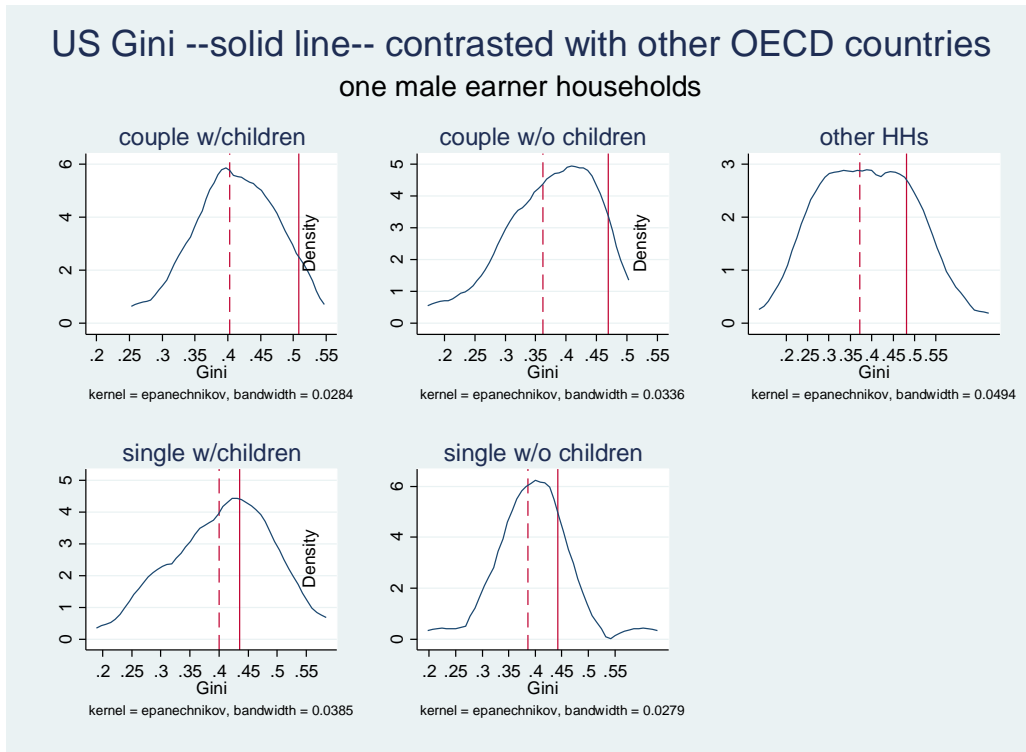
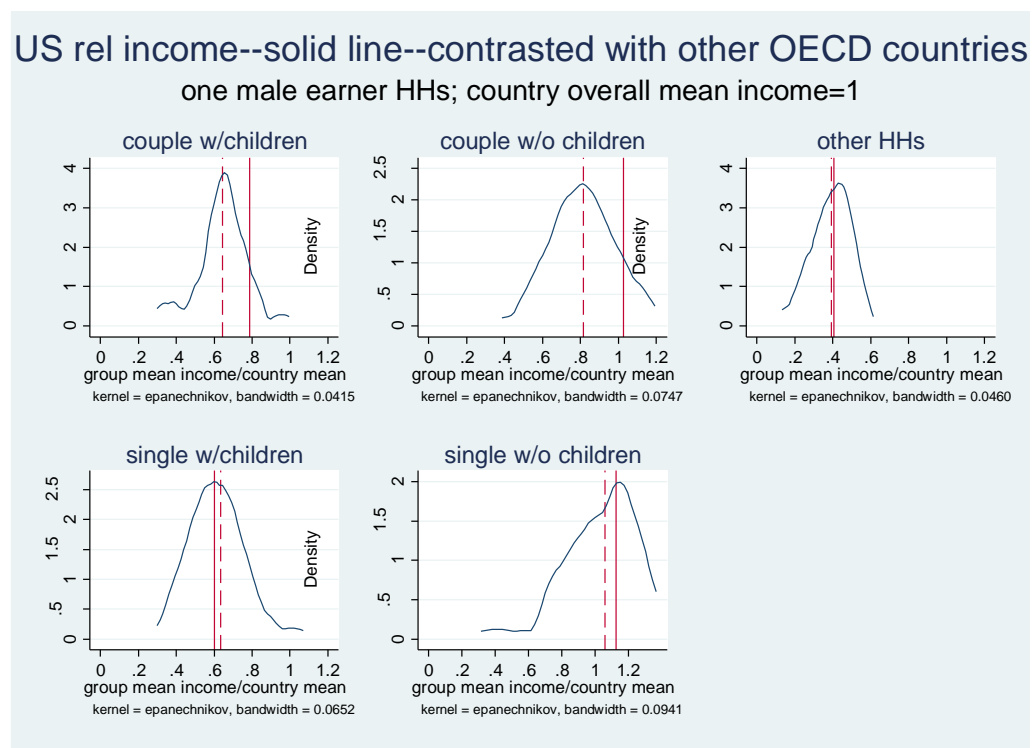


