The Paradox of Redistribution Revisited: 
For What it Matters, Targeting is Associated With Higher Levels of Redistribution

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The Paradox of Redistribution Revisited: For what it matters, targeting is associated with higher levels of redistribution

[First draft]

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This paper aims to show that Korpi and Palme’s highly influential claim that “the more we target benefits at the poor, the less likely we are to reduce poverty and inequality” does no longer hold as a robust empirical generalisation. We replicate their analysis for a broader set of advanced economies and find that the relationship has become an inverse one. For what it matters, targeting is generally associated with higher levels of redistribution. The important point is that the relationship over a broad set of countries and specifications is a weak one, suggesting that the extent targeting per se may not matter as much as we have assumed since Korpi and Palme. We show our findings to be robust across a set of alternative empirical specifications and data sources. We try to make sense of this reversal, focusing on two questions: a) have the “old” welfare states changed; b) are “new” welfare states different?
I. Introduction

This paper aims to make a compelling case that Korpi and Palme’s claim that “the more we target benefits at the poor, the less likely we are to reduce poverty and inequality, famously and influentially established in their 1998 ASR article ”The Paradox of Redistribution”, does no longer hold as a robust empirical generalisation. In fact, we show that if anything the relationship has become an inverse one, albeit amid very considerable cross-country variation. Targeting, for what it matters, is generally associated with higher levels of redistribution, and not as Korpi and Palme’s thesis holds with lower levels. The important point is that the relationship over a broad set of countries and specifications is a weak one, suggesting that the extent of targeting per se may not matter as much as we have assumed since Korpi and Palme.

The first purpose of this paper is to convince a critical reader that the reversal we claim to observe is robust across a set of alternative empirical specifications. The starting point of this paper is the operationalization as originally used by Korpi and Palme and subsequently by Lane Kenworthy. We also show that deviations from that method of measurement – for which we make a case on theoretical grounds – strengthen that finding. Second, it is robust for country selection; it holds for the original set of countries and it holds even stronger for an expanded set of countries. Third, we show our findings to be relatively robust for choice of data source.

The further purpose of this paper is to make sense of this apparent reversal. One important question is whether and possibly to what extent the relationship has in fact changed or whether the weak reversal is mainly driven by the fact that we now include a larger sample of countries. A second question pertains to the issue of cross-country variation. We observe countries with similar empirical measures to targeting (concentration indices) to have vastly different redistributive outcomes. The question is whether and possibly to what extent system design features account for this. Contextual factors – particularly the market income distribution – may also account for the fact that targeting in terms of its redistributive impact plays out differently across settings.

This paper proceeds as follows. We first summarize the story so far, devoting considerable attention to the original Korpi and Palme thesis. We then discuss the more recent literature, most
notably recent re-examinations by Kenworthy and Whiteford, suggesting that it may not be so bad after all. We contextualize the discussion about the particular link between targeting and redistribution in the broader puzzle of egalitarianism. After discussing methodological and measurement issues we move on to the empirical part, first presenting the main results and then robustness of these results for variations in measurement and data. In the discussion part we try to make sense of the results, focusing on two questions: a) have welfare states changed, particularly the nature of targeting; b) are “new” welfare states different?

II. The story so far: the paradox of redistribution and other puzzles


Diametrically opposed views used to exist on this issue and, to a point, this is still the case. On the one side there are those who belief that a welfare state can only fight poverty effectively and efficiently (i.e. cost-effectively) when benefits are mainly targeted to those most in need, i.e. when benefits are selective. Economists in particular have shown themselves to be proponents of selective benefit systems. Their main argument is that selective benefit systems are cheaper because fewer resources are ‘wasted’ on people who are not poor. Furthermore, some have claimed that the budgetary return to targeting also entails an economic advantage. Lower public expenditures, after all, imply lower taxes, which in turn are supposed to be conducive to economic growth. Economic growth, the argument proceeds, benefits the poor directly (although not necessarily proportionally so) and increases at the same time the fiscal base for redistributive policies.

This view of selectivity, still espoused by such organisations as the World Bank, has never been commonly shared. Two sorts of arguments underpin this more critical stance. First, there are technical considerations. Van Oorschot (2002) sums up the most important dysfunctions of
means-testing. First, these include higher administrative costs. Establishing need or other relevant criteria require monitoring, whereas universal benefits allow for less complex eligibility procedures. Furthermore, means tested benefits are subject to higher non-take up, partly because of stigmatization issues. Finally, targeted benefits can give rise to poverty traps, where benefit recipients have little incentive to take up work because this would entail loss of benefits.

A second line of counter-argument is that proponents of selectivity pursue a ‘mechanical’ economic argument which makes abstraction of the political processes which determine how much is actually available for redistribution. The reasoning is that, paradoxically, in countries with selective welfare systems less resources tend to be available for redistribution because there is less widespread and less robust political support for redistribution. As a consequence, the redistributive impact of such systems tends to be smaller. To put it another way: some degree of redistributive “inefficiency” (the Matthew-effect) is said to foster wider and more robust political support for redistribution, including to the most needy. This follows from the fact that a universal welfare state creates a structural coalition of interests between the least well-off and the politically more powerful middle classes (median voter theorem). By contrast, a selective system entails an inherent conflict between the least well-off, by definition the sole recipients of social transfers, and the better off, who fund the system without the prospect of getting much out of it.

The juxtaposition outlined above forms the starting point for Korpi and Palme. In their 1998 article, they employ a somewhat more complex typology, but their classification of welfare states is essentially based on the dimension universalism vs selectivity. Based on data relating to institutional characteristics of welfare states on the one hand, and data relating to observed income distributions and financial poverty on the other, they conclude that more selective systems, paradoxically, have a smaller redistributive impact than universal systems offering both minimum income protection as well as income security and cost compensations (for children) in a broader sense. Korpi and Palme find that, in effect, this relationship is mediated by the relative size of available means for redistribution. Countries with selective redistribution systems, they argue, spend less on redistribution, at least in the public sector. In essence, selective systems are generally smaller systems.

