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# Can Income Redistribution Help Changing Rising Inequality?



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**In this article compares the rise in inequality concerning net household incomes in a number of European countries and Canada, the USA and Australia. Two important factors are used to explain this worrying trend: a growing of unequal market incomes and/or a declining redistribution of income through taxes and transfers.**

## **Rising income inequality: Market incomes and redistribution**

Inequality has risen in most countries over the last three decades. A broad set of countries, ranging from Denmark, Finland, Sweden and the Netherlands, to the Baltics states and other CEE countries, and including also the UK and, outside Europe, Australia, Canada and the USA, have seen a rise in inequality by 28% since the early 1980s. A surprisingly large part of the rise (19%) is concentrated in the 1990s (Appendix Table 1). This take on inequality concerns net household incomes, which result after social transfers have been added and income taxes subtracted from market incomes. Therefore a combination of these two different factors is responsible for the increase: a growing inequality of market incomes and/or a declining redistribution of income through taxes and transfers. We first take a look at the former.

The dispersion of market incomes is not well known in a comparable format as net-income inequality. This is due partly to problems of statistical observation (especially of incomes from capital) and definition (e.g., are capital-funded pensions included? or rents on owner-occupied housing?), partly to problems of inequality measurement as the Gini coefficient has difficulty dealing with negative incomes (which also relate to capital), and partly to the use of equivalisation for household composition (see Appendix Box 1). However, from other data it transpires that market incomes have grown significantly more unequal. First, top incomes have gained notoriety in recent years.<sup>1</sup> Again for a broad range of countries we find a 21% growth in Top-10% shares since 1980, with more than half of this concentrated in the 1990s (Appendix Table 1). Top-1% incomes trump this growth with a 37% increase and an even stronger concentration in the 1990s. Second, labour earnings are the most important type of market income but, contrary to top incomes, they do not concern the full population but only the part with paid work. For a proper comparison to household income inequality we concentrate on annual earnings received by households. Interesting comparative research (RED, 2010) shows strong growth between the early 1980s and the mid-2000s for the variance (a measure that pays more attention to the bottom end than the Gini coefficient) in the USA, the UK, Sweden, and Germany (+57%, 49%, 71%, and 105% respectively). Again the rise concentrates significantly in the 1990s. However, not all countries follow necessarily the same pattern: the earnings inequality of Danish households has hardly changed (+6%).<sup>2</sup>



<sup>1</sup> These concern gross incomes after transfers but before taxation, and their share in total income is a different measure from the Gini coefficient. As high-income households plausibly receive relatively less of the transfers, their share in gross income will plausibly underestimate that in market incomes.

<sup>2</sup> Bjørnskov et al. (2012, 23).

Though in principle it seems sufficient to know that both market-income inequality and net-income inequality have increased, to warrant the conclusion that the redistribution of incomes has diminished, direct research can support this claim and also enables distinguishing the roles of taxation and of transfers. The RED (2010) contributions show also that for households with earnings their disposable-income inequality has trended up. Sharpe and Capeluck (2012) find for Canada that less than half of the increased market-income inequality since 1980 has been taken away by transfers and taxes. Blomgren et al. (2012, 15) point to a strong decline in redistributive effects in Finland since the mid-1990s, in spite of the fact that role of transfers actually grew. Bjørnskov et al. (2012, 14) show an increased redistribution and only a small increase in net-income inequality for Denmark, but they also found little change in household market-income inequality. Brewer and Wren-Lewis (2012, Table 5) indicate an increase in British market-income inequality by 74% (variance – I have left out pensions) and a larger increase in net-income inequality (90%). In a nutshell, even if redistribution is increasing it is usually insufficient to compensate for the growing dispersion of market incomes.

