# The Anti-Poverty Effectiveness of Child Maintenance: A Comparative 

## Study

# Master's Degree Programme in Inequalities, Interventions and New Welfare State Department of Social Research Faculty of Social Sciences <br> Master's thesis 

Author:
Shimul Reja

Supervisor(s):
Professor, Mia Hakovirta
Associate Professor, Mirkka Danielsbacka
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Turku

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#### Abstract

This study explores the anti-poverty effectiveness by using comparative analysis on child maintenance in single-parent families in Estonia, Greece, Italy, and Lithuania. Additionally, the study examines the child poverty rates in two-parent and single-parent families in these countries. The current study utilized the Luxembourg Income Study (LIS) data wave X in 2016, with 16,099 observations. The study aims to answer two questions: 1) Are children in twoparent families better off than children in single-parent families? 2) Do child maintenance transfers effectively reduce child poverty in single-parent families? This study found that child maintenance transfers reduce child poverty and lifted $7 \%$ to almost $43 \%$ of children out of poverty for those single-parent families receiving child maintenance in studied countries. However, the effect varies across countries because countries have different child maintenance schemes and systems, and only some eligible single parents receive child maintenance. Furthermore, child maintenance transfers also reduce poverty gaps. The study also reveals that children in two-parent families are generally better off than children in single-parent families, highlighting the economic insecurity of single-parent families in these countries.


Keywords: Child maintenance, anti-poverty effectiveness, child maintenance schemes, and family structure.

## 1. Introduction

Poverty is hardship and problems from insufficient material resources (Nygård et al., 2019). Child poverty is a debatable issue than poverty in general because children are not responsible for their way of life. They have to depend on their parents. Child poverty may vary on the structure of the family. Research found that a growing number of children worldwide live in single-parent families (Cuesta et al., 2023), and the financial hardship of single-parent families is well documented (Gornick \& Jäntti, 2012; Bradshaw et al., 2017). Two-parent families are often at an advantage over single-parent families across countries. A study found that the child poverty rate in single-parent families is higher compared to two-parent families (Whiteford \& Adema, 2006). In addition, a study also found that single-parent families face high poverty rates in many countries (Hakovirta et al., 2020). Child maintenance can play an essential role in alleviating child poverty. Study found that child maintenance reduces poverty in many countries, and it helps to lift children from poverty among families who receive it (Cuesta \& Mayer, 2018).

Child poverty is rising in Greece. According to Matsaganis (2011), in 2007, the child poverty rate for children aged $0-17$ was $9.7 \%$ compared to the EU's $6.2 \%$. Unfortunately, the rate has increased by $4.2 \%$ and reached $13.9 \%$ in $2018\left(\mathrm{OECD}^{1}\right.$, 2018). It is essential to know that single-parent families are rare in Greece, with only $6 \%$ of single families living with children compared to the EU 22\% (Matsaganis, 2011). However, the single-parent poverty rate in Greece is notably high at $26.8 \%$ (OECD, 2018). In Italy, child poverty rates started to rise in the 1990s (Natali \& Saraceno, 2017). In 2008, one in four children in Italy was at risk of poverty (Natali \& Saraceno, 2017). The child poverty rate in Italy reached 18\% in 2018 (OECD, 2018). Study indicates that children are more vulnerable to poverty than the population at large in Italy (Natali \& Saraceno, 2017). In addition, study also indicates that two-parent families in Italy showed better financial prosperity than single-parent families in 2008 (Natali \& Saraceno, 2017). Moreover, this study found that $39.3 \%$ of children in single-parent families are in poverty compared to $23.4 \%$ in two-parent families. Thus, study confirmed that children raised in single-parent families are expected to experience poverty than those raised in two-parent families (Natali \& Saraceno, 2010).

The child poverty rate in Lithuania is relatively high, is $16.5 \%$. It is higher than the average child poverty rate in OECD countries (12.8\%) in 2018 (OECD, 2018). Lithuanian performance in child poverty falls below the EU average (Salanauskaite \& Verbist, 2013). This statement

[^0]indicates that Lithuania is struggling with child poverty. In addition, the child poverty rate in single-parent families (41.3\%) was high in Lithuania in 2018 (OECD, 2018). Meanwhile, Estonia has shown considerable progress in reducing child poverty, with the rate dropping from $14.1 \%$ in 2013 to $10.3 \%$ in 2018 (OECD, 2014 \& 2018). According to Eurostat, in Estonia, only $15.2 \%$ of children are at risk of poverty compared to the EU average of $23.7 \%$ (Eurostat, 2020). In addition, in 2018, the child poverty rate in Estonia (10.3\%) was below the OECD average of $12.8 \%$. However, the child poverty rate in single-parent families (29.1\%) was relatively high in Estonia in 2018 (OECD, 2018). These statistics highlight the monetary insecurity of children in single-parent families in these countries. Despite this, few studies focus on child poverty in single-parent families in these countries.