Korpi and Palme’s main conclusion has gone relatively uncontested, although some scholars have expressed reservations because of the rather rudimentary character of the research methods
The degree of redistribution, for example, is measured by comparing the actually observed income inequality or at-risk-of-poverty rate with a rather unsophisticated ‘counterfactual’ distribution. In theory this counterfactual ought to accurately reflect the income distribution that would prevail in the absence of social transfers. However, the construction of this counterfactual is hampered by theoretical and practical problems. In most cases, including in Korpi and Palme’s paper, pre-transfer income is simply calculated by deducting observed social transfers and re-adding observed taxes. Full abstraction is thus made of any behavioural effects which a change in transfer/tax regime would entail. While patently less than perfect, the reality is that no satisfactory method exists at this time to adequately model such behavioural effects.

Another critique has been formulated by Moene and Wallerstein (2002) who have argued that analyses of redistribution need to be done at a more disaggregated level than ‘the welfare system’ because the determining redistributive principles may differ substantially for, say, unemployment, health care or pensions. Some schemes may rest heavily on the insurance principle, while others may put more weight to the need-principle. Thus, Moene and Wallerstein (2002) argue that universality and selectivity can coexist within one system.

Yet Moene and Wallerstein (2001) also conclude that universal provisions provoke the largest political support because of the higher chance of middle class citizens to become a beneficiary. Some opinion based studies also confirm that universal welfare schemes enjoy broader support (Forma, 1997; Kangas, 1995). It is plausible, however, that public opinion is influenced by the institutional set-up of a welfare state and so the causality cannot be seen as running one way (see Larsen, 2008; McCarthy and Pontusson, 2009). Also, one should not overestimate the effect of public opinion on social policy, as public policy is also influenced by resource mobilization, path dependence, political framing etc. There is other evidence in support, for example on the basis of studies that look at particular programmes. Corak, Lietz and Sutherland (2005) for example find that universal child related benefits – not those targeted at the poorest – provide better protection against poverty.

Some recent studies, however, claim that the link between redistribution and universal provision has substantially weakened, or even reversed over time. Kenworthy (2011) reproduces and updates Korpi and Palme’s analyses, which related to the situation in 11 countries as of 1985. Kenworthy’s findings confirm that countries with more universal benefits achieve more
redistribution (measured in the size of redistributive policies in the budget) for the period 1980 to 1990. By 1995, the image becomes less clear. Data for 2000 and 2005 seem to indicate that there is no longer any association (either positive or negative) between the two variables. Evidently, the findings are based on a small number of cases (10 countries), which make them particularly sensitive to outliers. A trend towards more targeting in Denmark, in conjunction with an evolution towards more universal benefits in the US, is largely responsible for the shift in conclusions. Moreover, the new findings may be driven to some extent by the growing share of pensions in social spending. However, analyses on an alternative dataset, controlling for pensions and featuring a larger number of countries, suggest that as of the mid 2000s, universalism is negatively associated with redistribution.

Kenworthy refers here to an earlier study by Peter Whiteford which shows that ranking method matters, a more than technical measurement issue to which we return in this paper. In the studies by Korpi and Palme and, as it is said to be a replication, Kenworthy, the calculations to establish the degree of targeting are based on households’ position in the income distribution before taxes and after transfers (i.e. gross income). Whiteford uses post tax/transfer income, i.e. disposable income, as the ranking measure. We come back on the issue of the ranking income concept in the section on “Measuring targeting and redistribution”, and will test the sensitivity of the results for using different ranking income concepts. Whiteford finds that universalism correlates negatively with redistribution. Kenworthy writes about this: “This by no means settles the question, but it does suggest additional reason to rethink the notion that targeting is an impediment to effective redistribution” (Kenworthy, 2011:58). This paper takes the quest further from there, addressing measurement issues in more depth, expanding the number of countries included in the analysis and checking for robustness against choice of data.

III. Wider considerations: the puzzle of egalitarianism

Before we move to the empirical part we want to stress that the issue of universality versus targeting makes up only one element in a wider ‘puzzle of egalitarianism’ (Alvarez 2001). After all, at the country level we are confronted with several empirical relationships that beg for a
more thorough understanding. Lindert (2004) evokes the ‘Robin Hood Paradox’ “in which redistribution from poor to rich is least present when and where it seems most needed”.

The connection between universality, the level of social expenditure and redistributive impact is part of a wider puzzle and it is important to be aware of this. For one, we know there also to be a strong relationship at the country level between wage inequality and social expenditure. In other words, it is countries with egalitarian wage structures that tend to have universal welfare systems, generous benefits and, as a consequence, high social expenditures. This connection is again contra-intuitive, because at first sight, one would expect the opposite relation, namely that a greater wage disparity would require more redistribution, and, therefore, higher social expenditures. Hence, the causal chain may well start with institutions and policies shaping income distributions before taxes and transfers. But it may also run in other ways.

Let us briefly discuss these alternative causal narratives. First, the direction of causality may go from an extensive welfare state to a condensed waged distribution. This is the line followed by Beramendi Alvarez (2001), who has argued that second-order effects of social expenditure are a large part of the explanation of the ‘puzzle of egalitarianism’. First order effects of redistribution on inequality consist of direct income transfers from high-income to low-income households, through taxes, social security or social assistance. But second order effects are equally important: the higher taxes and transfers of large welfare states influence labour supply in such a way that a more condensed wage distribution results. High-wage earners substitute monetary income for leisure in response to taxes, while generous benefits reduce labour supply among those commanding low wages (through higher reservation wages). These second order effects may be highly contingent upon national institutions, particularly with regard to funding of the welfare state, the level of wage bargaining and fine details of institutional design.