Figure 11. Relative income of 5 subgroups among one-male-earner households



Note: US value: solid line. Mean for 24 countries: broken line. Source: see Annex 2.

Figure 12. Inequality of two subgroups of “traditional” households

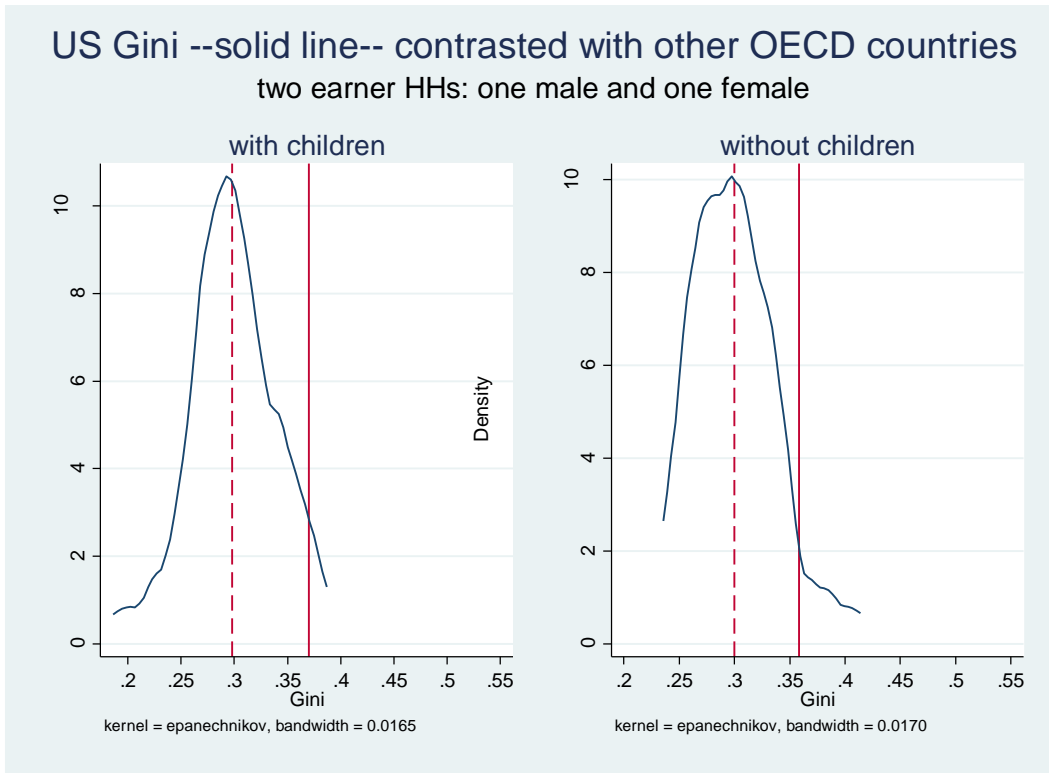
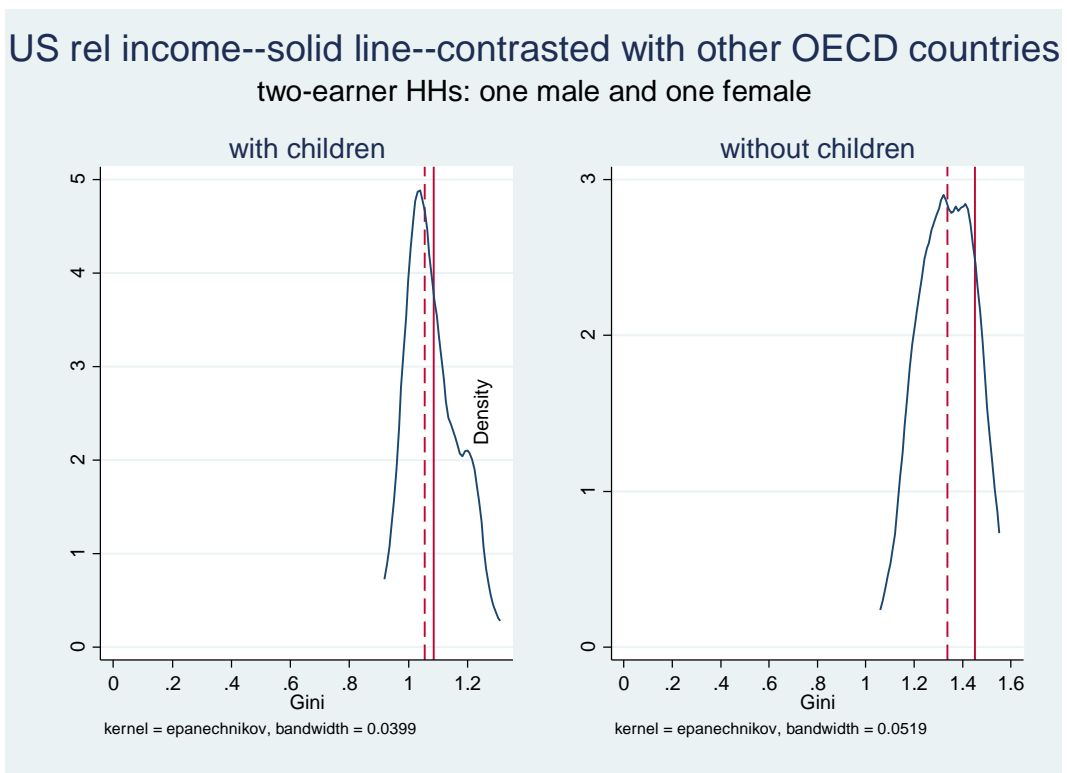