### **Fundamental change in labour-market income distribution**

It has been a long and still unfinished adieu to the world of the single breadwinner (if it ever existed). Currently, dual- and triple-earner households are a majority (57%) of all households receiving an income from paid

labour (gross annual earnings) in Europe, and they comprise a 75% share of all employees. Importantly, and unsurprisingly, multiple-earner households concentrate towards the top of the household earnings distribution. Single-earner households make up 88% of the bottom decile of EU labour-earning households and only 11% of the top decile, and inversely for multiple-earner households (Salverda and Haas, 2014). The few single-earner households who make it to the top, enjoy being also at the top of the individual earnings distribution; however, the many multiple-earner households get there by combining earnings from lower levels in the same distribution.

This has given rise to a complex situation that institutions and policies of income redistribution are still grappling with. Panousi et al. (2013) point out the permanent nature of the change. The multiple-earner growth has gone hand in hand with shifts towards female employment and part-time employment, albeit in some countries more than others, which both have sharpened during the crisis, making the increase in open unemployment more muted than expected. Shorter working hours and a lower level of (hourly) pay now hang together more strongly than before: part-time jobs concentrate at lower levels of pay and occupations, especially in the private sector. At the same time the 'new normal' of multiple earning has pulled the additional job growth of the 1990s and 2000s towards households that already had a person in employment, resulting in a limited reduction in household joblessness at best – if not an increase. Thus the personal employment-to-population rate could grow while the household employment rate lagged or even declined. The UK provides the sharpest example of this separation. In

1980 the two employment rates were about equal at 72-74%, but up to 2005 the personal employment-to-population rate increased by 5 percentage points while the household employment rate fell by 7 percentage points, opening up a 12 percentage-points gap (Blundell and Etheridge, 2010, in RED 2010). Note also that for the EU as a whole the household employment rate has suffered further from the current crisis (-2 percentage points).

The new situation has several important implications. First, these developments blunt the use of the traditional unemployment rate as a helpful labour-market indicator. It is important to stress also that multiple earners concern couples and larger households, whilst at the same time the share of single-person households has risen rapidly – roughly doubling in recent decades. So, even if multiple earners in a household may provide some insurance against the consequences of unemployment as the partner can continue in work, this will not help single-person households. Second, the increased individual (annual) earnings inequality has become an important contributor to the rising inequality of household earnings indicated above. It reflects differences in hourly pay levels<sup>3</sup> and their growing conjunction with (part-time) hours. Third, as a result of the combination of two or more earners in a household low-wage workers may now be found in households high up the income distribution. This blunts general individual-focused tools for limiting wage inequality, not only traditional ones such as the minimum wage, but also newer ones such as tax credits for employed individuals or exemptions from employer contributions. It makes the case though for targeted,

household-dependent measures such as the Earned Income Tax Credit. Fourth, in spite of their high incomes households at the top may pay less in taxes than expected – at least in countries having independent taxation of individual earnings – and add to net-income inequality. For example, households in the incomes top decile in the Netherlands pay an average effective tax rate of slightly less than 20% of gross income but this rate diverges significantly between second earners (12%), first earners (22%), and single earners (27%-28%). The flip side of this is that it may affect solidarity: why accept paying more tax as an individual because you are a partner to another earner and together obtain a higher household income than another individual who earns the same amount but has a non-earning partner or no partner at all?

## Policy contributions and remedies to income inequality

Policies of redistribution encompass social transfers, based on social assistance and social insurance, on the one hand and taxation on the other hand. The weights of the two as well as their effects differ significantly between countries. However, certain changes in recent decades have been widely shared. The levying of income tax has been reduced significantly. Particularly, top marginal rates of personal income tax have declined by a quarter, from 56% in 1981 to 41% in 2005.<sup>4</sup> Most of the decline is concentrated between 1984 and 1991. This has lowered current tax receipts and therewith the funding of redistribution. Equally important, it also increasingly has a long-run behavioural effect – stimulating high pay in



<sup>3</sup>The P90:P10 ratio has surged by around 30% in the USA, Canada, Denmark, Netherlands and Germany between the early 1980s and the mid-2000s.