Second, the causal mechanism between redistribution and inequality may run in the opposite direction. A highly unequal distribution of market incomes may make it politically and technically more difficult to redistribute income. McCarty and Pontusson (2009) review a number of political economy theories with regard to voter behaviour under different conditions of economic inequality. The so-called median voter models assume that changes in the income distribution lead to a shift in the preference of the median voter, or the ‘political middle’. Moene and Wallerstein (2001, 2003) have argued under conditions of rising income inequality, the
median voter has a preference for reduced expenditure on insurance and social spending. Empirical studies tend to support this model, as outlined above (Robin Hood Paradox).

However, Meltzer and Richard (1981) have formulated an opposing hypothesis, predicting that rising income inequality leads to a shift in preferences of the median voter, towards more redistribution. A recent paper by Corcoran and Evans (2010) provides empirical support for this thesis, analyzing the association between growing income inequality and support for public education in the US. It should be noted than in this case, support refers to in kind benefits (public education) rather than direct income transfers.

As McCarty and Pontusson (2009) show, the majoritarian assumption underlying the median voter models is not universally applicable. In many contexts, a vast number of parties (including trade unions, employers’ organisations) compete for political influence. The partisan politics theory assumes that, rather than moving all parties either to the left or the right, income inequality can cause polarization of the electorate. As the political spectrum widens, the outcome depends largely on the extent to which low-income groups are mobilized, in terms of election turnout and union density. In turn, social security arrangements can strengthen trade unions, particularly in so-called Ghent countries where they are involved in the provision of unemployment benefits (Van Rie et al., 2011) Furthermore, the recent attention in the literature to insider-outsider conflicts and divergent interests within ‘Labour’ or ‘the Left’ are of key importance.

Third, causality between equality and redistribution may run in both directions, in a process of mutual reinforcement. This argument has been developed by Barth and Moene (2009) in a recent NBER paper. They argue that a more equal wage distribution leads to welfare generosity through a process of political competition. In turn, more income redistribution produces more equality. The authors hypothesize that this multiplier operates mainly through the bottom of the income distribution: the amplification occurs where wages at the bottom of the distribution are compressed, not where higher incomes are compressed. The hypothesis finds empirical support in their analyses on 18 OECD countries over the years 1976 to 2002.

Finally, an extensive welfare state, as well as a limited degree of wage inequality may both be the results of variables that determine both. As Atkinson (2000) suggests, countries may be characterised by notions of equity that are widely shared within any society, but that differ across
societies. A society in which the value of solidarity is widely shared may simultaneously support pay norms, collective agreements and adequate minimum wages, as well as quasi-universal and generous benefits.

Thus, variables like wage dispersion, primary income inequality, generosity, universality, level of expenditures and disposable income inequality make up a complex web of interrelations of which the causalities can run in different directions. In this paper, the primary focus lies on the relationship between the factors of universality, generosity and disposable income inequality.

IV. Measuring targeting and redistribution

Conceptual clarity is essential when discussing universalism and targeting. As Van Oorschot (2002, p. 173) states, misunderstandings may easily arise. For instance, targeting is often equated with means-testing although it does not necessarily imply a means test, as other eligibility criteria (e.g. family composition) can be established to channel benefits to specific groups (e.g. lone parents). By contrast, ‘universal’ benefits are aimed at broad segments of the (national) population. Still, it should be noted that universal benefits are rarely truly universal, as they often apply for instance a residency criterion, which can be more or less strict. Moreover, whether benefits are flat-rate or earnings-related, is a question that is closely linked but distinct from universality or targeting.

Korpi and Palme employ three aspects to classify transfer systems: a) the basis of entitlement; b) the benefit level principle and c) the form of governance, particularly the extent of employer-employee corporation. In their classification targeted models have two distinguishing features: the basis of entitlement is proven need and benefits are there to provide a minimum income.

However, the actual operationalization they use in their 1998 article is much more straightforward and simple. It is also for that reason contestable on a number of grounds. In their 1998 ASR article they do not build on institutional indicators to gauge the level of targeting within tax/transfer systems. The extent of targeting is measured on the basis of a single outcome indicator, the targeting coefficient, which reflects effective redistributive outcomes rather than redistributive intentions, as we will argue below. This means that ‘targeting’ here is interpreted
as social transfers being more beneficial for lower incomes, irrespective whether this comes about because of system characteristics like means testing (“income selectivity”) or providing benefits for specific categories (“categorical selectivity”). Basically, this means that we look at the position of the beneficiaries in relation to the median (voter).

As this article seeks to replicate the findings by Korpi and Palme and subsequent studies, we aim for maximum comparability. Thus the building blocks of our analysis consist of some commonly used income concepts, namely market income, gross income and disposable income\(^1\). All incomes are adjusted for household size by applying a standard equivalence scale. *Market income* includes income from labour and capital, as well as mandatory individual and occupational pensions (LIS definition). *Gross income* is defined as market income plus social transfers plus net transfers between households. Social transfers consist of the total of work-related insurance transfers, universal benefits and social assistance benefits. Finally, *disposable income* is arrived at when deducting taxes from gross income. These taxes refer to personal income taxes and social contributions (excluding employer contributions).

*Redistribution* refers to the impact of taxes and transfers on income inequality. It is measured by the difference between the Gini coefficients with and without tax-transfers relative to pre-transfer income; this corresponds in our analysis to the difference of the Gini coefficients of market and disposable income relative to that of market income. The impact on inequality is driven by the size of transfers, as well as by their structure, i.e. whether these transfers are going relatively more to lower or higher incomes.

For indicating the impact of the size of transfers, we use the concept of *generosity*: how much is spent on social transfers? Generosity is measured here by expressing average social transfers as a share of income (either market income, gross income or disposable income). There is a positive relationship between redistribution and generosity: the larger the size of the transfers, the more inequality can be reduced (see e.g. Lambert, 2001 and discussion earlier in this paper).