This study aims to provide insights into the anti-poverty effectiveness of child maintenance on single-parent families in Estonia, Greece, Italy, and Lithuania. These countries are chosen based on their high poverty rates, particularly involving single-parent and child poverty (OECD, 2018). In addition, this study also examines whether two-parent families are better off than single-parent families in these countries. This study will use Luxembourg Income Study (LIS) data to answer the following questions- 1 . Whether children in two-parent families are better-off than children in single-parent families? 2. Do child maintenance transfers reduce child poverty among single-parent families across studied countries? The first research question is answered by measuring the child poverty rate by family structure across studied countries. This study answers the second research question by measuring the child poverty rate before and after child maintenance transfers. This study makes two contributions to the contemporary studies. Firstly, the current study is the first to focus on the effectiveness of child maintenance in reducing child poverty in single-parent families in Estonia, Greece, Italy and Lithuania. Secondly, limited research has been conducted on child poverty by family structure in these countries.

This study is divided into five parts, and the countries are divided into two clusters-Estonia and Lithuania (Baltic states) and Greece and Italy (Southern European states). A comparative analysis will be provided based on the country clusters. The first part focuses on the introduction of the study. The second part focuses on child maintenance and poverty. The second part is further divided into four sections. The first section discusses the divorce rate, child and single-parent poverty rate, single-parent employment, and unemployment rate across countries. This section also analyses how and why these contexts affect single-parent families in these countries. The child poverty rates, employment, and unemployment rates in two-parent families discusses in second section. Child maintenance schemes discuss in the third section.

This section also focuses on child maintenance schemes across studied countries. A literature review on child maintenance in reducing child poverty is provided in the fourth section. The third part describes the data, variables, methods, and descriptive statistics. The fourth part presents the results based on the research questions. The final part of this study is dedicated to the discussion and conclusion of the study. A comparative analysis is the key to the final section. In addition, a limitation of the study is also discussed in this part.

## 2. Child Maintenance and Poverty

### 2.1 Divorce rate, child poverty, employment and unemployment rate in singleparent families across studied countries

The following section focuses on the divorce rate, child poverty rate, employment, and unemployment rates in single-parent families across studied countries. In addition, this section analyses the effects of divorce and the unemployment rate on single-parent families.

Table 1: Divorce rate, child and single-parent poverty rate, employment and unemployment rate.

| Country | Crude <br> divorce rate <br> per 1000 <br> (\%) | Child <br> poverty rate <br> in general <br> (\%) (2018) | Child <br> poverty rate in singleparent families (\%) (2018) | Employment rate in single-parent families (\%) (2018) | Unemployment rate in singleparent families (\%) (2018) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Estonia | 1.9 (2020) | 10.3 | 29.1 | 69 | 18.9 |
| Greece | 1.8 (2017) | 13.9 | 26.8 | 49.8 | 26.7 |
| Italy | 1.1 (2020) | 18 | 33.4 | 41.1 | 29.0 |
| Lithuania | 2.7 (2020) | 16.5 | 41.3 | 25.6 | 25.6 |

Source: OECD family database, and Eurostat database.
The first column in Table 1 shows the crude divorce ${ }^{2}$ rate across countries. According to Table 1, the crude divorce rate is highest in Lithuania at $2.7 \%$. It is also highest across the EU. Lithuanian crude divorce rates have been high in the European States for several decades (Maslauskaite \& Michailoviené, 2016). Estonia and Greece have slightly higher crude divorce rates than the OECD average ( $1.7 \%$ ), with rates of $1.9 \%$ and $1.8 \%$, respectively. On the other hand, Italy has the lowest crude divorce rate among all countries, with only $1.1 \%$. In addition, Lithuania has the highest child poverty rate, $41.3 \%$, in single-parent families, while Greece has

[^1]the lowest, $26.8 \%$. Greece and Estonia have rates below the OECD average of $31.9 \%$. Furthermore, the employment rate for single-parent families is highest in Lithuania at 69.3\%, followed closely by Estonia at $69 \%$. Italy has the lowest employment rate for single-parent families, $41.1 \%$. Finally, the unemployment rates in single-parent families are highest in Italy at $29 \%$ and lowest in Estonia at $18.9 \%$. On average, the unemployment rates in Baltic states are lower than in Southern European states.
A study found that single-parent families are increasing due to the high divorce rate across countries (Zhang, 2018). Unfortunately, many of these families are experiencing economic vulnerability due to the high unemployment rates among these families. A study found a higher child poverty rate in families where parents are jobless (Adema \& Whiteford, 2006). In summary, high divorce rates may enhance the proportion of single-parent families, and high unemployment rates among single-parent families may increase the child poverty rates across studied countries.

The following section highlights the child poverty, employment, and unemployment rates in two-parent families across studied countries. In addition, this section also highlights the impacts of employment and unemployment rates on two-parent families.