<sup>4</sup>Continuously available for 15 of the above 30 countries in World Tax Indicators database, see Sabirianova Peter et al. (2010).

firms and the growth of top incomes (Piketty, Saez and Stantcheva, 2011). It may also stimulate savings<sup>5</sup> and the long-run building up of wealth. The introduction of lower taxes on capital income in two-tier systems has further encouraged this. For Finland the growth of top incomes is attributed to rising capital incomes and their reduced taxation introduced in 1993; in spite of a rise, redistribution has been unable to compensate for the concomitant rise in inequality (Blomgren, 2012). This links to the rising importance of inheritance in times of lower economic growth (Piketty, 2014).<sup>6</sup>

However, income tax is only half the story of direct taxation. Many countries levy non-progressive contributions to social security and overall progressivity differs little between countries including high-tax ones (OECD, 2012). Adding indirect taxation to this, value-added tax (VAT) adds yet another important factor with a regressive effect on income inequality (Figari and Paulus, 2012). Low-income households consume a larger part of their incomes, if not more than it, and therewith contribute relatively higher amounts of VAT. Worryingly, EU countries raised VAT rates significantly as one of their responses to the financial crisis.<sup>7</sup>

Next to taxation, transfers are the main artery of redistribution. As said, its importance varies across countries. Sharpe and Capeluck (2013) ascribe 70% of the effect to transfers and only 30% to taxation. Brewer and Wren-Lewis (2012) show how the increasing inequality of market incomes (+74%) went together with increased mitigation by taxation (+77%), which however remained insufficient while the mitigating effect of transfers trailed far behind (+11%). From an in-depth enquiry into the effects of redistribution in the face

of rising inequality Marx and Van Rie (2014) conclude that reduced redistribution was often the main reason why inequality rose after the mid-1990s. Next to both taxes and transfers, which define disposable income, the access of households to social services (health care, education, family support and transfers to the elderly) determines the actual significance of their net income, which differs greatly in international comparison. Here Marx and Verbist (2014) conclude that "The best performers among the rich countries in terms of economic, employment, social cohesion, and equality outcomes have one thing in common: a large welfare state that does several things at the same time, investing in people, stimulating and supporting them to be active, and also adequately protecting them and their children when everything else fails."

## Discussion

Redistributive policies have continued to reduce inequality, but even when their size has grown the effect has diminished in the face of strongly rising inequality in market incomes, particularly household earnings from labour. It puts on the agenda the need of directly addressing the inequality of market-incomes inequality, e.g. by introducing or augmenting minimum wages and by taking away the undue rent seeking that seems to have overtaken the highest levels of pay. Though the minimum wage certainly helps in improving the living wage of households, its effect on the income distribution has become more muted. Its main roles are, first and as always, preventing excessive downward wage competition that negatively affects productivity growth and human-capital investment, and,

<sup>5</sup> Domeij et al (2010, 193; in RED 2010) find an increased savings rate for high incomes in Sweden after 1990.

<sup>6</sup> See also Economist 4 January 2014, and Financial Times 7 January 2014.

<sup>7</sup> Bargain et al. (2013) come to a favourable conclusion about redistributive effects during the financial crisis but do not include indirect taxation.

second, limiting the finances needed for redistribution to low-earnings families. The British government has got that point recently.<sup>8</sup>

Much analytical and policy-making attention is paid to low incomes and poverty but very little is available about high incomes and pay. Recently, the OECD has introduced a (still very incomplete) high-pay statistic next to the incidence of low pay but even full-grown it will offer no more than the very beginning of systematic comparative study of the top end's contributions to inequality and its underlying factors. The World Top Incomes Database has been extremely successful in helping to focus on such incomes but its maintenance depends fundamentally on voluntary contributions. Extension and deepening of the database and the systematic analytical embedding of its indicators are needed.