Figure 13. Relative income of two subgroups of “traditional” households



Note: US value: solid line. Mean for 24 countries: broken line. Source: see Annex 2.

4. Summary and conclusions

High inequality in US disposable income, calculated across households, is not only the product of less redistribution in the US as compared with similar OECD countries; it is principally due to greater inequality in the underlying market income. The primary component of market income is income from labor. In this paper, we have shown that equalized labor income across households is indeed more unequally distributed in the US than in all (but one) of 24 OECD countries. Thus inequality in the distribution of labor income goes a long way toward explaining inequality of disposable income.

We were also interested in assessing whether labor income inequality is pervasive, across household types and demographic subgroups, or whether it may be due to either exceptionally high or exceptionally low average labor incomes received by some groups. We conclude that within-group inequality of labor incomes in the US is, in almost all cases, high by OECD standards. So it is neither an unusual household composition, nor unusually high mean labor incomes of some demographic groups that explain high US earnings inequality, but simply the fact that high and low labor incomes are universally spread across all household/demographic categories.

Table 2 shows that, when we look at individual demographic groups used in the paper, the US' inequality ranking is uniformly high. The average US rank is 2.8, and, in 14 out of 18 cases, US within-group inequality is among the three top inequalities. When we look, however, at groups' and subgroup' relative mean incomes, most of them are quite close to the OECD average. In only three cases are US relative labor incomes rather high (one-male-earner households living in a couple with or without children, and "traditional" households with no children) and in only one case is US relative income unusually low (three-or-more-earner households).