*Targeting* is measured in two ways: on the one hand we use the concentration coefficient of transfers in the same way as Korpi and Palme (1998) do. Additionally, we present the share of transfers going to the bottom quintile.

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\(^1\) Note that in the distributional analyses here negative incomes are set to zero.
The concentration coefficient of an income component is calculated in a similar way as the Gini coefficient (see e.g. Kakwani, 1977; Lambert, 2002; OECD, 2008). The difference between the two lies in the variable according to which income units are ranked. With a concentration coefficient of an income component, income units are ranked according to income (and not by the income component itself), while for a Gini coefficient the focal variable and the ranking income variable are the same (namely income). Concentration coefficients can be considered as a summary indicator of the information provided by quintile distributions. When the concentration coefficient has a value that is lower than the Gini coefficient of the income on which its ranking is based, then lower incomes benefit relatively more: individuals receive a higher share of the income component than their share of income. Thus, these concentration coefficients provide insight into the pro-poorness of the various income components independent of their size. A concentration coefficient will be zero if all income units receive the same absolute amount of transfers. Hence, we can make a distinction here between weak and strong pro-poorness. Strong pro-poorness corresponds to a negative concentration coefficient (area A in the Figure below), whereas weak pro-poorness is captured by a concentration coefficient between zero and the value of the Gini coefficient of income (area B). When the value of the concentration coefficient is larger than the Gini, then the benefit is pro-rich (area C).

\[2\text{Though of course this does not mean that all concentration coefficients of zero correspond to equal absolute amounts over the income distribution.}\]
Quintile distributions are based on five equal-sized population groups which are divided according to their income. Income units are ranked from low to high income, using either of the three income concepts (market, gross, disposable). A comparison of the share of social transfers going to the bottom quintile with the corresponding concentration coefficient indicates how the concentration coefficient comes about: is it driven by targeting towards the bottom quintile (the poor), or are rather by patterns higher up the income ladder?

Note that we use the term ‘targeting’, which suggests that outcomes are due to the characteristics of the system, but this need not be the case. Moreover, the outcomes of a system are highly dependent on the characteristics of the underlying population, in terms of socio-demographic characteristics, income inequality, composition of income, etc. If, for instance, a benefit is designed in such a way that all children are eligible, but all children are situated in the bottom quintile, then this policy measure may appear as very targeted in its outcomes, even though its design may not include any means-testing or needs-based characteristic. This means that strictly speaking we cannot derive from the concentration coefficient how pro-poorness of a transfer comes about.

The following factors may play a role:

- The design of the policy (eligibility; income or categorical selectivity; conditions for calculating the size of the transfer);
- Distribution of socio-demographic or other characteristics that determine eligibility and size of the transfer, and hence determine where transfers will be located in the income distribution;
- The ranking of beneficiaries in the income distribution. This means that the same distribution of transfers will only result in different concentration coefficients if recipients have a different ranking in the underlying income distribution.

Summarizing, the value of the concentration coefficient is derived on the one hand from the relative size of the transfer going to each income unit, and on the other hand from the ranking of each income unit, which determines its relative weight in the contribution to the concentration coefficient.
We use different income concepts to rank incomes when calculating quintile distributions and concentration coefficients. In a first instance we use the same income concept to rank income units as the one used by Korpi and Palme (1998), as well as by Kenworthy (2011), namely gross income, or ‘Who gets what after social transfers but before taxes’. Of course, there are arguments to use other income concepts for ranking individuals. The most obvious candidates are market income and disposable income, which are also the income concepts used to calculate the redistributive effect in Korpi and Palme (1998) and in this paper. With market income (or ‘Who gets what before taxes and transfers’), income units are ranked according to the position they take in the hypothetical situation that there would be no social redistribution. This effectively puts households that rely solely on transfers at the bottom of the distribution. By definition the impact of the transfer is very large. This makes more sense for people who fail to gain access to the labour market whereas they are supposed to be economically self-reliant. They would probably have no other means of existence. But this is a stronger assumption for the elderly who rely on public pensions. In the counterfactual scenario they would probably have saved. Thus in calculations based on pre transfer rankings, retired households count as extremely poor and they populate the very bottom of the distribution. This probably overstates the impact of social transfers on the income distribution. For this reason Whiteford (2010) and OECD (2008) use disposable income (i.e. ‘Who gets what after taxes and transfers’) as the ranking measure. The drawback here is that the impact of the welfare state may be underestimated. Some pensioners, for example, might have occupied an entirely different position in the income distribution in the absence of a public pension system. In our empirical application, we test the sensitivity of the results for using either market or disposable income as ranking measure.

If taxes and transfers do not alter the ranking of income units, then concentration coefficients will be the same for all three income concepts. In practice, this is not the case. Especially the inclusion of social transfers (i.e. moving from market to gross income) causes income units to change rank, implying that concentration coefficients can substantially differ when market income opposed to gross or disposable income is used. Reranking due to taxes (i.e. moving from gross to disposable income) is in general much smaller, implying that concentration coefficients based on the ranking of either gross or disposable income will probably not be very different.
V. Data

The indicators are calculated on the basis of the micro survey data of the Luxembourg Income Study (LIS), in line with the approach of Korpi and Palme (1998) and Kenworthy (2011). We include the following countries, referring to 2004 (unless specified otherwise between brackets after the country’s name): Australia (2003), Austria, Belgium (2000) Canada, the Czech Republic, Denmark, Estonia, Finland, France (2005), Germany, Greece, Hungary (2005), Ireland, Israel (2005), Italy, Luxembourg, the Netherlands, Norway, Poland, Slovenia, Spain, Sweden (2005), Switzerland, United Kingdom, United States. LIS tries to provide datasets that are as comparable as possible. However, some issues remain. One of the major issues relevant for our study is the fact that not all datasets include gross income amounts, implying that gross income in fact corresponds to disposable income and that market income does not include taxes. This is the case for Belgium, France, Greece, Hungary, Slovenia and Spain. Moreover, it also implies that social transfers are net of taxes in these countries, whereas in the other countries gross transfers (i.e. before deduction of taxes) are used. This is particularly relevant for countries where transfers are subject to substantial taxation, as is the case in the Nordic countries. For the distributional analyses the individual is the unit of observation, while incomes are pooled at the household level. An equivalence scale is used to correct for household size. In a first step we apply the same equivalence scale as in Korpi and Palme (1998), namely the square root of household size.