In addition, the own effects of taxes and transfers on market-incomes inequality growth shall be scrutinised: the long-run behavioural effects of reduced taxation on high incomes, capital incomes, and inheritance. International coordination seems highly advisable to put an end to the existing leap-frogging of tax-rate setting which, going in a downhill direction, can only end in a disaster of broken legs and bones. The same holds for the effects of individual-based taxation on household outcomes. There is no reason to reorient towards the household and joint taxation; instead general tax credits should be checked for their household effects and replaced by targeted credits where desirable. Beyond the immediate effect on the distribution of earnings and incomes the long-run focus should be on the household distribution of employment, explicitly including the working-hours dimension. Thus the efficacy and

efficiency of the redistributive apparatus may be significantly improved at the same time.

Equally, the long-run view of benefits and social transfers implies strong effects of enduring, inter-generational inequality of cuts motivated by the short run.

Can taxation and transfers be changed in a world characterised by quantitative easing as about the only active policy aimed at overcoming the crisis, which has had little effect other than uplifting the financial values held by top-income households? Not easily, and the turnaround will be political as much as economic. We all know that poor neighbourhoods can be successfully turned around, so why not countries? For country inequalities, the Latin American example indicates that it can be done (Bird and Zolt, 2013). Capturing high incomes and top wealth cannot be too difficult with the help of Bloomberg's daily detailed statistics of the very rich. ■

<sup>8</sup> A structural increase of its level, preferably with EU commitment to a fixed relative level at 60% of the median hourly wage, is to be preferred over continuous political involvement in minimum-wage setting.