Table 2. US inequality and relative income rankings
(compared to other OECD countries)

Type of household	Rankings among 24 OECD countries (Top = highest; 24 =lowest)	
	By inequality	By relative income
One-female-earner	2	17
Couple w/children	5	8
Couple w/o children	4	8
Other	6	18
Single w/children	3	19
Single w/o children	3	9
One-male-earner	Top	2
Couple w/children	Top	2
Couple w/o children	Top	3
Other	3	12
Single w/children	8	14
Single w/o children	4	10
“Traditional”	Top	8
w/children	Top	9
w/o children	2	5
Two female earners	2	9
Two male earners	Top	10
Three + earners	2	20
<i>Mean of all ranks</i>	<i>2.8</i>	<i>10.2</i>

To tease out the specificity of US inequality, we estimated regression where the Gini coefficient for each country/group is regressed on groups’ relative mean income (i.e., relative to the mean of that country) and dummy variables for such groups (15) and countries (24). We are, of course, mainly interested in the coefficient on the dummy variable for the US. The results are reported in Table 3.

Compared to the omitted country (Denmark, with very low inequality), the coefficient on the US dummy is 0.059 and is statistically significant at 0.1 percent. This means that on average (of 15 family types), US inequality is some 5.9 Gini points greater than Denmark’s. Of all these study countries, the US coefficient is the greatest, followed by Canada’s (0.054).

Table 3. US income inequality exceptionalism
(dependent variable: Gini coefficient of household type/country)

Variable		Coefficient (p value)
Relative group mean		-0.029 (0.23)
Three or more earners		-0.029 (0.08)
Two earners	Female	0.023 (0.17)
	Male	0.035* (0.16)
One female earner	Couple with children	0.097** (0.00)
	Couple without children	0.054** (0.01)
	Other	0.063** (0.01)
	Single with children	0.084** (0.00)
	Single without children	0.069** (0.00)
One male earner	Couple with children	0.090** (0.00)
	Couple without children	0.057** (0.00)
	Other	0.059** (0.01)
	Single with children	0.084** (0.00)
	Single without children	0.087** (0.00)
One male one female earner	Couple without children	0.086 (0.61)
US dummy		0.059** (0.00)
Adjusted R ² (F)		0.57 (15.0)
Number of observations		400

Note: The omitted family type is one male / one female earner with children, and the omitted country is Denmark. Dummy variables for other countries are not shown.

Our overall conclusion is that US market income inequality – specifically, inequality of labor income – is not an outcome that can be readily addressed by changing the relative economic position of persons within selected household groups. High levels of inequality in the US are found across all household types; they all contain households with very high and very low labor incomes. The generalized policy implication of this finding is that if policy-makers aim to reduce US labor (and thus market, and ultimately disposable) income inequality, they need to design and implement policy strategies that affect diverse households.

Annex 1.
LIS datasets used

	Name of survey	Year
Australia	Household Expenditure Survey (HES) and Survey of Income and Housing (SIH)	2010
Canada	Survey of Labour and Income Dynamics (SLID)	2010
Czech republic	Survey on income and living Conditions / EU-SILC	2010
Germany	German Social Economic Panel Study (GSOEP)	2010
Denmark	Statistics Denmark: Law Model	2010
Spain	Encuesta de Condiciones de Vida (ECV) / Survey on Income and Living Condition (EU- SILC) 2010 survey	2010
Estonia	Estonian Social Survey (ESS) / EU-SILC (Survey on Income and Living Conditions)	2010
Finland	Survey on Income and Living Conditions (SILC), formerly known as Income Distribution Survey (IDS)	2010
France	Family Budget Survey (BdF)	2010
UK	Family Resources Survey (FRS)	2010
Greece	Survey on Income and Living Conditions / EU- SILC 2011 survey	2010
Hungary	Household Monitor Survey	2009
Ireland	Survey on Income and Living Conditions / EU-SILC	2010
Iceland	Survey of Income and Living Conditions (EU-SILC)	2010
Israel	Household Expenditure Survey	2010
Italy	Survey on Household Income and Wealth (SHIW)	2010
Luxembourg	Panel socio-économique "Liewen zu Letzebuerg" (PSELL III) / Survey on Income and Living Conditions (EU-SILC)	2010
Netherlands	Survey on Income and Living Conditions (EU-SILC)	2010
Norway	Household Income Statistics (formerly based on the Income Distribution Survey)	2010
Poland	Household Budget Survey	2010
Russia	Russia Longitudinal Monitoring Survey-Higher School of Economics (RLMS-HSE)	2010
Slovakia	Statistics on Income and Living Conditions (EU SILC 2011)	2010
Slovenia	Household Budget Survey	2010
US	Current Population Survey – ASEC (Annual Social and Economic Supplement)	2010

Annex 2.