We also compare these outcomes with the data of EU-SILC 2007, which includes all EU countries (incomes refer to 2006). We apply definitions of income concepts that are as close as possible to the ones used in EU-SILC. Social transfers, however, are in all countries here net of taxes. The same equivalence scale is used (square root of household size).

VI. Results

As our first aim is to replicate the findings we start our analysis by using the same concepts, operationalisations and data (LIS) as Korpi and Palme (1998) and Kenworthy (2011). We relate the concentration coefficient of social transfers, with income units ranked according to gross
income, to the redistributive effect of taxes and transfers, as measured by the difference between the pre and post tax/transfer Gini coefficient.

Let us first consider the two key variables in Figure 1 separately, starting with our measure of targeting. All concentration coefficients are smaller than the Gini coefficient of gross income, which means that all systems are progressive (i.e. pro-poor). There is however wide variation in the spectrum of targeting-universality. The smaller/more negative the concentration coefficient, the more targeted the transfers, whereas the closer the concentration coefficient is to the Gini, the more universal the transfers are distributed. Australia, the United Kingdom and, maybe somewhat surprisingly, Denmark have most negative concentration coefficients and can be characterized as strongly pro-poor. Negative concentration coefficients are found in the majority of the countries, pointing to a substantial degree of targeting. In ten countries we find weak pro-poorness, e.g. Southern Europe, Austria and Poland. (Note that, as shown in appendix Figure A.5, concentration coefficients match quite closely to an alternative measure of targeting: the share of transfers going to the bottom quintile.)

Turning to our measure of redistribution we also observe considerable cross-country variation with the Nordic countries taking positions as leading redistributing countries, and the Southern European countries, the United States, Canada, Switzerland and Israel at the other side of the spectrum.

Let us now consider the relationship between the degree of targeting and redistributive impact. Clearly, the striking finding – against the background of the earlier discussed literature - is that the relationship between universalism and redistributive impact has become an inverse one: the more targeted systems tend to be the most redistributive. That said, there is very considerable cross country variation around this relationship. The fact that the line tilts towards the inverse relationship from the one established by Korpi and Palme is driven by a limited number of countries. Perhaps the most important conclusion to draw from this graph is that there is no strong relationship. Note also that this graph does not lend itself to easy categorization in terms of the welfare state regimes elaborated by Esping-Andersen (1990). In this regard Lødemel (1997) spoke about a welfare paradox, whereby the liberal welfare state in the United Kingdom had developed minimum income benefits seemingly according to universal doctrines. At the
other extreme was Norway, a social democratic welfare state with a highly residual and selective system of minimum income benefits.

**Figure 1. Concentration index (ranking by gross income) and redistributive impact, mid 2000s.**

Source: Luxembourg Income Study
Note: 1) for Belgium, France, Greece, Hungary, Slovenia and Spain calculations are based on disposable incomes instead of gross incomes due to data availability. 2) The countries included in Korpi and Palme (1998) are in bold.

Looking more closely at this graph, especially noteworthy at the left hand side are Australia, the United Kingdom and Denmark, all characterized by having benefit systems that are the most strongly pro-poor of all countries. Yet the redistributive impact in Denmark appears much stronger. Similarly, looking at the countries with still strong pro-poor spending (concentration indices between -0.2 and 0), the corresponding redistributive impact differs a great deal. Some of
the countries with the strongest redistributive tax/transfer systems are to be found here (Sweden and Finland), together with some countries with the weakest (the USA, Canada, Israel and Switzerland). Focusing finally on the right hand side of the graph – the countries with positive targeting coefficients – the relationship does become consistently negative, especially in the countries with the weakest pro-poor spending (Greece, Spain and Italy).

Looking at this graph from the perspective of the Y-axis (the extent of redistribution achieved by the tax/transfer system) essentially yields a similar picture of cross-country variation. Particularly in the countries with moderately high levels of redistribution (around 35 per cent reduction of the post tax/transfer Gini as compared to the pre tax/transfer level) no single corresponding value for the targeting measure is to be found; it ranges from a comparatively strong pro-poor level of -0.2 (Czech Republic and Belgium) to weak pro-poorness in countries like Austria and Poland.

Recall that there are two causal steps in K&P’s thesis. First, universal systems tend to be larger systems, spending more on the poor and non-poor alike. Second, larger systems tend to be more redistributive. Figure 2 shows the first part of that causal chain, setting the concentration coefficient against the measure of generosity we use here (share of transfers in gross income). The graph shows that there is a negative relationship across countries between targeting and generosity (similar patterns emerge when cash social spending as a share of GDP is used as an indicator for generosity, see Figure A.4 in Annex). Although in line with Korpi and Palme, the relationship is a relatively weak one with again a lot of cross-country variation. A strongly pro-poor system like Denmark’s is not smaller than weakly pro-poor systems like Spain.

Figure 3 shows the second step in the causal chain and links generosity to redistributive impact. Here the relationship is clearly strongly positive and it is also relatively consistent. There is not a single system achieving a strong redistributive impact with a low level of spending and, conversely, higher levels of spending tend to be associated with stronger redistributive impacts. This is consistent with the findings from a host of studies (Nolan and Marx, 2009; OECD, 2008 and 2011).

Note here that the strongest redistributive impact is achieved by countries that combine moderate (Sweden and Finland) to strong targeting (Denmark) with comparatively high levels of spending.
Figure 2. Concentration index (ranking by gross income) and generosity, mid 2000s.