### 2.2 Child poverty rate, employment rate and unemployment rate in two-parent families across studied countries

Table 2: Child poverty rate, employment and unemployment rate in two-parent families
$\left.\begin{array}{|l|l|l|l|}\hline \text { Country } & \begin{array}{l}\text { Child poverty rate in } \\ \text { two-parent families } \\ (\%), 2018\end{array} & \begin{array}{l}\text { Employment rate in } \\ \text { two-parent families } \\ (\%), 2018\end{array} & \begin{array}{l}\text { Unemployment rate } \\ \text { in two-parent }\end{array} \\ \text { families (\%), 2018 }\end{array}\right]$

Source: OECD family database.
According to Table 2, the child poverty rate in two-parent families is highest in Italy at $15.8 \%$, while Estonia has the lowest rate at $7.5 \%$. All countries, except Estonia, have child poverty rates above the OECD average of $9.4 \%$. Regarding two-parent employment rates, Lithuania leads the pack at $62.9 \%$, while Italy has the lowest rate at $31 \%$. Notably, the employment rates in Baltic states are above the OECD average of $46.9 \%$, whereas Southern European states are below. Finally, the unemployment rates in two-parent families are highest in Italy at $6.3 \%$ and
lowest in Estonia at 2\%. The unemployment rates in Baltic states are below the OECD average of $4.5 \%$, whereas Southern European states are above it.

It is evident from Tables 1 and 2 that the unemployment rate is significantly lower in households with two parents than in single-parent families. Conversely, the employment rate is relatively better in two-parent households compared to single-parent. Notably, the child poverty rate in single-parent families is significantly higher than two-parent families. Hence, this data highlights the financial prosperity of two-parent families.

### 2.3 Child Maintenance Schemes

Divorce and separation are increasing across European countries (European Judicial Network, 2022). Children are significantly affected by divorce and separation, particularly when it comes to their economic well-being. One scheme, such as the child maintenance scheme, may promote the economic stability of children whose parents have separated or divorced (Hakovirta et al., 2022). In addition, child maintenance schemes can promote better living opportunity for children even in the event of parental separation or divorce (Hakovirta \& Jokela, 2018). The earlier statement indicates parental responsibility to provide financial support for the living expenses of their children if they do not live with their children (OECD, 2010). Thus, child maintenance obligations come into the discussion.

Separation and divorce lead policymakers to re-evaluate parental child maintenance obligations. Parental obligations can ensure proper living standards for the children. However, parental obligations vary widely depending on a country's policies, history, and legal structures. Cultural and socio-political factors can also play a role in shaping attitudes towards parental responsibilities. However, the states are maintaining three main clusters of child maintenancecourt, agency, and hybrid. In many countries, the court is the sole responsible to determines child maintenance payments, especially in cases of divorce or separation. The judicial system is liable to prosecute and determining child maintenance agreements. For instance, the civil judicial procedure in France automatically determines child maintenance payments after a divorce or separation. However, parents can make private agreements in many countries. Austria, for example, allows parents to make a private agreement, but it needs court approval. If they disagree, they can seek court assistance. In some countries, such as the UK, the agency is responsible for settling child maintenance obligations. The agency assesses, collects, and transfers child maintenance payments. Some countries follow a hybrid system-both agency and court system. The municipal social welfare board or the court can provide counsel to the parents if they disagree. In some cases, the municipal social welfare board typically leads in determining child maintenance payments. However, if parents disagree with the decision from
the municipal social welfare board, a lawyer may assist in the case. The Netherlands follows a unique process involving the court, agency, and municipal social assistance in the child maintenance procedure. This approach refers to the hybrid scheme (Skinner, Bradshaw, and Davidson, 2009).

The following section describes the child maintenance schemes across studied countries.

### 2.4 Child Maintenance Schemes in Studied countries

## Estonia

The Estonian constitution established that parents should provide financial support, such as child maintenance, to the children. This obligation is considered a family duty even after separation. Non-residence parents are required to provide financial assistance to the residence parent until their children turn 18 years old. However, children can apply to the court to continue receiving child maintenance even after turning 18. If parents fail to pay child maintenance voluntarily, the residence parent can seek help from the court and even apply for state aid. The state guarantees a minimum child maintenance allowance of 292 euros until 2021. However, starting in 2022, the court is responsible for deciding on the amount of child maintenance payment, considering child's situation, parent's income, and child-related costs (European Judicial Network, 2022).

## Greece

Non-resident parents provide monetary support-such as child maintenance to resident parents in case of divorce or separation in Greece. Children supposed to receive child maintenance payment until they reach to 18 years of old, and if the child is studying, they are also entitled to receive maintenance after 18 years of old. However, if a person cannot pay, they are not obligated to do so. To receive child maintenance payment, a resident parent must apply to the court and appoint a lawyer with a power of attorney to bring an action. However, a resident parent must pay court expenses of around 300 euros. The court will deliver a default judgment against the resident-parent if he/she does not pay the court expenses. The court decides and enforces child maintenance payment considering both parent's income and the child's needs. No organization can help to recover child maintenance payments (European Judicial Network, 2020).

