Child Poverty, Child Maintenance and Interactions with Social Assistance Benefits Among Lone Parent Families: a Comparative Analysis

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Child poverty, child maintenance and interactions with social assistance benefits among lone parent families: a comparative analysis

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Abstract
In many developed countries lone parent families face high rates of child poverty. Among those lone parents who do get child maintenance there is a hidden problem. States may retain all, or a proportion, of the maintenance that is paid in order to offset other fiscal costs. Thus, the potential of child maintenance to alleviate poverty among lone parent families may not be fully realized, especially if the families are also in receipt of social assistance benefits. This paper provides an original comparative analysis exploring the effectiveness of child maintenance to reduce child poverty among lone parent families in receipt of social assistance. It addresses the question of whether effectiveness is compromised once interaction effects (such as the operation of a child maintenance disregard) are taken into account in four countries Australia, Finland, Germany and the UK using the LIS dataset (2013). It raises important policy considerations and provides evidence to show that if policy makers are serious about reducing child poverty, they must understand how hidden mechanisms within interactions between child maintenance and social security systems can work as effective cost recovery tools for the state, but have no poverty reduction impact.

Introduction
In many developed countries lone parent families face high rates of child poverty (Barcena-Martin et al., 2018; Bradshaw et al., 2018; Gornick and Jäntti, 2012; OECD, 2011). Social assistance benefits are vital for their economic survival and are important in fulfilling policy aims that intend to tackle poverty. In the pursuit of poverty reduction, many countries also use child maintenance policies to enforce the financial responsibilities of separated parents to pay maintenance for their children (Skinner and Davidson, 2009; Skinner et al., 2012). Private child maintenance and public social security policies therefore, should work in tandem to reduce poverty, especially in lone parent families reliant on social assistance. Yet, research shows that child maintenance makes only small reductions to poverty among eligible lone parent populations, because only a minority ever receives it. For those parents who do get child maintenance (usually mothers), it does help to reduce poverty to some extent (Cuesta and Meyer, 2014; Hakovirta, 2011; Skinner and Main 2013; Skinner et al. 2017a). Arguably, improving payment compliance among non-resident parents (usually fathers) would help maximize the poverty effectiveness of child maintenance and many countries do have strong enforcement powers to make this happen (Skinner et al., 2007).
However, there is another, mostly hidden problem relating to the poverty effectiveness of maintenance. That is where states retain all, or a proportion, of child maintenance in order to offset other fiscal costs. Thereby, its potential to alleviate poverty is not fully realized as its value to the income packages of lone parent families is reduced. This is especially so where lone parents are reliant on social assistance benefits, as some states may not pass through all the maintenance that is paid by the other parent to lone parent families (Skinner et al., 2017b). A situation that is regarded as unsatisfactory by the OECD who state:

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\text{In the absence of a system of advance maintenance payments, at least some part of the payment by the non-resident parents should go directly to the child. Currently, in some countries if the resident parent receives income support, the payment collected effectively goes to the government to offset the cost of income support being paid to the family in question. This may create disincentives for the non-resident parent to meet his/her commitments. Therefore, some portion of child-support payments should always go to the child for which support is being paid. (OECD, 2011, 215)}
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Such policy arguments for a ‘pass through’ of child maintenance should help alleviate child poverty. At least, the OECD argues, the pass through should occur in countries where there is no ‘advance maintenance’ scheme. An advance scheme (or guaranteed scheme) is where the state provides some of the child maintenance that is owed up-front and then pursues the other parent to collect it back. Once collected, the state retains the maintenance as they have already ‘paid it’ to the eligible parent.

In practice it is difficult to identify what happens in countries with guaranteed maintenance schemes, or understand how the poverty outcomes produced by such schemes might vary, especially in comparison to countries without such schemes (Skinner et al., 2007; Skinner et al., 2017b). Partly, this is because guaranteed schemes operate as a complex interaction between private child maintenance and public social assistance systems. Therefore, their effect on poverty reduction is difficult to disentangle in empirical research. However, a similar type of interaction operates via the ‘pass through’ mechanism and there is some research on this, mostly from the US. Under US federal law, for families receiving public assistance, (Temporary Assistance for Needy Families (TANF)), the individual state can keep child maintenance payments to reimburse itself and the federal government for TANF assistance. The level of the pass-through varies across states from a full, 100 per cent, to zero.
per cent. Strong research evidence shows that a full pass-through increases compliance and the custodial parents’ likelihood of receiving payments increases as does the amounts they receive (Cancian et al., 2006; Cassetty et al., 2002; Lippold et al., 2010; Sorensen and Hill, 2004). These US studies however, did not analyze the full range of interaction effects relating to child maintenance, or their antipoverty effects on recipients.

Indeed, little is known about interactions between child maintenance systems enforcing private obligations and social assistance systems providing public benefits, or their combined effects on alleviating poverty. It could be that lone parents on social assistance would be no better off financially from child maintenance once these interactions are accounted for. This is what Skinner et al. (2017b) found in their original analysis using a model families approach across four countries with similar child maintenance systems (Australia, New Zealand, the UK and the US). Depending on the kind of interactions, they found some country systems could treat child maintenance as a complement to social assistance benefits, thereby maximizing its potential to reduce poverty. Whereas in other systems, child maintenance was treated as a substitute for social assistance, leaving lone parents no better off even if child maintenance was paid by the other parent.