Source: Luxembourg Income Study
Note: for Belgium, France, Greece, Hungary, Slovenia and Spain calculations are based on disposable incomes instead of gross incomes due to data availability.

Figure 3. Reduction in inequality due to taxes and transfers compared with size of social transfers (expressed as a share of gross income), mid 2000s.
Source: Luxembourg Income Study
Note: for Belgium, France, Greece, Hungary, Slovenia and Spain calculations are based on disposable incomes instead of gross incomes due to data availability.

VII. Sensitivity

How robust are these results? They depend on a number of choices in our approach and changing one of the parameters may considerably affect the outcomes and hence conclusions. We test the sensitivity of the results for changes in a) country selection; b) data source; c) the ranking of the income concept.

*Restricting the analysis to countries with full information on transfers and taxes*

Not all LIS datasets include gross income amounts, implying that gross income in fact corresponds to disposable income and that market income does not include taxes. This is the case for Belgium, France, Greece, Hungary, Slovenia and Spain. This also implies that social transfers are net of taxes in these countries, whereas in the other countries gross transfers (i.e. before deduction of taxes) are used. This is particularly relevant for countries where transfers are subject to substantial taxation, as is the case in the Nordic countries.

It is relevant for that reason to restrict the analysis to full information countries and this is shown in the Figure below. The relationship between the extent of targeting and redistributive impact becomes a neutral one in this graph, with countries on both ends of the targeting-universalism dimension essentially achieving similar levels of redistribution.
Figure 4. Concentration index (ranking by gross income) and redistributive impact, restricting the analysis to countries with full information on transfers and taxes.

Source: Luxembourg Income Study
Note: for Belgium, France, Greece, Hungary, Slovenia and Spain calculations are based on disposable incomes instead of gross incomes due to data availability.

Robustness for data source: using EU-SILC data

Another important robustness check involves the one for data source. The figure below replicates the analysis on the basis of EU SILC (the value of the indices for both LIS and EU SILC can be found in Table A.1 in Annex). In this analysis the non-European countries (Australia, the United States, Canada and some other countries) are excluded, but the coverage of Europe is more comprehensive, with the exception of Switzerland. Norway and Iceland are however included. The overall picture is strikingly similar to the LIS derived one; the more targeted systems tend to be the most redistributive. The gradient of the line is similar but so is the extent of cross-country variation around that relationship. Only at the outer ends of the targeting dimensions we find relative consistency: the most targeted systems (Denmark and the Czech Republic) achieve comparatively strong redistribution while the least pro-poor systems (Greece, Italy, Portugal and Cyprus) have comparatively weak redistributive impacts.
But there are also some striking differences:

- Spain takes somewhat different position (more universalist), but the southern European countries clearly remain important drivers of the negative relationship.

- The Czech Republic takes a striking position in having a strongly targeted and highly redistributive system.

- Hungary and Slovenia appear as having the most redistributive systems, together with Sweden.

- Denmark and Sweden show up as less redistributive than in the LIS based analysis; Finland too but there is less of a position shift.

- UK features as having a far less targeted system than in the LIS based analysis.
The choice of the ranking income concept

First, we look at the effect of changing the variable used to rank incomes when calculating the concentration coefficients. The ranking determines the weight of the income unit in its contribution to the concentration coefficient. Changing ranks thus affects the weights, and consequently the value of the concentration coefficient.

So far results have been calculated using gross income as the pivotal income concept (notably for ranking income units and determining generosity). When this is shifted towards disposable income (as is done in Whiteford, 2010 and OECD, 2008), roughly the same pattern emerges (Figure 6): there is a positive relationship between generosity and redistribution, and also between targeting and redistribution. The picture is rather similar to the one based on gross incomes. There are two reasons for this. On the one hand, for some countries there is no information on taxes implying that gross income corresponds to disposable income in this analysis. On the other hand, taxes in general cause only little reranking of income units (in line with other results in literature), meaning that the relative contribution of an income unit’s transfers to the concentration coefficient is hardly affected.

Figure 6. Concentration index (ranking by disposable income) and redistributive impact

Source: Luxembourg Income Study
Note: for Belgium, France, Greece, Hungary, Slovenia and Spain calculations are based on disposable incomes instead of gross incomes due to data availability.

When ranking incomes on the basis of market income (Figure 7), all concentration coefficients are negative, indicating that in all countries transfers are strongly pro-poor. Strongest pro-poorness is found in Australia, the Netherlands, the United Kingdom, Switzerland, and Denmark. According to this measure Estonia turns out to have the most universal system. As already mentioned, these differences between ranking based on market income and gross income point to different degrees of reranking in countries. Reranking is very important in countries where many transfer-recipients have a market income of zero. Take the case of the Netherlands. In the market income based approach this country has just about the most targeted transfer system; in the gross income based calculation transfers are far more distributionally neutral. An important factor here is the relatively generous pension system in the Netherlands. In the market income based calculation it is effectively assumed that pensioners would have zero income in absence of the transfer. While this is clearly an unrealistic counterfactual, the market income based approach does say something about the extent to which transfers go to households solely reliant on them.

**Figure 7. Concentration index (ranking by market income) and redistributive impact**

Source: Luxembourg Income Study
VIII. Discussion: making sense of this reversal

The reversal in the original negative relationship between targeting and redistributive impact as established by Korpi and Palme is driven by two factors. First, as Kenworthy (2011) has already demonstrated, the observed relationship for the original set of countries in the Korpi and Palme study has weakened over time. This raises the question: what has changed in those countries? Second, and arguably more crucially, it is the inclusion of new countries that causes the relationship to become a positive rather than a negative one. This raises a second major question: what is different about the countries which did not feature in the analysis by Korpi and Palme and the subsequent replication by Kenworthy?

Has the nature of targeting changed?