## Italy

In Italy, child maintenance is financial assistance provided to resident parents from the nonresident partner due to separation or divorce. Parental financial assistance ensures that the child's needs are met and is also part of their duty of family solidarity. The court decides the regular child maintenance amount considering the child's needs and the financial condition of
the non-resident parent. This payment should continue until 18 years of their child's age. Resident-parents may apply to the court if they do not receive child maintenance payments. Alternatively, both parents can reach a private agreement with the help of a lawyer before going to court. In this case, the decision must be sent to the public prosecutor within ten days. However, the state may provide financial assistance to the resident parents if they do not receive child maintenance from non-resident parents. It is important to note that this amount is not guaranteed, and only a few people receive it. Ultimately, everything depends on the court's decision (European Judicial Network, 2021).

## Lithuania

In Lithuania, family is highly valued, and parents are liable to provide a prosper life for their children, even after separation or divorce. The constitution recognizes that parents should have some obligations to maintain their underage children after separation or divorce. Thus, the law considers parents the primary actor responsible for child maintenance contribution (Maslauskaite \& Michailoviené, 2016). The state should take responsibility for those children whose parents are not taking liability for their children. However, the parents are responsible for paying children in any condition until they reach 18 years of old. The court decides the child maintenance payment in Lithuania (European Judicial Network, 2020). The court considers three ways to pay - a regular monthly contribution, a lump-sum payment, and assigning particular property to the children (Maslauskaite \& Michailoviené, 2016). The court does not fix a maximum or minimum amount of money for the children, but the court decides on a proportional contribution considering the child's needs, such as living costs, the parent's income, circumstances, and conditions (Maslauskaite \& Michailovienė, 2016, \& European Judicial Network, 2020). In all cases, the court decides what amount to pay for the child and fixes the amount based on the specific case (Maslauskaite \& Michailoviené, 2016).

Moreover, the family law states that parents should provide financial support for the betterment of their children, and the wealthy parent should contribute more. The state plays a secondary role in child maintenance contribution, and it only provides support in cases where parents' support is inadequate, or they cannot pay. However, child maintenance paid by the state is only guaranteed for some, and it is minimal. The court-approved maintenance payments only for exceptional cases (European Judicial Network, 2020).

### 2.4.1 Child maintenance schemes across studied countries: A comparative analysis

The court plays a significant role in child maintenance schemes across countries included in the study. While parents are primarily responsible for providing financially for their children, the court ensures that child maintenance payments are made. The child maintenance scheme in Estonia is highly organized and well-structured, with robust enforcement mechanisms in place. These mechanisms include both an enforcement service and a judicial procedure. The child maintenance mechanism in Greece, Italy, and Lithuania is almost identical. In Greece, resident parents are required to pay court expenses. The state law in Lithuania and Italy is committed to paying child maintenance payments in case of parental failure. However, it is not guaranteed, and the court determines whether single parents receive financial support.

The following table highlights the key characteristics of child maintenance schemes of countries included in the studies.

Table 3: Key Characteristics of Child Maintenance Schemes, 2010

| Country | Involvement in the determination of child maintenance | Responsibility for determining child maintenance payment | Rules for determining payment | Responsibility for enforcement | Age limit for child maintenance payments | Advance on maintenance payments |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Estonia | Parents, Court and Agency | Court if <br> parents don't <br> reach <br> agreement | Minimum <br> stated by the state, and additional based on parents' income | Enforcement service/ Judicial Procedure/Court | Until 18 years of children age | Yes |
| Greece | Parents and Court | Parents and Court | Parents income | Courts | Until 18 years of children age | No |
| Italy | Parents and Courts | Parents and Court | Parents income | Courts | Until 18 years of children age | No |
| Lithuania | Parents and Courts | Parents and Court | Parents income | Courts/Judicial procedure | Until 18 years of children age | No |

Source: (https://www.oecd.org/els/family/database.htm).

### 2.5 Literature Review: Child maintenance and poverty reduction

Child poverty continues to be a major issue across the European Union (Salanauskaite \& Verbist, 2013). About fifty percent of the poor children in Europe come from two types of families: single-parent and two-parent (Salanauskaite \& Verbist, 2013). Empirical research indicates that single-parent families are facing economic hardship in many countries. A study found that children in single-parent families are more prone to fall in poverty across countries (Cuesta et al., 2018). Studies also reveal that in most countries, single-parent families are also more prone to live in poverty than families with two parents (Bradshaw et al., 2018, \& Gornick \& Jäntti, 2012). Hence, scholars and policymakers are more concerned about the poverty of single-parent families. Scholars and policy makers expect to give priority on income poverty in single-parent families (Cuesta et al., 2018). Research indicates that child maintenance can promote economic prosperity and helps to alleviate child poverty in single-parent families (Cuesta et al., 2023, \& Cuesta et al., 2018). Child maintenance is not a scheme where families get support from the government, but it is a scheme where non-resident parents provide financial assistance to resident parents (Cuesta et al., 2018).