This paper extend that earlier work by Skinner et al. (2017b). It uses data from the Luxembourg Income Study (LIS) of 2013 and will address the question of whether lone parents on social assistance benefits are any better off after child maintenance is paid. Uniquely, it will provide a comparative analysis of the poverty reduction potential of child maintenance that takes into account the interaction effects between child maintenance systems and social assistance systems using real data from LIS, rather than a model families approach as used by Skinner et al. (2017b). The comparative analysis reported here will involve four selected countries (Australia, Finland, Germany and the United Kingdom) with different child maintenance systems, to explore how the poverty outcomes might vary depending on the interaction mechanisms.

This paper therefore, provides new evidence to contribute to policy debates about the effectiveness of poverty reduction strategies for lone parent families in the following ways: by taking account of different interaction effects between private child maintenance and public social assistance systems which have hitherto usually been ignored; by presenting a more accurate and nuanced picture of the anti-poverty effectiveness of child maintenance as a
result of complex system interactions and; and by comparing the poverty outcomes across selected countries with quite different child maintenance systems. We argue that the effectiveness of child maintenance policies to reduce lone parent poverty is curtailed in some countries due to interaction effects, leaving lone parents no better off even if child maintenance is paid. This is in contradiction to the OECD recommendation above.

The article begins by providing some contextual background, outlining the prior research on child poverty and child maintenance policies in the countries under study. We then describe our approach to the analysis and how we take account of different interaction mechanisms, before explaining the variables we used for our data analysis from the Luxembourg Income Study (LIS) 2013. In the last two sections we present our findings and discuss the implications for the poverty reduction potential of child maintenance across countries with different schemes.

**Background**

*Poverty and child maintenance policies*

In most countries children in lone parent families are at the greatest risk of poverty (e.g. Barcena-Martin et al., 2018; Bradshaw et al., 2018; Gornick and Jäntti, 2002; OECD, 2011). A study of 2004 LIS data by Gornick and Jäntti (2012), showed that children of lone mothers were on average three to four times more likely to be poor compared to children in two parent families in almost all countries studied. In Germany child poverty rates for lone mothers was highest at 43 per cent, compared to Australia and the UK which was at 32 per cent and Finland was the lowest, with child poverty rates for lone mother families at 11 per cent. Bradshaw et al. (2018) using the 2016 EUSILC (European Union Statistics in Income and Living Conditions) data also found that across all countries in the EU, lone parents (which collectively includes lone mother and lone father households) had a higher risk of poverty than couples. In Finland 22 per cent of children in lone parent families were poor, compared to 33 per cent in Germany and 27 per cent in the UK. Whilst these studies are not directly comparable as they use different lone parent populations, the key point Bradshaw et al. (2018) make, is that child poverty rates vary considerably across countries but can be reduced for lone parent families by social transfers.
Child maintenance policies could have a part to play in understanding some of this variation. It is a private transfer between separated parents that the state has an interest in upholding and has put institutional arrangements in place to make it so. Maintenance policies do indeed represent an attempt by the state to ensure that separated parents meet their financial obligations to their children and usually fathers are the payers and mothers the receivers. Many policies across countries aim explicitly to use this as a means to reduce child poverty (Skinner et al., 2012) and some national studies have explored their effectiveness in this regard. In the UK, using the Family and Children Study (2008–09) Skinner and Main (2013) found that only 34 per cent of all lone mothers eligible to receive child maintenance actually did receive it, and of those, only 14 per cent were lifted out of poverty. In comparison, Bryson et al. (2013) estimated the poverty effectiveness for a population of lone mothers who were on social assistance benefits in the UK in 2012. Not surprisingly, they found slightly higher rates; some 36 per cent received child maintenance and 19 per cent were lifted above the poverty threshold by maintenance. Skinner et al. (2017a) conducted an analysis of the ‘Household Income and Labour Dynamics in Australia’ (HILDA) panel survey for the year 2011. They found that over half (55%) of lone parents in Australia received child maintenance in the previous year, and their poverty was reduced by 21 per cent when child maintenance was received. This higher rate of receipt is comparable to that reported in the Australian Longitudinal Study of Separated Families (Quet al., 2014).

Some comparative analysis of EU countries has also been conducted. Hakovirta’s (2011) analysis of LIS data found different child poverty reduction effects for those lone parent families who received maintenance. In Finland, the proportion of children living in poverty decreased by 29 per cent after maintenance was paid, compared to just 11 per cent in Germany and 7 per cent in the UK. The OECD’s latest analysis of LIS data (2011) found a similar ranking of countries with the largest poverty reduction effects occurring among lone parent families in Nordic countries. Whereas, in the UK and Australia, child maintenance reduced the proportion of lone parents living in poverty by only 8 and 19 per cent, respectively (OECD, 2011). More recently, Hakovirta and Jokela (2018) looked at household poverty and found that poverty reduction was highest in the UK and Finland while in the US, child maintenance was less efficient in lifting lone mother families above the poverty line. However, these earlier studies ignore the interaction effects and the key point from these analyses is that the poverty reduction outcomes vary considerably, which, we posit will partly
depend on the interaction effects between child maintenance systems and social security systems which provide social assistance benefits.