The Korpi and Palme argument essentially is about the relative size of the electorates benefiting from and paying for redistributive measures. The studies by Moene and Wallerstein and by others explicitly test theoretical models that seek to explain varying attitudes to universal versus selective systems in terms of their pure redistributive impacts across electorates, particularly the middle class (for an overview see McCarthy and Pontusson, 2009).

From this perspective it is not easy to understand why, for example, the United States has shifted towards a more universalist position. Perhaps an explanation is to be found in the fact that the debates that triggered and shaped social policy changes over the 1990s and 2000s were less about such distributional issues than about the effects of redistributive policies.

One of the factors that arguably made some targeted systems less politically robust and prone to spending cuts in the 1980s was the fact that strongly targeted, particularly means-tested benefits entailed strong work disincentives and other behavioral incentives. The issue was not so much that these systems catered to a small part of the electorate, far removed from the median voter.
The political weakness derived from the perceived ‘perverse’ work and family formation incentives.

In the United States, the main means-tested system (AFDC) became the focus of quite heated political debates during the 1980s. Charles Murray’s Losing Ground (1984) launched a virulent attack on this final safety net provision as it was then in place. That system was identified as the main culprit in creating an underclass of chronically welfare dependent single mothers. While the book and its claims became the object of equally virulent criticism from the left, welfare reform took centre stage in the political debate. Clinton ran his first campaign in a slogan to ‘end welfare as we know it’.

What ensued was a major shift in social policy. Statutory time limits on social assistance benefit duration were introduced. This move was accompanied by the expansion of a targeted benefit of an altogether different nature: the Earned Income Tax Credit. The Earned Income Tax Credit (EITC) has been introduced in the US in 1975 as an exemption from employees’ social security payments for poor working households with children. The system was subsequently expanded and the 1993 reform, in particular, turned the scheme into the country’s pre-eminent anti-poverty program for families of active working age. The expansion of EITC was accompanied by the introduction of new training and employment schemes and several increases in the minimum wage. This combination represented a paradigmatic shift in American social policy. Empirical studies show that the expansion of EITC, in combination with other policy reforms and several increases in the minimum wage, produced some striking initial results, including marked increases in labour market participation and declines in poverty among some segments of the population, especially single-parent households (Hotz and Scholz, 2003; Eissa and Hoynes, 2004).

The EITC has become America’s pre-eminent welfare programme. Spending has increased and appears to enjoy relatively broad and robust political support. This raises the question why that it. The system is less strongly targeted than before, which probably in part accounts for the shift of the US in the graphs. The system now caters to larger sections of the electorate, including the (lower) middle class, and this may account for that expansion. But an equally if not more important factor may be the fact that the system is perceived to encourage and reward work; it enjoys greater overall legitimacy (Kenworthy, 2011).
Activation and the prevention of long-term dependence among able-bodied people at active age has also became a major issue in Europe and an increased policy emphasis on activation has become evident, certainly at the level of policy rhetoric, and gauging by some indicators also in terms of actual policy (Barbier and Ludwig-Mayerhofer 2004; Kenworthy, 2008; Dingeldey, 2007; Eichhorst and Konle-Seidl, 2008, Aurich, 2009). That said, the truth is that we still lack reliable indicators of actual activation intensity, mainly because implementation aspects are so difficult to measure (e.g. effective sanctioning or effective availability and take-up of training places, subsidized jobs etc.). To reduce work disincentives, earnings disregards have been introduced for people dependent on social assistance or unemployment benefits who make a (partial) transition from complete benefit dependency to part-time work. People on targeted benefits have also become the focus of intensified monitoring, activation and sometimes sanctioning efforts (Marx and Nelson, 2012).

Most importantly, perhaps, means-tested benefits are no longer exclusively aimed at people not in work, but also at those in work in low-paid jobs. The French RsA scheme is a good example of a new style means-tested benefit scheme that offers integrated support for the non-employed and (part-time) low paid workers alike. The scheme also has entirely different work incentives.

The RSA (Revenu de Solidarité Active), was introduced in France in 2008 the specific aim of remodeling the incentive structure of people on social assistance, and particularly to make work or returning to education a more lucrative financial prospect. The previous minimum income system (Minimum Integration Income - RMI) was based on a one for one trade-off of benefit for earned income, so that EUR 100 earned led to a deduction of EUR 100 from benefit paid. Under RSA a “62% slope” is applied so that earning EUR 100 leads to a EUR 38 deduction in benefit paid. Efforts have also been made to encourage beneficiaries of RSA into employment, for example with assisted employment contracts and (improved) insertion mechanisms.

In addition, the RSA has simplified the provision of social protection by combining several previously separate schemes into a single sum. A household with no earned income is eligible for the “basic RSA” which is defined at the household level and takes into account the composition of the household. The “in-work RSA” acts as a top-up for people paid less than the national minimum wage (SMIC).
The point here is that targeted, means-tested systems look totally different today from the systems in place in the 1980s. Whereas the old systems were the focus of harsh welfare critiques, especially from the right, the new targeted systems are lauded as the essential gateways of welfare to work. They enjoy broad partisan support, as is evident in the UK where the WTC, implemented by the Labour government is maintained by the conservative one. Similarly, in France, the newly elected socialist government has no intentions for a major overhaul of the RSA.

That said, the programmes we have discussed in this section still constitute a relatively small fraction of social spending. The American EITC, while far more important in spending than the traditional means-tested welfare provisions AFDC/TANF, is still much smaller than America’s pension system, which makes up the bulk of spending in the graphs presented here. Similarly in France the major social insurance provisions still make up the bulk of spending.

*What makes the newly included countries different?*

The original Korpi and Palme analysis included Australia, Canada, Finland, France, Germany, the Netherlands, Norway, Sweden, Switzerland, the United Kingdom and the United States.