Several studies found that child maintenance schemes reduce child poverty in many developed and under-developed countries (Cuesta et al., 2018; Hakovirta, 2011; Skinner, Bradshaw, and Davidson, 2007). In 2004, child maintenance brought out $6 \%$ and $50 \%$ of children from poverty in single-headed families in the United States and Sweden, respectively (Cuesta et al., 2018). Thus, child maintenance can be identified as an important source of child poverty reduction. However, the child poverty reduction differs across countries. A study found that child poverty reduction varies significantly across countries when it comes to single-parent families who receive child maintenance. For example, child maintenance payments in Finland decreased poverty by 29 percent compared to 7 percent in the UK (Hakovirta, 2011). In addition, countries follow different mechanisms to determine child maintenance schemes (Cuesta et al., 2023). Most countries use the court system ( 9 out of 19) to determine child maintenance payments (Cuesta et al., 2023). Moreover, a study found that child maintenance transfer reduces poverty and the poverty gap ${ }^{3}$ (Cuesta et al., 2018). Research indicates that child maintenance positively impacts children in single-parent families and helps to reduce the poverty gap. In the USA, it reduces the poverty gap by $5.3 \%$, while in Finland and Sweden, it reduces the poverty gap by $15.7 \%$ (Hakovirta, 2011). In summary, a child maintenance scheme is a potential source to alleviate child poverty and poverty gap among single-parent families.

[^2]The following section highlights data, methods, and descriptive statistics.

## 3. Data, Methods and Descriptive Statistics

This study uses the Luxemburg Income Study (LIS) data from 2016. This dataset is familiar for giving comprehensive reports on household composition and family income. In addition, variables are well-connected in LIS dataset, which allow this study to compare child poverty across various family types, and assess the effectiveness of child maintenance to alleviate poverty in single-parent families across studied countries.

## Samples

This study defines single-parent families as a group comprised of at least one adult who is over 18 years old, and an adult should have at least one child who is under 18 years old. On the other hand, this study also defines two-parent families headed by two adults who are over 18 years old and they are married or cohabiting (Cuesta et al., 2018). In addition, they should have at least one child who is under 18 years old. The total number of observations across countries is 92,961 . However, after excluding widows and other categories, this study identified 1,094 observations belong to single-parent families, and 15,005 observations belong to two-parent families. Overall, the total number of observations is 16,099 .

Table 4: Distribution of single and two-parent families

| Country | Single-parent <br> families | Two-parent families | Total Observations |  |
| :--- | :--- | :--- | :--- | :--- |
| Estonia | $269(8.59 \%)$ | $2,864(91.41 \%)$ | 3,133 |  |
| Greece | $470(5.06 \%)$ | $8,812(94.94 \%)$ | 9,282 |  |
| Italy | $135(6.39 \%)$ | $1,979(93.61 \%)$ | 2,114 |  |
| Lithuania |  | $220(14.01 \%)$ | $1,350(85.99 \%)$ | 1,570 |
|  | Total | $1,094(6.80 \%)$ | $15,005(93.20 \%)$ | 16,099 |

Source: Own calculation from LIS database 2016, Wave X.
Table 4 shows some interesting findings based on the distribution of two-parent and singleparent families. Table 4 states that below $10 \%$ single-parent families are observed in Estonia, Greece and Italy. Lithuania has the highest percentage (over 14\%) of single-parent families among studied countries. On the other hand, the lowest percentage of single-parent families (5.6\%) marked in Greece. Regarding two-parent families, Greece has the highest number, with almost $95 \%$, while Lithuania has the lowest percentages, just under $86 \%$.

## Variables

This study analysed the anti-poverty effectiveness of child maintenance in single-parent families across countries. To do so, we utilized two levels of variables: personal level and household level. The household level variables included household identifier, normalized household weight and composition, number of household members, alimony and child maintenance, number of household members 17 or younger, and disposable household income. Meanwhile, the personal level variables consisted of household identifier, marital status, relationship to household head, age of youngest child, and number of own children living in the household.

## Measures

## Child Maintenance

Child maintenance ${ }^{4}$ specify the child support comes from the non- resident parent to resident parent to maintain living expenses of a child (Hakovirta \& Jokela, 2018). Two measures of child maintenance, dichotomous and continuous, are widely used. The dichotomous measure refers to whether or not the child received child maintenance in the past year. On the other hand, continuous measures refer to the yearly gross family income from child maintenance payments (Cuesta et al., 2018). This study will use the dichotomous measure to calculate the child poverty rate before and after child maintenance. Thus, this study considers child maintenance received in the year 2015 as the study covers data from 2016. In addition, alimony ${ }^{5}$ and child maintenance are considered to see their combined effect on reducing poverty. It is important to note that widows are not included in this study because widows hardly receive child maintenance payments.

## Disposable Household Income (DHI)

The disposable household income can be calculated by subtracting taxes and social contributions from the household's yearly gross total income. According to LIS, DHI is the sum of a household's yearly total income, from different income sources- such as labour income, social security transfers, and private transfers, by subtracting income taxes and social contributions (LIS, 2023).