**Interaction of child maintenance with social assistance benefits**

Before outlining the results of our analysis, it is helpful to explain social assistance schemes, highlight the key means-tested social assistance programs for lone parents and explain what is known about the interactions operating between child maintenance and social assistance systems in our selected countries.

Social assistance benefits are transfers made by government units to households intended to meet the same kinds of needs as social insurance benefits but are provided outside of an organized social insurance scheme and are not conditional on previous payments or contributions (OECD, 2001). Usually benefits are means-tested or income-related where eligibility is dependent upon current or recent resources, though other categorical conditions may also apply (Gough et al. 1997). They are usually cash benefits intended to bring incomes up to a minimum standard set by law in each country.

Interactions between child maintenance and social assistance systems were first explored by Skinner, Meyer, Cook and Fletcher (2017b). They identified explicit mechanisms such as the ‘pass-through’ already described above, which states could use to recover some of their fiscal costs. But they also found that cost recovery could happen in more hidden ways. One more hidden mechanism operated when child maintenance was counted as income in calculating social assistance benefits. Accordingly, benefits were reduced by the same amount as maintenance paid, leaving lone parent model families no better off as their incomes were effectively capped at the level of social assistance benefits. This meant child maintenance was treated as a substitute for social assistance benefits. Some countries however could operate a ‘child maintenance disregard’ within the social assistance system; meaning some (or all) of the child maintenance would be ignored when calculating benefit entitlements. Thereby, child maintenance was treated as a complement to social assistance benefits and helped to reduce poverty. The UK was exceptional in this regard; since reforms in 2010, parents could keep all the child maintenance paid increasing their incomes above social assistance levels. Consequently, Skinner et al. (2017b) argued from their analysis of model
families, that child maintenance has only a latent potential to reduce child poverty once these interactions are fully taken into account.

The ways in which child maintenance payments are treated in determining social assistance benefits and whether a child maintenance disregard operates are therefore, very important factors to consider when assessing the potential of private child maintenance to reduce lone parent poverty. Moreover, it is important to note that the pass through mechanism and the maintenance disregard can vary in the amounts of child maintenance they choose to ignore. For example, the pass through can vary from 100 per cent of the maintenance, to a zero amount being passed to the lone parent recipient. The child maintenance disregard can also be a ‘full disregard’ meaning all the child maintenance is ignored when calculating amounts of social assistance benefits, or it can be a partial disregard or no disregard. Generally speaking, the pass through mechanism operates within the child maintenance system and the disregard within the social assistance system. But they can also combine in complex ways to produce the same outcomes. For example, even if all of the maintenance is passed through to the receiving parent within the maintenance system, it might not be disregarded when calculating benefits. In practice therefore, it is complex to work out how these different mechanisms can combine to produce the same outcomes. Thus, with a full-pass through, but no disregard the final outcome may be identical to when none of the maintenance is passed through. This exposes how the institutional procedures may differ across countries, yet produce similar outcomes and this has important policy implications, especially in the light of OECD recommendations highlighted in the introduction. We will explore this further in the methods section. Meanwhile, the use of the two mechanisms and the main social assistance benefits for lone parents are described now for each country in Table 1.

Table 1 HERE

In Australia the main social assistance benefit for lone parent families is means-tested parenting payment. All of the paid child maintenance is passed through to parents, the state does not retain any of it. However, maintenance is counted as income when calculating social assistance benefits partially reducing its value to the income package of lone mothers. Thus, a portion of the child maintenance in Australia is treated as a ‘substitute’ for social assistance benefits.
In Finland and Germany lone parents can receive means-tested social assistance if their incomes are low enough. They also have guaranteed child maintenance schemes which advances maintenance financed by the state if payments are not made by the responsible parents, or if there is no non-resident parent, or if the level of maintenance is very low. The purpose of guaranteed maintenance is to compensate for, or supplement the child maintenance to which the child was otherwise entitled (Skinner and Davidson, 2009). Both countries also operate a full pass-through but no disregard. Meaning that regardless of whether it is guaranteed maintenance paid by the state, or maintenance paid by the other parent, it is counted as the income of the receiving parent when calculating social assistance. Thereby, social assistance is reduced by the same amount of child maintenance (Bundesministerium für Arbeit und Soziales, 2017; Social Insurance Institution, 2018). Lone parents on social assistance benefits are therefore likely to be no better off financially irrespective of any maintenance paid by the other parent, unless it is paid at very high levels. With no disregard in place, child maintenance is treated as a substitute for social assistance and acts as a cost recovery tool for the state, simultaneously minimizing its value to lone parents.

In the UK, the main social assistance benefits are Income Support, or Income-based Jobseekers Allowance (the latter is for those lone parents who are required to seek or take up work based on the age of the youngest child). These benefits (and others) are being amalgamated into one ‘Universal Credit’ which is being slowly rolled out across the UK, so lone parents in receipt of social assistance could be on any one of these three benefits and consequently their incomes might vary slightly even if their circumstances are exactly the same. There is a full pass through of child maintenance and payments are also fully disregarded (Skinner et al., 2017b; Bryson, 2013). Thus, the value of child maintenance is maximized, (if it is paid) as it is treated as a complement to social assistance benefits for all families. Evidence shows since this reform was introduced in 2010, it has worked to improve incentives for non-resident parents to pay (Bryson et al., 2013). Overall, from the evidence available in the UK and US, it seems a more generous pass through and disregards are associated with higher levels of child maintenance. The question is does this translate into a reduction in poverty?