Decomposition in within-group, between-group and overlap Gini components
(for six household types); all in Gini points

	(1) Overall labor Gini	(2) Between component	(3) Narrow within component	(4) Overlap	(5) = (3)+(4) Total within component
Australia	0.357	0.119	0.002	0.236	0.238
Canada	0.394	0.112	0.003	0.280	0.282
Czech republic	0.323	0.129	0.002	0.192	0.193
Germany	0.363	0.109	0.005	0.248	0.254
Denmark	0.323	0.112	0.003	0.208	0.211
Spain	0.366	0.136	0.003	0.227	0.230
Estonia	0.368	0.124	0.006	0.238	0.245
Finland	0.335	0.103	0.004	0.228	0.232
France	0.365	0.114	0.006	0.245	0.251
UK	0.400	0.124	0.004	0.272	0.277
Greece	0.365	0.127	0.002	0.237	0.238
Hungary	0.394	0.149	0.011	0.234	0.245
Ireland	0.430	0.186	0.008	0.235	0.243
Island	0.330	0.127	0.002	0.200	0.202
Israel	0.442	0.184	0.003	0.255	0.258
Italy	0.320	0.149	0.003	0.169	0.171
Luxembourg	0.366	0.084	0.003	0.279	0.282
Netherlands	0.336	0.100	0.002	0.234	0.236
Norway	0.337	0.119	0.003	0.215	0.218
Poland	0.358	0.135	0.005	0.218	0.223
Russia	0.368	0.156	0.007	0.205	0.212
Slovakia	0.311	0.136	0.001	0.173	0.175
Slovenia	0.277	0.128	0.002	0.147	0.149
US	0.436	0.125	0.006	0.305	0.311
<i>Non-US mean</i>	<i>0.361</i>	<i>0.129</i>	<i>0.004</i>	<i>0.228</i>	<i>0.232</i>
<i>US / non-US mean</i>	1.21	0.97			1.34

REFERENCES

- Brandolini, Andrea, and Timothy M. Smeeding (2006), "Patterns of Economic Inequality in Western Democracies: Some Facts on Levels and Trends", *Political Science and Politics*, 39 (1), January, 21–26.
- Gabaix, Xavier, and Augustin Landier (2008), "Why has CEO pay increased so much?", *Quarterly Journal of Economics*, vol. 23, pp. 49-100.
- Gornick, Janet C., and Branko Milanovic (2015), "Income Inequality in the United States in Cross-National Perspective: Redistribution Revisited", LIS Research Center Brief, No. 1, May. Available at http://www.gc.cuny.edu/CUNY_GC/media/CUNY-Graduate-Center/PDF/Centers/LIS/LIS-Center-Research-Brief-1-2015.pdf
- Luxembourg Income Study (LIS) Database, <http://www.lisdatacenter.org> (multiple countries; {January 10, 2016- June 12, 2016}). Luxembourg: LIS.
- Mishel, Lawrence, and Alyssa Davis (2015), "The CEOs make 300 times more than typical workers", Economic Policy Institute Issue Brief No. 399, June 2015. Available at <http://www.epi.org/files/2015/top-ceos-make-300-times-more-than-typical-workers.pdf>
- Mishel, Lawrence (2015), "Causes of wage stagnation", Economic Policy Institute, January 6.
- Organization for Economic Cooperation and Development, OECD (2011), *Divided We Stand*, Paris: OECD.
- Piketty, Thomas (2014), *Capital in the Twenty-First Century*, Harvard University Press.
- Piketty, Thomas, and Emmanuel Saez (2006), "The Evolution of Top Incomes: A Historical and International Perspective", *American Economic Review*, 96 (2), May, 200–205.