## Pre-and post-child maintenance income

This study calculates pre-child maintenance income by subtracting child maintenance payments from yearly gross disposable household income. On the other hand, the post-child

[^3]maintenance income considers alimony and child maintenance payments to calculate yearly gross disposable household income (Cuesta et al., 2018).

## Poverty Rate

This study considers a standard $60 \%$ poverty threshold to measure the child poverty rate across studied countries. The child is considered poor if the family income falls below the $60 \%$ poverty threshold (Cuesta et al., 2018). The $60 \%$ poverty threshold applies to both single-parent and two-parent families.

## Poverty gaps

The poverty gap is a ratio by which the average income of a person falls below the poverty line. The pre-child maintenance poverty gap considers family income before child maintenance payments, while the post-child maintenance poverty gap considers the family income after child maintenance payments (Cuesta et al., 2018).

## Methods

This study assesses child poverty rates by the family structure, and answer the first research question- whether children in two-parent families are better off than the children in singleparent families. In response to the second research question, this study calculates poverty rates for pre-and post-child maintenance income. Child poverty reduction displayed in absolute terms, such as percentage points reduction, and relative terms, such as percentage of children lifted out of poverty (Cuesta et al., 2018).

## 4. Results

### 4.1 Child poverty in single-parent and two-parent families

This section addresses the first research question and provides insights into child poverty based on family structure. Table 5 below describes the child poverty rates in two-parent and singleparent families. The results indicate that the overall poverty rate is highest in Italy, which is 29.31 percentage points, for all families with children, while Estonia reports the lowest rate at 19.45 percentage points. Furthermore, the highest child poverty rate for two-parent families is observed in Italy at 25.04 percentage points and the lowest in Estonia at 15.48 percentage points. Conversely, the results suggest that the child poverty rate in single-parent families is highest in Lithuania at 50.70 percentage points and lowest in Greece at 35.34 percentage points. Findings suggest that the child poverty rates for two-parent families are almost half compared to single-parent families. Hence, these results indicate that children in two-parent families are comparatively more affluent than single-parent families.

Table 5: Child poverty rates in single parent and two-parent families.

| Country | Child poverty rate in <br> all families (\%) | Child poverty rate in <br> two-parent families <br> $(\%)$ | Child poverty rate in <br> single-parent <br> families (\%) |
| :--- | :--- | :--- | :--- |
| Estonia | 19.45 | 15.48 | 44.40 |
| Greece | 24.00 | 23.05 | 35.34 |
| Italy | 29.31 | 25.04 | 45.94 |
| Lithuania | 28.37 | 22.82 | 50.70 |

Source: Own calculation from LIS database 2016, Wave X.

### 4.2 Anti-poverty effectiveness of child maintenance

This section addresses the second research question. Tables 6 and 7 describe whether child maintenance could reduce child poverty among all single-parent and single-parent families receiving child maintenance. Results from Table 6 suggest that Lithuania has the highest child poverty rate before and after child maintenance for all-single parent families, with rates of 59.49 and 50.70 percentage points, respectively. On the other hand, Greece has the lowest child poverty rate before and after child maintenance, with rates of 40.70 and 35.34 percentage points, respectively. The highest child poverty reduction (absolute reduction) is observed in Lithuania, with a reduction of 8.79 percentage points. Conversely, the lowest child poverty reduction (absolute reduction) is observed in Italy, with a reduction of 1.5 percentage points. Notably, the absolute reduction across all countries is below ten percentage points, indicating that child maintenance reduces child poverty for all single-parent families, but the effects are minimal. Furthermore, the relative reduction is highest in Lithuania at 14.78 percentage points, while Italy has the lowest at 3.16 percentage points. Notably, the relative reduction of child poverty is over ten percentage points for all studied countries except Italy.

Furthermore, the results show that child maintenance is crucial not only in reducing child poverty but also in reducing the child poverty gap for all single-parent families. The result shows that Greece has the highest reduction in the child poverty gap at 33.33 percentage points, while Lithuania has the lowest reduction at 17.86 percentage points. Italy has minimal effects on reducing child poverty for all single-parent families at 1.5 percentage points. However, it reduces the child poverty gap by 26.09 percentage points, making it the second-highest poverty reduction across all studied countries. In addition, child maintenance has the highest impact on reducing poverty in Lithuania, with an absolute reduction of 8.79 percentage points, but it reduces the lowest child poverty gap by 17.86 percentage points. In summary, child
maintenance is effective in reducing child poverty for all single-parent families across studied countries.