**Aims, data and measures, sample characteristics**
The aim of this article is to discover whether child maintenance provides additional value to the income of the poorest lone parents reliant on social assistance benefits (where it is treated as a complement to social assistance) or whether it has none (where it is treated as a substitute for social assistance and incomes stay at the level of social assistance). We can then see across countries the variations in anti-poverty effectiveness of child maintenance by taking into account these interaction effects.

We have selected four countries for the analysis. Our original aim was to compare twelve countries but we had to reduce this due to data limitations. For example we dropped the US because states have different disregard policies and we dropped other countries because in LIS the child maintenance variable was missing in the data. In yet other countries it was difficult to disaggregate social assistance from other social transfers. We focused on these four countries as there was reasonable data and they represented the three types of child maintenance scheme models as described by Skinner and Davidson (2009). Australia and the UK have an administrative agency model, Germany a court based model and Finland a hybrid model; a mix of court and agency. The countries also differ in terms of how they treat child maintenance in their means-tested social assistance schemes (Skinner et al., 2017b). This analysis makes a new contribution to comparative research by providing a different perspective – that is by examining not just specific policies, but also how they might interact to produce hitherto unknown outcomes.

*Data and income indicators*

We use Luxembourg Income Study (LIS) data from 2013 (Australia data is from 2010 as 2014 data does not include child maintenance). The distinct advantage of using LIS income data is that it enables us to disaggregate income and examine the different income sources. Several large LIS-based studies have assessed child maintenance and child poverty (Cuesta et al., 2018; Hakovirta, 2011; Hakovirta and Jokela, 2018; OECD, 2011; Skinner et al., 2007) but no research exists that looks exclusively at lone parent families on social assistance benefits or on the contribution child maintenance makes to child poverty reduction that takes account of the interaction effects. Skinner et al., (2017b) as stated above, used country level data and fictitious model families to estimate the effects of interactions. Their analysis however, was not based on real data collected from lone parent households.
We use three main income variables for the analysis: 1) child maintenance received, 2) social assistance received and for poverty calculations 3) disposable household income before and after child maintenance. Disposable household income is a measure of post-tax-post-transfer income before housing costs.

Child maintenance: Child maintenance is an amount of cash financial support, normally paid by a non-resident parent to the resident parent to support the raising of children when parents have separated and do not live together (INCSS.org). In the LIS data the variable includes monetary alimony and/or child maintenance transfers from other private persons or households. Even though alimony is included in the variable, very few families receive it (Meyer and Hu, 1999). For Finland and Germany, where guaranteed maintenance exits, we have merged two variables, child maintenance and guaranteed maintenance, to calculate total child maintenance; in some cases parents with care may receive both child maintenance and guaranteed maintenance, for example when the non-resident parent has stopped making maintenance payments in the middle of the year. Calculations are based on the total yearly amount of child maintenance received irrespective of eligible numbers of children in the family.

Social assistance: All countries selected for this study have means-tested minimum income schemes. Whether lone parents are in receipt of social assistance is identified using the LIS variables for general social assistance. For the UK and Germany, we also included unemployment assistance schemes that form part of the last-resort systems in these countries. General social assistance includes monetary transfers from minimum income guarantee systems or last resort systems, received from the state through social programs targeted towards individuals or households in need (for full description, see appendix 1). While the LIS database relies on national household income surveys and provides extensive harmonized and comparable information on households’ earnings and social transfers, one obvious limitation that has to do with the harmonization process is the availability of country specific information on social transfers. In our study this means that the social assistance schemes included in the general social assistance variable are predetermined for each country and cannot be studied separately.

Poverty indicator: We use the disposable household income variable for child poverty calculations with 50% median equalized disposable income poverty threshold. Incomes are
adjusted using the square root equivalence scale. The child poverty rate is calculated by multiplying the number of poor families with children by the number of children in them using a child weight. The percentages then represent the proportion of children living in a household below the relevant poverty line. Poverty reduction shows the proportion of all children lifted above the poverty line by child maintenance.

For the child poverty analysis in Table 3 we used equivalent disposable income to set a poverty threshold and calculate child poverty rates. For table 4, to underline the interaction between child maintenance and social assistance benefits, we calculated a new disposable household income variable that removes all types of received child maintenance. In effect, this method allows us to study more closely if child maintenance lifts lone parent families from poverty if they simultaneously are receiving social assistance benefits. Thus the child poverty threshold of 50% of disposable household income in interaction analysis is based on income pre-child maintenance. In this way we are not double counting child maintenance in pre and post poverty analysis (see Skinner and Meyer, 2006; Skinner and Main 2013; Skinner et al., 2017a).

Sample size and proportions receiving child maintenance and social assistance benefits

Our sample consists of lone parent households: which is a parent with no partner present in their household and who live with one or more dependent children under the age of 18. We have excluded families where relatives or non-relatives may be living in the household and excluded widows (widows have no other parent to pay). Sample sizes are presented in Table 2. Finland has roughly about a quarter of the sample size compared to the rest (349 lone parents) and this must be borne in mind when interpreting the results.