## References

- Bargain, Olivier, Tim Callan, Karina Doorley, and Claire Keane. 2013. *Changes in Income Distributions and the Role of Tax-Benefit Policy during the Great Recession: An International Perspective*. IZA Discussion Paper No 7337. <http://ftp.iza.org/dp7737.pdf>
- Bird, Richard, and Eric Zolt. 2013. Taxation and Inequality in the Americas: Changing the Fiscal Contract? International Center for Public Policy Working Paper 13-15, Georgia State University. <http://aysps.gsu.edu/isp/images/ispwp1315.pdf>
- Bjørnskov, Christian, Ioana Neamtu and Niels Westergård-Nielsen. 2012. *Growing Inequality and Its Impacts in Denmark*. GINI Country Report. <http://gini-research.org/system/uploads/509/original/Denmark.pdf?1373978704>.
- Blomgren, Jenni, Heikki Hiilamo, Olli Kangas, and Mikko Niemelä. 2012. *Growing Inequalities and Their Impacts in Finland*. GINI Country Report. <http://gini-research.org/system/uploads/438/original/Finland.pdf?1370077250>.
- Brewer, Mike, and Liam Wren Lewis. 2012. Accounting for changes in income inequality: Decomposition analyses for Great Britain, 1968-2009. ISER Working Paper No 2012-17. <https://www.iser.essex.ac.uk/publications/working-papers/iser/2012-17>
- Debacker, Jason, Shanthi Ramnath, Bradley Heim, Ivan Vidangos and Vasia Panousi. 2013. Rising Inequality: Transitory or Persistent? New Evidence from a Panel of U.S. Tax Returns. *Brookings Papers on Economic Activity*, 46:1, 67–122.
- Figari, Francesco, and Alari Paulus. 2012. *The Impact of Indirect Taxes and Imputed Rent on Inequality: A Comparison with Cash Transfers and Direct Taxes in Five EU Countries*. GINI Discussion Paper No 28. [http://www.gini-research.org/system/uploads/371/original/DP\\_28\\_-\\_Figari\\_Paulus.pdf?1342692872](http://www.gini-research.org/system/uploads/371/original/DP_28_-_Figari_Paulus.pdf?1342692872).
- Marx, Ivo, and Tim van Rie. 2014. The Policy Response to Inequality: Redistributing Income. In: Salverda et al. (eds), 2014. Chapter 10.
- Marx, Ivo, and Gerlinde Verbist. 2014. The Policy Response: Boosting Employment and Social Investment. In: Salverda et al. (eds), 2014. Chapter 11.
- OECD. 2012. *Income inequality and growth: The role of taxes and transfers*. Economics Department Policy Note No 9. Paris.
- RED (*Review of Economic Dynamics*). 2010. Special Issue: Cross-sectional facts for macroeconomists (with contributions on USA, UK, Sweden, Spain, Italy, Germany and Canada).
- Piketty, Thomas. 2014. *Capital in the 21<sup>st</sup> century*. Harvard University Press (forthcoming)
- Piketty, Thomas, Emmanuel Saez, Stefanie Stantcheva. 2011. *Optimal Taxation of Top Labor Incomes: A Tale of Three Elasticities*. NBER Working Paper No. 17616.
- Sabirianova Peter, Klara, Steve Buttrick, and Denvil Duncan. 2010. Global Reform of Personal Income Taxation, 1981-2005: Evidence from 189 Countries. *National Tax Journal*, 6:3, 447–478. Based on World Tax Indicators, maintained at Andrew Young School: <http://aysps.gsu.edu/isp/wti.html>
- Salverda, Wiemer, Christina Haas, Marloes de Graaf-Zijl, Bram Lancee, Natascha Notten and Tahnee Ooms. 2013. *Growing Inequalities and Their Impacts in The Netherlands*. GINI Country Report. <http://www.gini-research.org/system/uploads/512/original/Netherlands.pdf?1380138293>
- Salverda, Wiemer, and Christina Haas. 2014. Earnings, Employment and Income Inequality. In: Salverda et al. (eds), 2014. Chapter 3.
- Salverda, Wiemer, Brian Nolan, Daniele Checchi, Ivo Marx, Abigail McKnight, István György Tóth, and Herman van de Werfhorst (editors). 2014. *Changing Inequalities in Rich Countries: Analytical and Comparative Perspectives*. Oxford University Press.
- Sharpe, Andrew, and Evan Capeluck. 2012. *The Impact of Redistribution on Income Inequality in Canada and the Provinces, 1981-2010*. CCLS Research Report 2012-08. Ottawa. [www.csls.ca/reports/csls2012-08.pdf](http://www.csls.ca/reports/csls2012-08.pdf)

Appendix

**Table 1: Changes in income inequality: Trends in country averages, 1980-2010**

	Gini coefficient of household net equivalised incomes				Top-income shares in gross incomes					
	Total 30 countries	of which with an increasing Gini coefficient			Top-10%			Top-1%		
		Countries with rising shares			Countries with rising shares			Countries with rising shares		
	Countries	Rise (points)	Rise (%)	Countries	Rise (pcpt)	Rise (%)	Countries	Rise (pcpt)	Rise (%)	
<b>Changes</b>										
<b>1980-1990</b>	18	8	0.028	12%	13	3.0	12%	12	1.6	18%
<b>1990-2000</b>	22	22	0.044	19%	15	3.4	12%	16	2.1	28%
<b>2000-2010</b>	30	19	0.022	8%	10	1.8	5%	9	0.6	8%
<b>1980-2010</b>	18	17	0.065	28%	16	5.8	23%	16	2.6	37%
Consistent rise		6	0.070	30%	7	9.3	37%	6	3.9	62%
<b>Levels</b>	All 30 (Gini)		Rising 6 (Gini)		All 17 (pcpt)	Rising 7 (pcpt)		All 16 (pcpt)	Rising 6 (pcpt)	
Start level	0.241		0.256		27.8	28.0		6.4	6.6	
End level	0.304		0.327		33.3	37.2		8.9	10.5	
In a few cases when data are lacking for specific years, the closest comparable period is covered.										
Source: GINI database and WTID: <a href="http://gini-research.org/articles/data_2">http://gini-research.org/articles/data_2</a> and <a href="http://topincomes.g-mond.parisschoolofeconomics.eu/">http://topincomes.g-mond.parisschoolofeconomics.eu/</a>										