Table 6: Anti-poverty effectiveness of child maintenance for all-single parent families

| Country | Child <br> poverty rate <br> before child <br> maintenance <br> $(\%)$ | Child <br> poverty rate <br> after child <br> maintenance <br> $(\%)$ | Absolute <br> reduction in <br> child poverty <br> $(\%)$ | Relative <br> reduction in <br> child poverty <br> $(\%)$ | Reduction of <br> child poverty <br> gaps (\%) |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Estonia | 50.74 | 44.40 | 6.34 | 12.50 | 20.00 |
| Greece | 40.70 | 35.34 | 5.36 | 13.17 | 33.33 |
| Italy | 47.44 | 45.94 | 1.5 | 3.16 | 26.09 |
| Lithuania | 59.49 | 50.70 | 8.79 | 14.78 | 17.86 |
| Sourc: Own |  |  |  |  |  |

Source: Own calculation from LIS Database 2016 wave X.
According to Table 7, the result suggests that child maintenance effectively reduces child poverty among single-parent families receiving child maintenance. Results indicate that Italy has the highest child poverty rate before and after child maintenance, at 69.16 and 64.18 percentage points, respectively. On the other hand, Estonia has the lowest child poverty rate before child maintenance, which is 62.32 percentage points. However, Lithuania observed the lowest child poverty rate after child maintenance which is 35.96 percentage points. The result also indicates that Lithuania has the highest child poverty reduction, with an absolute reduction of 27.05 percentage points. On the other hand, Italy has the lowest child poverty reduction, with 4.98 percentage points reduction. The results suggest that the absolute reduction of child poverty for single-parent families is over 15 percentage points in all studied countries except Italy. Furthermore, Lithuania has the highest relative reduction of child poverty, at 42.93 percentage points, while Italy has the lowest relative reduction of 7.20 percentage points. Finally, the results indicate that child maintenance reduces child poverty gaps by more than 40 percentage points for all countries. The highest child poverty gap reduction observed in Greece is 60.53 percentage points, while Italy has the lowest child poverty reduction, at 43.48 percentage points. These results indicate that child maintenance reduces child poverty for single-parent families those receiving child maintenance, but the effects vary across countries. The results also indicates that child maintenance reduces the child poverty gaps for singleparent families in studied countries.

Table 7: Anti-poverty effectiveness for single-parent families receiving child maintenance.

| Country | Child <br> poverty rate <br> before child <br> maintenance <br> $(\%)$ | Child <br> poverty rate <br> after child <br> maintenance <br> $(\%)$ | Absolute <br> reduction in <br> child poverty <br> $(\%)$ | Relative <br> reduction of <br> child poverty <br> $(\%)$ | Reduction of <br> child poverty <br> gaps (\%) |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Estonia | 62.32 | 46.74 | 15.58 | 25.00 | 44.44 |
| Greece | 68.05 | 44.17 | 23.88 | 35.09 | 60.53 |
| Italy | 69.16 | 64.18 | 4.98 | 7.20 | 43.48 |
| Lithuania | 63.01 | 35.96 | 27.05 | 42.93 | 57.69 |

Source: Own calculation from LIS Database 2016 wave X.
It is evident from Tables 6 and 7 that the absolute reduction of child poverty for single-parent families receiving child maintenance is more than $15 \%$ in studied countries except Italy. Conversely, the absolute reduction in all-single-parent families is less than $10 \%$ across studied countries. In addition, the relative reduction is high (more than $25 \%$ ) in single-parent families receiving child maintenance than all-single parent families (which is less than $15 \%$ ) across studied countries. Moreover, child maintenance lifted out more than $40 \%$ of children from poverty in single-parent families receiving child maintenance. Conversely, child maintenance lifted out less than $35 \%$ of children from poverty in all single-parent families. In both cases, child maintenance lifted out children from poverty but the effects are high in single parent families than all-single parent families. In summary, these results conclude that child maintenance effectively reduces child poverty for those single-parent families receiving child maintenance.

## 5. Discussion and Conclusion

This study is the first to examine the anti-poverty effectiveness of child maintenance on singleparent families in Baltic and Southern European states. This study also compares child poverty rates based on family structure across these states. The findings suggest that two-parent families are better off than single-parent families. Interestingly, the child poverty rate in twoparent families is highest in Italy, a Southern European state, while the lowest observed in Estonia, a Baltic state. On average, the result indicates that child poverty rates in two-parent families are lowest in Baltic states compared to Southern European States.

Conversely, Lithuania, a Baltic state, has the highest child poverty rate in single-parent families. In addition, the lowest child poverty rate is identified in Greece, a Southern European state. Despite these variations, broadly, this study suggests that Southern European states are generally top in reducing child poverty in single-parent families.

Furthermore, Greece's lowest single-parent poverty rate indicates their efficient social policies, labour market policies for single-parent families, and child maintenance policies. Indeed, earlier research has shown that European societies have developed policies to support working families with children (Chzhen \& Bradshaw, 2012), which may help to keep the low child poverty rate in single-parent families in this country. In addition, the study result highlights that the difference between child poverty rates in single-parent and two-parent families is massive in all studied countries. These differences reinforce the well-established finding that children are affluent in two-parent families (Chzhen \& Bradshaw, 2012).