Table 2 here

Table 2 also sets the context by showing the receipt of child maintenance and social assistance benefits. In Finland the majority of lone parents received maintenance in 2013 (74%), while it was 43 per cent in Australia and just 34 per cent in Germany and the UK. In Germany, prior to 2017, there were special conditions for the guaranteed maintenance schemes (Skinner et al., 2007), which is why many lone parents did not receive it1. The UK
has had consistently low rates of receipt since its implementation in 1993 for a range of complex reasons. Regarding social assistance benefits, the UK has the highest rate with 69 per cent of lone parents receiving these in 2013 compared to 50 per cent in Australia, 42 per cent in Germany and only 23 percent in Finland. This variation most likely reflects a range of factors such as eligibility rules, employment rates and earnings of lone parents.

**Results**

**Child maintenance and child poverty**

This section presents an analysis of child poverty rates of different populations of parents. This is shown in Table 3, first the rates for all families with children are presented, then all lone parent families, those lone parents receiving social assistance, and lastly for lone parents who do not receive child maintenance and for those lone parent families who do receive child maintenance. The poverty threshold is set at household income below 50 percent of the population median disposable income in each country. This helps set the poverty context for the sample of LIS data from 2013, especially highlighting poverty rates for families on social assistance benefits as well as the different poverty rates for the two sub-groups of lone parents those who do get child maintenance compared to those who do not (note we are not measuring the effect of child maintenance on poverty reduction in this table, we are simply describing poverty rates for different populations).

Table 3 here

Table 3 shows that child poverty rates are higher in lone parent families than in all families with children across all four countries studied. This is in accordance with earlier studies confirming the higher risks among lone parent families. The rates do still vary across countries however, being the highest in Australia and Germany (41% and 37% respectively) and lowest in Finland and the UK (17% and 13% respectively).

For the next sub group of lone parents on social assistance benefits, it is not surprising to see higher rates of poverty across most countries. Germany overtakes Australia as having the highest poverty rate (51% compared to 46%), with Finland at 26 per cent. The UK, shows a slightly lower rate of child poverty among lone parents in receipt of social assistance
compared to all lone parents; this is not easily explained as it is counter to what might be expected, although at 3 per cent the margin for difference is small (see further discussion below).

When comparing the two last sub groups of lone parents, those who do receive child maintenance with those that do not, as might be expected, those with no child maintenance have higher rates of poverty for all countries. Again, there is considerable variation; Australia has the highest rate (33%) closely followed by Germany (30%) and then Finland (14%) with the UK having the lowest poverty rate at just 5 per cent. We cannot tell from this analysis, the many possible factors that might be influencing poverty rates (for example employment and earnings). However, we do know in the UK that richer lone parent families and those in work are more likely to receive child maintenance (Hakovirta and Jokela, 2018); so the poverty rates among those families who receive child maintenance may be lower in any case, even before they receive child maintenance. That is why it is important for our analysis to consider the poverty reduction effects of maintenance for the poorest lone parent families; i.e. those in receipt of social assistance benefits, to which we now turn.

The interaction of child maintenance with social assistance benefits and the effect on poverty reduction

The second part of our child poverty analysis considers a sub-sample of only those lone parent families who receive child maintenance. As we have seen in Table 3 above, these are the group of lone parents with the lowest child poverty rates. So it might feel a little odd to focus on them when doing an analysis of poverty, but we need to do that in order to explore the anti-poverty effectiveness of child maintenance that can also take account of interaction effects. Because clearly if lone parent families do not receive child maintenance there is no interaction effect between child maintenance systems and social assistance systems. This analysis is therefore focusing on the poverty reduction potential of child maintenance only when it is paid.

Among the sub-sample who receive child maintenance, we make a further comparison of the poverty rates of those who rely on social assistance benefits with those who do not. We then present the poverty rates for both groups before and after they receive child maintenance. In
this way we can take account of the effect of the interaction mechanism of the child maintenance disregard for those in receipt of social assistance benefits compared to those not in receipt of social assistance. For example we would hypothesize that the countries that do not operate a disregard (Germany and Finland) or only a partial disregard (Australia) would be less effective at reducing poverty among lone parents on social assistance benefits than those that do have a disregard (the UK). In our comparison of these four countries, we are automatically including the effect of the pass-through mechanism, because within the child maintenance systems, all four countries pass 100 per cent of the maintenance that is paid to the lone parent. However, that means we cannot isolate any independent effect of the pass through mechanism by comparing countries with and without a pass through. We tried to include the US for that purpose, but because the pass through proportion varies across states this was not possible. The results for our four countries are presented in Table 4.

**Table 4 about here**

The first two columns in Table 4 report the child poverty rates for all lone parents who are in receipt of child maintenance, both before they receive child maintenance and after they receive it. Results reveal that child maintenance is effective at reducing child poverty in all countries among all types of lone parent families, but is most effective in the UK with a drop from 11 percent in poverty pre child maintenance to just 5 percent post child maintenance, representing a poverty reduction value of around 54 per cent. In comparison in Germany and Finland, child maintenance has a poverty reduction value of around 44 percent and in Australia it is 30 percent.