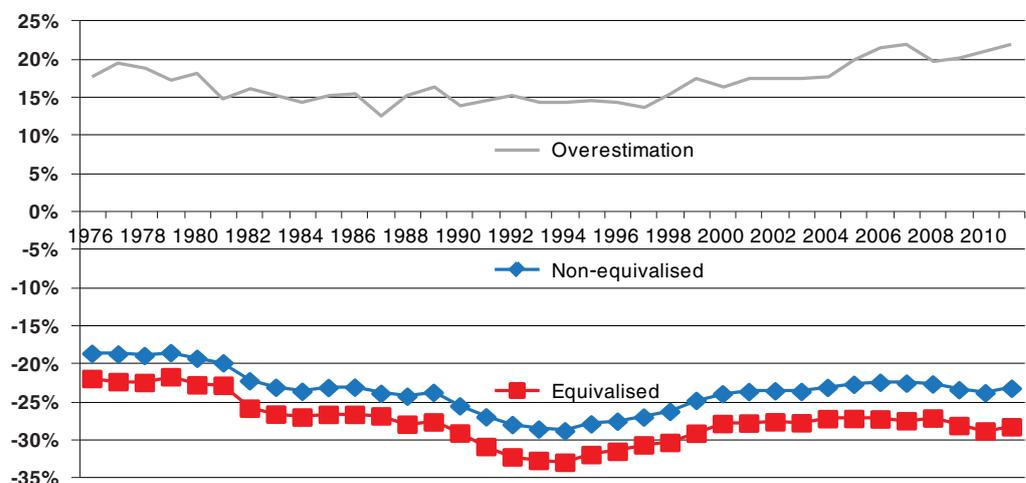
### Box 1: Why redistribution may be (increasingly) less than we think

Effects of redistribution are now commonly determined by comparing market incomes and disposable incomes both on the basis of equivalisation for household composition. In principle equivalisation is a good thing to do to determine what value an income has to a household, depending on the number of adults and children. However, equivalising market incomes makes their inequality difficult to recognise 'in the field' (e.g., top incomes are not equivalised) and may also lead to a mistaken estimation of the extent of redistribution by taxes and transfers. Equivalisation exerts a strong equalising effect as larger households concentrate at higher market incomes, while one-person households are found at the lower end. The strong rise of singles in recent decades will have reinforced the effect. Equivalisation is responsible for 38% of the complete gap between unequivalised market-incomes inequality and net-equivalised inequality in the Canadian case below.

The silent assumption seems to be that equivalisation has the same effect on both market incomes and disposable incomes. However, a full set of Canadian data can illustrate that this is not the case. The figure below compares the size of the redistributive effects when equivalising or not. The relative difference between the two shows the size of the overestimation of redistribution due to equivalisation. The effect grows from 14% in the mid-1990s to 22% at the end of the 2000s.



### Canadian redistribution, from market income to disposable income: the effect of household equivalisation, 1976-2011



Calculated from <http://www5.statcan.gc.ca/cansim/a03>.

Similarly, Brzozowski et al. (2010, Figure 7; see RED 2010) shows an equalisation effect for family earnings that grows from 7% in the mid-1990s to 11% in the mid-2000s. Salverda et al. (2013, Figure 2.12) shows how net-income inequality for Dutch labour households after 1990 remained flat after equalisation while before equalisation it rose by about one quarter.

As a result an important point is overlooked: the contribution of changing household formation to the evolution of inequality. It is important to actually investigate this effect. People may change this behaviour, or be constrained to change it due to rising inequality – as many have demonstrated by giving up their own house and join others after the US mortgage debacle.

For this reason I do not use here the OECD's income inequality and poverty database for market incomes. ■