Based on the second research question, this study found that child maintenance is efficient in decreasing child poverty in both Baltic and Southern European states. However, the effects of child maintenance on child poverty vary across these countries. In Italy, child maintenance brought out $7.20 \%$ of children from poverty in those families receiving child maintenance, the lowest among studied countries. A study found that child maintenance slightly reduces child poverty because a limited number of eligible single-parent receive child maintenance transfers (Hakovirta et al., 2020).

On the other hand, in Lithuania, child maintenance has lifted 42.93\% of children out of poverty in those families receiving child maintenance which is the highest among studied countries. A study states that ensuring child maintenance from non-resident parents to resident parents may help to reduce poverty (Hakovirta et al., 2020). In addition, study also states that a robust enforcement mechanism for child maintenance payments may help to maximize child poverty reduction (Skinner, Bradshaw, \& Davidson 2007).

The study shows that child maintenance has moderate anti-poverty effectiveness in Estonia, with $25 \%$ of children being lifted out of poverty in those families receiving child maintenance. Estonia maintains a court system, and the court is solely responsible for deciding child maintenance. In addition, their robust enforcement mechanism-two-layer enforcement mechanism, can assist resident parents to ensure child maintenance payments (European Judicial Network, 2022). These mechanisms may help to reduce child poverty in Estonia.

Greece maintains a court system to ensure child maintenance for resident parents. The court fees are capped at 300 euros. The resident parents must pay the court fee to apply for child maintenance payments. The case will only proceed if a parent can pay the court fees. Despite
these procedures, child maintenance has been very effective in Greece, and lifting out $35.09 \%$ of children from poverty in those families receiving child maintenance which is the secondhighest among studied countries. Greece is implementing several policies to assist low-income families and vulnerable groups, particularly after 2012, which may help to reduce poverty levels in single-parent families. (Ferrone et al., 2021).

Notably, child maintenance transfers not only lift children out of poverty but also reduce child poverty gaps across countries. This study states that child maintenance has reduced the child poverty gap from $43.48 \%$ in Italy to $57.69 \%$ in Lithuania. These findings are consistent with an earlier study showing that child maintenance transfers have reduced poverty gaps in Latin American and some developed countries (Cuesta et al., 2018).

These results are especially noteworthy for Baltic states with the highest child poverty gap reduction compared to Southern European states. Child poverty reduction could be attributed to the Baltic states' better child maintenance systems, including court procedures, enforcement procedures, and child maintenance transfers. Empirical research indicates that child maintenance policies can promote financial stability, and alleviate poverty gap among children in single-parent families (Hakovirta et al., 2022). The successful implementation of child maintenance policies in Baltic states could explain their better performance in reducing child poverty gaps than Southern European states.
The results of this study are discussed in light of several drawbacks. The first limitation is that the study only considers data from the 2016 wave X. It would have been ideal for including the latest dataset, for example, from 2020 or 2021. However, the LIS dataset only offers data from 2016 (the latest) for all countries included in the study except Lithuania (2018). Therefore, this study decided to continue with the dataset from 2016. The second limitation is that child maintenance is guaranteed for every child in Estonia, but this is not included in the analyses. Unfortunately, the latest template for LIS data 2019 has no variable for guaranteed child maintenance transfer. As a result, the study did not include a child maintenance guarantee scheme in the analysis. The third limitation is that the second part of the study used an updated child poverty rate in single-parent and two-parent families from the OECD database, thus poverty rates in the literature review and findings may differ on some points.
Despite some drawbacks, this study conclude that child maintenance payments effectively reduce child poverty among single-parent families in studied countries. However, the impact differs across countries due to the different child maintenance policies. All these countriesmaintained court-based systems to ensure child maintenance transfers. Nevertheless, the court runs differently. A study states that different courts treat similar cases differently, and some
courts are more adversarial than others (Hakovirta et al., 2022). These differences can make a big difference in whether or not single-parent families can access the child maintenance they deserve. For example, in Italy and Greece, a resident parent has to pay a court fee to apply for child maintenance transfers, while the court procedure is freely accessible in Estonia. These fees can be a massive burden for single-parent families in Italy, especially when they are struggling financially due to separation or divorce. In addition, the impacts also differs because not all eligible single-parent families receive child maintenance payment (Hakovirta et al., 2020).

This study also found that children in two-parent families are at an advantage over children in single-parent families. This result is consistent with a previous study which states that twoparent families are economically prosperous than single-parent families (Cuesta et al., 2018). These results conclude that single-parent families are relatively poor than two-parent families. Better child maintenance systems and compliance can promote economic stability among single-parent families.

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[^0]:    ${ }^{1}$ The Organisation for Economic Co-operation and Development.

[^1]:    ${ }^{2}$ crude divorce rate refers to the number of divorces per 1000 people during a given year.

[^2]:    ${ }^{3}$ Poverty gap refers to a ratio by which the average income of a person falls below the poverty line.

[^3]:    ${ }^{4}$ Scholars used child maintenance and child support in similar terms. Child maintenance is used across European Union (EU) where child support is used in the United Kingdom and the United States.

    5 A financial support that a person received from their spouse during separation or divorce.