Columns three and four indicate the child poverty effect for those lone parents in receipt of child maintenance, but not in receipt of social assistance benefits. We see a slightly different trend, with child maintenance in Germany having the greatest poverty reduction potential – with 39 percent of lone parents in poverty pre child maintenance dropping to 22 per cent post; representing a poverty reduction effect of around 44 percent. The UK is next at 38 percent poverty reduction effect, followed by Australia (36%) and Finland (12%).

Columns five and six are the most interesting. They report the poverty reduction effect which includes the interaction mechanisms, and especially highlights the differential effects of the child maintenance disregard across countries. Now the analysis tends to show entirely different results for some countries to those reported in the left hand side of the table. Thus,
in Germany and Finland for lone parents in receipt of social assistance benefits, child maintenance have no or minimal poverty reduction effects. This result highlights the effect of the zero amount of a child maintenance disregard, thus it seems to show how all maintenance is counted as income in calculating social assistance benefits. Meaning that even among this group of lone parents where child maintenance is paid, it has no poverty reduction potential. Effectively, lone parents’ incomes are capped at the level of social assistance benefits in these two countries.

The UK performs the best with child maintenance having a potential poverty reduction effect of around 60 percent. So although the level of poverty among lone parents in the UK starts from a low base in this analysis (of those on social assistance, only 10 per cent are in poverty) child maintenance has a powerful reduction effect. Australia also does reasonably well with a potential reduction effect of around 28 percent (where child poverty rates drop from 50% pre child maintenance to 36% post child maintenance). This shows how comparatively effective the full pass through and disregard are for social assistance benefit recipients in the UK and in Australia as we hypothesised. There are some counterintuitive results for the UK however, when comparing within country results as presented across all the columns in table 4. These warrant some further discussion.

For example in the UK, like all the other countries in Table 4, you might expect lower poverty rates among lone parents who are not in receipt of social assistance benefits compared to those who are on social assistance. Table 4 (columns 3 and 5) shows that on average, they have a slightly higher poverty rate at 13 per cent compared to 10 per cent (both measures are before maintenance). There is no obvious explanation for this. It could be we are picking up an effect of housing subsidies. In the UK, social assistance benefits act as a passport to other benefits and qualify people for additional housing subsidies for example. So those receiving Universal Credit may have housing subsidies included in their total income, inflating their income slightly, so this might explain it. It could also be an effect of child tax credits, in which this is automatically included in social assistance benefit claims (Income Support and Universal Credit) but there may be a lower take-up of this among non-benefit recipients as they have to actively apply for it. Indeed, analysis of take-up shows much lower rates among families with children who are in work compared to those families out of work and therefore more likely to be receiving social assistance (63% compared to 93% respectively) (HMRC, 2017:15). Or it could be an anomalous result given that the UK is in the middle of a long transition phase in which all previous in-work and out-of-work benefits
are being amalgamated into one benefit Universal Credit, so we have old and new benefits being included within our social assistance measure with unknown combined effects. In any event, this unexpected result does not invalidate the analysis or the findings, which are about comparing differences across countries of the anti-poverty effects of different mechanisms on maintenance for those on social assistance benefits.

**Conclusions**

In this article we have made a unique contribution to understanding the potential value of child maintenance in reducing child poverty. The research has tested the hitherto hidden effect of the mechanisms of the ‘pass through’ and the ‘child maintenance disregard’ that operates in the interaction between child maintenance and social assistance systems. We analyzed whether there is a potential for child maintenance to provide surplus value to the incomes of lone parent families or whether maintenance are partially or wholly subsumed within social assistance entitlements because of the ways these mechanisms operate. It is the first analysis of its kind that tries to expose interaction effects using LIS income data. It extends, and helps to confirm work by Skinner et al., (2017b) who used a similar analytical approach, but on model families that could only estimate the impacts and even then, for only some kinds of fictitious families.

As expected, the results confirmed that lone parents who do receive child maintenance have a lower child poverty rate compared to those who do not receive any and this is consistent across countries. This means that child maintenance, if received, can reduce child poverty. That much is already known, but the most important finding is the way it highlights how child maintenance has almost no effect in reducing child poverty for the poorest lone parents on social assistance benefits in some countries. Thus, in Germany and Finland, even if child maintenance is paid, it does not reduce poverty because it is not disregarded when calculating benefit amounts. In those countries, maintenance is treated as a substitute income source, so that lone parent families who receive more child maintenance would receive less from social assistance benefits. Furthermore, as both Germany and Finland also operated a guaranteed maintenance scheme, even if the state pays some of the maintenance up front in advance, this is still not increasing the income of lone parents who remain on social assistance and is therefore not reducing child poverty. At least that is, at the time the data was collected in
2013, before Germany had revised its guaranteed maintenance scheme. Whereas in Australia and the UK child poverty is reduced, not just because of the pass through mechanism but also because of the disregard. This means that child maintenance is treated, in whole or in part, as a complement to the incomes of lone parent families in receipt of social assistance benefits helping to reduce their poverty.