The additional countries included in our LIS based analysis roughly fall into three categories: a) three Southern European countries (Greece, Italy, Spain); b) post-communist countries now part of the EU (Czech Republic, Estonia, Hungary and Slovenia) and c) advanced economies not included in the original analysis: Austria, Ireland, Israel and Luxembourg.

The EU SILC based analysis covers the EU plus Norway and Iceland.

The Southern European countries included in our analysis – Greece, Spain and Italy – drive much of the observed weak positive relationship between targeting and redistributive impact. In the EU SILC based analysis, which also includes Portugal and Cyprus, this is also the case.

In terms of the targeting measure used in this study the Southern European countries rank as having the least amount of targeting. Looking at the share of transfers going to the bottom
quintile of the income distribution (ranked by gross income), the targeting coefficient even underestimates the pro-richness of the transfers there (Figure A5). In the LIS based analysis, the share going to the bottom quintile in Italy, Greece and Spain is just over 10 per cent. This is three times less than the 35 per cent of transfers flowing to the poorest in the countries with the highest concentration coefficients: the UK, Denmark and Australia.

A distinct feature of the Southern welfare systems is a high degree of categorical differentiation, mostly by occupational category. While some segments of the population, and particularly the workforce, are relatively well catered for, other segments essentially receive little or nothing. There is a sizeable literature showing that welfare systems there tend to reinforce or at least replicate socio-economic and occupational inequalities (Ferrera, 2010; Matsaganis et al., 2003). The Southern European countries also remain relatively unique among the “old” European countries in not having nationally organized social safety nets, except in Portugal where it was introduced in 1997. In Italy and Spain social assistance remains a regional matter and benefit levels vary quite considerably (Van Mechelen and Marchal, 2012).

The post-communist economies take relatively varying positions on the two main dimensions under focus here. In the LIS based analysis, the Czech Republic appears to have a relatively targeted system while Poland it to be found on the other end of the spectrum; redistributive impacts, however, are very similar in both countries. The SILC based analysis, which comprises a broader set of countries, reinforces this picture of diversity. The post-communist countries occupy very different positions on both dimensions. This diversity is also evident from measures of social spending, taxation and benefit generosity (Cerami and Vanthuysse, 2010). Institutional indicators of minimum income protection also point to very significant differences (Van Mechelen & Marchal, 2012; Goedemé, 2012)

**Conclusion**

We have established that Korpi and Palme’s claim that “the more we target benefits at the poor, the less likely we are to reduce poverty and inequality” does not, or at least no longer holds as a robust empirical generalisation. For what it matters, transfer systems that cater disproportionally to the poor are generally associated with higher levels of redistribution, and not as Korpi and
Palme’s thesis holds with lower levels. Strongly targeted system are also not necessarily less generous although the general tendency remains for universal systems to be more generous.

The important point is that the relationship over a broad set of countries and specifications the relationship between targeting and redistribution, or generosity for that matter, is a rather weak one, suggesting that the extent targeting per se may not matter as much as we have assumed since Korpi and Palme. Our findings are however largely consistent with the view that “targeting within universalism” yields the most optimal results if the aim to maximize redistributive effect.

Clearly, this paper raises further questions. Why does a similar degree of strong targeting, as captured by the concentration index, produce stronger redistributive outcomes in Denmark as compared to the UK and Australia. Similarly, why do similar (quasi)-universal systems yield such different redistributive outcomes across countries?

As we already indicated, the redistributive outcomes of a particular system are dependent on the characteristics of the underlying population, in terms of socio-demographic composition, the extent of market income inequality and other such factors, etc. A system may appear as very targeted in its outcomes, even if its design does not include means-testing or needs-based features. This means that strictly speaking we cannot derive from the concentration coefficient how the pro-poorness of a transfer comes about. Using a tax-benefit model like EUROMOD, we could go further in analyzing how system design features matter relative to (or in interaction with) contextual features in producing redistributive impacts.
References


Appendix

Figure A.1: Index of Targeting of Transfer Income and Income Redistribution: 11 OECD countries, mid 1980s

Figure A.2: Redistribution by targeting-universalism: across countries at common points in time

Source: Kenworthy, 2011.
Figure A3. Reduction in inequality due to taxes and transfers compared with size of social transfers (cash social spending expressed as a share of GDP), mid 2000s.

Source: OECD SOCX 2005 for cash social spending as a share of GDP.

Figure A.4. Targeting and generosity (cash social spending as % of GDP), mid 2000s.

Source: OECD SOCX 2005 for cash social spending as a share of GDP.
Figure A.5. Concentration coefficients versus bottom quintile transfers share

Source: LIS

Figure A.6. Concentration indices when ranked by gross and market income

Source: LIS
<table>
<thead>
<tr>
<th>Country</th>
<th>GINI of income</th>
<th>Generosity Targeting</th>
<th>GINI of income</th>
<th>Generosity Targeting</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUS (2003)</td>
<td>0.4435</td>
<td>0.3421</td>
<td>0.2996</td>
<td>32.4% 10.6% -0.3760</td>
</tr>
<tr>
<td>AUT</td>
<td>0.4111</td>
<td>0.2937</td>
<td>0.2610</td>
<td>36.5% 22.5% 0.1030</td>
</tr>
<tr>
<td>BEL (2000)</td>
<td>0.4311</td>
<td>0.2864</td>
<td>0.2864</td>
<td>33.6% 20.1% -0.1516</td>
</tr>
<tr>
<td>CAN</td>
<td>0.4211</td>
<td>0.3470</td>
<td>0.3124</td>
<td>25.8% 9.7% -0.1951</td>
</tr>
<tr>
<td>CHE</td>
<td>0.3321</td>
<td>0.2526</td>
<td>0.2511</td>
<td>24.4% 11.2% -0.1673</td>
</tr>
</tbody>
</table>

Source: LIS & EU-SILC  Note: MI=Market Income; GI=Gross Income; DI=Disposable Income; RE=Redistributive Effect; ST=Social Transfers; CC=Concentration Coefficient