Analysing the effects of these pass through and disregard mechanisms helps to understand how these hidden mechanisms work and raises very important policy considerations. For example, the OECD has called for policy changes so that countries consider passing through at least some of the maintenance that is paid. Certainly the argument for doing so makes sense as it is assumed this would help encourage higher rates of payment compliance among parents who are responsible for paying it. This, the OECD argues, would help halt the cost recovery approach adopted by the state to keep the maintenance that is paid to offset fiscal costs. Our analysis shows that, whilst this is a reasonable policy recommendation, it could completely fail to have the desired effect in practice: because it does not allow for the complexity of the interaction mechanisms and how they can combine in such a way that the state may appear to give with one hand, but can still take away with the other. So all our four countries operated a full pass through as recommended by the OECD, but it made no difference without also having a maintenance disregard in place. It was only in Australia and the UK where the child maintenance disregard operated within the social assistance system did it make any difference to child poverty.

The results clearly demonstrate that the principle of child maintenance as children's own income does not help the poorest children in those countries where paid maintenance is deducted from social assistance. It could be current policy is acting as a disincentive for non-resident parents to pay child maintenance - especially if they know that their children will not receive any of it when it is not passed through to the receiving parent in the first place. We can also say there is an additional disincentive effect that is not picked up by the OECD and that is when, even if it is all passed through, maintenance could be treated as a substitute to social assistance. Meaning that all of it is regarded as income and social assistance benefits are therefore subsequently reduced leaving the lone parent family no better off. This produces the same outcome as far as a non-resident parent is concerned; none of the maintenance actually goes to children and thereby reduces incentives to pay as there would be no point financially.
Ultimately, our analysis raises questions about the legitimacy of child maintenance policies that proclaim to tackle child poverty when hidden interaction mechanisms continue to operate as cost recovery tools for the state. Crucially and contrary to what is believed, even when child maintenance is paid, it can be ineffective at reducing child poverty. But in addition, the interaction mechanisms may build in disincentives to pay. Yet, policy makers may be unaware of how these two mechanisms combine to produce such negative outcomes. Our analysis opens up the possibility for policy makers to create a win-win situation (reducing poverty and improving payment compliance) if they reviewed both child maintenance and socially security policies together to take full account of interaction mechanisms to ensure that one policy is not countermanding the other. The UK's approach that has decoupled child maintenance from social assistance benefits provides a simple and clear way to maximise the anti-poverty effectiveness of child maintenance and potentially may also improve incentives to pay. In the UK, child maintenance is therefore meaningful to both the payer and receiver and reduces poverty.

Despite our unique analysis, the approach is restricted. Due to the data limitations we were able to include only four countries and even among those, it was very challenging to operationalize the data to categorise benefits into social assistance schemes. It is also important to note that pass through and disregard mechanisms are only one element of larger maintenance and welfare state policies. We have learned some lessons however, that are important to note when conducting comparative analysis in this policy area. Researchers must be wary of making universal assumptions that child maintenance is a complement to income and that just because it is paid, it can help reduce poverty. Our analysis shows that this is unlikely to be the case.

Acknowledgements
This work was supported by the Academy of Finland grant No. 294648. We also thank Professor Daniel Meyer from the University of Wisconsin-Madison for helpful advice on the analysis and anonymous referees for their useful comments.

Notes
1 Before July 2017, the German guaranteed maintenance scheme only included lone parents’ children up to 12 years old for a maximum period of 72 months. In July 2017, the scheme was changed to apply to children under 18 years old with no maximum period. See https://www.bmfsfj.de/blob/93500/0caab0f096677ab72724ba27b75c2175/der-unterhaltsvorschuss-data.pdf
References


Cuesta, L. and Meyer, DR. (2014), ‘The role of child support in the economic wellbeing of custodial-mother families in less developed countries: The case of Colombia’, International
Journal of Law, Policy and the Family, 28,1, 60–76.


Table 1. Social assistance schemes for lone parent families and operational mechanisms for state recovery of child maintenance payments in 2013.

<table>
<thead>
<tr>
<th></th>
<th>Means-tested social assistance schemes for lone parents</th>
<th>Pass-Through</th>
<th>Child Maintenance Disregard</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Australia</strong></td>
<td>• General social assistance</td>
<td>Full pass-through</td>
<td>Yes, partial disregard</td>
</tr>
<tr>
<td></td>
<td>• Child care tax rebate</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Parenting payment</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Finland</strong></td>
<td>• Social assistance (=toimeentulotuki)</td>
<td>Full pass-through</td>
<td>No</td>
</tr>
<tr>
<td><strong>Germany</strong></td>
<td>• General social assistance (=Sozialhilfe).</td>
<td>Full pass-through</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>• Unemployment assistance and social benefit (=Arbeitslosengeld II, Sozialgeld).</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>UK</strong></td>
<td>• Income support (IS)</td>
<td>Full pass-through</td>
<td>Yes, full disregard</td>
</tr>
<tr>
<td></td>
<td>• Income-based Jobseeker allowance (JSA)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• (Universal Credit)* (UC)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sources: Skinner et al. 2017b; Social Insurance Institution Finland 2017; Bundesministerium für Arbeit und Soziales 2017.

* Universal Credit is a new benefit and will replace all previous benefits when the rolling programme of implementation is completed (around 2020). So LIS may pick up parents who are on IS, or others on income-based JSA, or others on UC.
Table 2. Number of lone parent families and proportion (%) of lone parents receiving social assistance and child maintenance in LIS dataset, 2013

<table>
<thead>
<tr>
<th>Country</th>
<th>Total sample</th>
<th>All lone parents with children under 18 years old</th>
<th>Non-widowed lone parents with children under 18 years old</th>
<th>All lone parents receiving social assistance benefits</th>
<th>Lone parents receiving child maintenance</th>
<th>Social assistance recipients receiving child maintenance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Australia</td>
<td>18071</td>
<td>1297</td>
<td>na</td>
<td>654</td>
<td>50</td>
<td>560</td>
</tr>
<tr>
<td>Finland</td>
<td>11030</td>
<td>349</td>
<td>332</td>
<td>79</td>
<td>23</td>
<td>246</td>
</tr>
<tr>
<td>Germany</td>
<td>15946</td>
<td>1389</td>
<td>1312</td>
<td>581</td>
<td>42</td>
<td>449</td>
</tr>
<tr>
<td>UK</td>
<td>20137</td>
<td>1582</td>
<td>1541</td>
<td>1093</td>
<td>69</td>
<td>525</td>
</tr>
</tbody>
</table>

Source: Luxembourg Income Study 2013 (Australia 2010)
Note: weighted frequencies. Widows excluded in figures on lone parents receiving child maintenance.
Child maintenance in Germany and Finland also includes advanced maintenance.
Table 3. Child poverty rates (using 50 percent median disposable income threshold) for lone parent families and for those receiving CM and those not receiving CM (%), 2013

<table>
<thead>
<tr>
<th></th>
<th>All families with children</th>
<th>All lone parent families</th>
<th>Lone parents in receipt of SA</th>
<th>Lone parent families not receiving CM</th>
<th>Lone parent families receiving CM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Australia</td>
<td>15</td>
<td>41</td>
<td>46</td>
<td>48</td>
<td>33</td>
</tr>
<tr>
<td>Finland</td>
<td>5</td>
<td>17</td>
<td>26</td>
<td>28</td>
<td>14</td>
</tr>
<tr>
<td>Germany</td>
<td>10</td>
<td>37</td>
<td>51</td>
<td>41</td>
<td>30</td>
</tr>
<tr>
<td>UK</td>
<td>8</td>
<td>13</td>
<td>12</td>
<td>18</td>
<td>5</td>
</tr>
</tbody>
</table>

Source: Luxembourg Income Study 2013 (Australia 2010)
Note: Widows excluded in figures on lone parents receiving child maintenance. Child maintenance in Germany and Finland also includes advanced maintenance.

Table 4. Child poverty rates (50 % of median income threshold) for lone parent families receiving child maintenance before and after considering child maintenance payments, %

<table>
<thead>
<tr>
<th></th>
<th>All lone parents</th>
<th>Lone parents not receipt of SA</th>
<th>Lone parents receipt of social assistance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Before child maintenance payments</td>
<td>After child maintenance payments</td>
<td>Before child maintenance payments</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Australia</td>
<td>47</td>
<td>33</td>
<td>39</td>
</tr>
<tr>
<td>Finland</td>
<td>25</td>
<td>14</td>
<td>17</td>
</tr>
<tr>
<td>Germany</td>
<td>54</td>
<td>30</td>
<td>39</td>
</tr>
<tr>
<td>UK</td>
<td>11</td>
<td>5</td>
<td>13</td>
</tr>
</tbody>
</table>

Source: Luxembourg Income Study 2013 (Australia 2010)
Note: Widows excluded. Poverty threshold is calculated using disposable household income excluding child maintenance payments.
## Appendix 1. Description of social assistance benefit and child maintenance by country

<table>
<thead>
<tr>
<th>Country</th>
<th>Original dataset</th>
<th>LIS variable</th>
<th>LIS variable</th>
<th>Included benefits/programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Survey of Income and Housing (SIH)</td>
<td>hmitpiha</td>
<td>hmitsagen</td>
<td>General social assistance (special benefit), child care tax rebate, parenting payment</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>hmitbuface</td>
<td></td>
</tr>
<tr>
<td>Finland</td>
<td>Income Distribution Survey (IDS)/ Survey of Income and Living Conditions (SILC)</td>
<td>hmitpiha</td>
<td>hmitsagen</td>
<td>General social assistance (toimeentulotuki)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>German Socio-Economic Panel (GSOEP)</td>
<td>hmitpiha</td>
<td>hmitsagen</td>
<td>General social assistance (Sozialhilfe), unemployment assistance and social benefit (arbeitslosengeld II, sozialgeld)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>hmtsofaun</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UK</td>
<td>Family Resources Survey (FRS)</td>
<td>hmitpiha</td>
<td>hmitsagen</td>
<td>General social assistance (universal credit, working tax credit, income support), Income-based jobseeker's allowance (JSA)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>hmtsofaun</td>
<td></td>
</tr>
</tbody>
</table>

Note: Definition of social assistance (hmitsagen): Monetary transfers from minimum income guarantee systems/last resort systems, received from the state through social programmes targeted towards individuals or households in need. Such means-tested systems are meant to provide a minimum subsistence level, covering frequently the totality of the population. Includes in-work benefits paid to those in low-paid jobs in order to raise disposable income without creating disincentives to work. Excludes minimum protection schemes which are covering only specific groups of the population such as the elderly, disabled, dependents of a deceased, or families.

Definition of unemployment assistance: Monetary transfers from unemployment social programmes targeted towards individuals or households in need. Such means-tested transfers cover income poor unemployed persons.