

The Effect of Childhood Savings Accounts on Household Spending

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Abstract

In 2005, the U.K. implemented the Child Trust Fund (CTF) to improve the life chances of children born into poverty. The introduction of the CTF, and the abrupt ending of the program in 2011 as part of the austerity measures under the Cameron government, provides a unique natural experiment to test how parents respond to a large-scale financial investment in children. Using data from the U.K. Living Costs and Food Survey, this paper explores whether parents alter their spending patterns in response to the CTF and whether this response differs by socioeconomic status (SES). I find that while low SES households do not demonstrate the largest changes in their expenditures in response to the Child Trust Fund, middle SES households with eligible children significantly alter their expenditures to increase parental investments. These results suggest that for some households, child savings accounts increase parental investments.

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I. Introduction

Economic circumstances during childhood have long-term effects on well-being. Economic hardship during childhood affects the investments parents can make in a child and, ultimately, the child's development and future human capital (Waldfogel and Washbrook, 2011). Compared to children from other families, children from lower income families face fewer opportunities for upward mobility, including attending and completing college and starting a business (Bailey and Dynarski, 2011; Currie 2009; Stinebrickner and Stinebrickner, 2008). With the increase in income and wealth inequality over the past thirty years, the consequences of the "birth lottery" are more important than before (Chetty et al. 2014; Kopczuk 2010; Wolff, 2007).

In an effort to equalize the life chances of children born into poverty, the UK enacted the Child Trust Fund (CTF) in 2005 for all children born on or after September 1, 2002. Before abruptly ending the CTF in 2011, the government contributed £250 to £500 to a savings account for each eligible child and made additional contributions of £250 to £500 at age 7. Although the balance will only be available to children when they reach the age of 18, it can be used for any purpose, including spending that may improve economic mobility such as furthering their education or starting a business.

The CTF, by providing financial endowments to a child, was intended to give eligible children more economic resources as they transition to adulthood. If parents believe the public endowment will allow for opportunities previously unattainable for their CTF eligible child, especially for parents with limited means, parents may choose to reinforce these investments by increasing their own investments. On the other hand, if parents have a predetermined level of quality for their children or if parents wish to equalize total investments across all their children, public financial endowments may crowd out private, parental investments in CTF eligible

children. In this paper, I examine whether households alter their spending in response to the CTF and, specifically, if lower income households respond differently to the CTF than other households. By measuring a child's endowment with the CTF and private investments with household expenditures, I can measure if a child savings account program will crowd-in or crowd-out parental investment and if this effect differs for households of different socioeconomic status (SES), as hypothesized by Conley (2008). Understanding how parents respond to a large-scale public investment will help to understand how children will fare under such a program.

A large literature exists on how parents respond to a child's endowment by making investments to influence the human capital of their children. A child's endowment refers to the resources the child possesses at birth. This study differs from the literature in two respects. First, previous work tends to focus on a child's genetically determined endowment, often measured by birth weight. Utilizing the variation in endowments created by the CTF, this study captures a plausibly exogenous source of a child's endowment.

Second, previous work also tends to focus on parental investments of time rather than expenditures. Yet, parental spending on children is one way that parents invest in children (Kaushal et al. 2011; Kornrich and Furstenberg 2013). Parents alter expenditures in response to changes in child-related benefits (Blow et al. 2004; Kooreman 2000; Lundberg et al. 1997), as well as means-tested benefits (Gregg et al. 2004; Ward-Batts 2008). No previous work, to my knowledge, examines a savings program.

This research makes several contributions to the literature. First, it captures how child savings accounts may contribute to child development. In addition to the UK, a number of countries, including Canada, South Korea, and Singapore, have created large scale child savings

account programs; in the US, child savings accounts exist as small-scale programs, known as Child Development Accounts (CDAs) that are often demonstration projects within cash welfare programs (Loke and Sherraden 2009). Most work on child savings accounts, including the CTF, focus on tabulations of the number of accounts opened or changes in amounts saved using observational data.¹ Little is known about how child savings account programs affect child development. This research, to my knowledge, is the first to examine how parents respond to a long-term public investment in children that increases the child's financial endowment for their adult life. These potential responses are important for assessing the societal benefits of child savings programs.

This work also provides an application of Conley's 2008 hypothesis that parental investment strategies differ by socioeconomic status (SES). Conley argues that lower SES parents, because of their budget constraints, direct their investments towards the child with the highest return. In contrast, higher SES households seek to equalize investments in their children. Because the generosity of the CTF differs by household SES status, I can measure if households respond differently to the CTF.

The findings of this work also have implications for the long-term consequences of policies that seek to end the intergenerational transmission of poverty, especially those that target young children. If parents reinforce a child's financial endowment with increased resources, these policies will be more effective in improving the future human capital of children.

This paper proceeds as follows: Section II provides background on the Child Trust Fund and the broader policy context, Section III discusses the literature related to how economic resources during childhood affect long run outcomes and previous work on child savings accounts. Section

¹ The Saving for Education, Entrepreneurship, and Downpayment (SEED) program a randomized CDA program in Oklahoma, found small but positive effects of program participation on savings for education among lower income families (Nam et al 2013).

IV presents the data and methodology used in the analysis. Section V presents the results and Section VI concludes with a discussion.

II. Background

Child Trust Fund

As part of Prime Minister Blair's goal to reduce poverty and improve the well-being of children born into poverty, he proposed the CTF in April of 2001. With the May 2004 passage of the Child Trust Fund Act, the CTF launched in 2005. The CTF provided a tax-free savings account for children born on or after September 1, 2002. At birth, all eligible children received a £250 voucher from the government to establish a CTF account. If the parent did not establish an account within a year, the government would open an account for the child. Additional public contributions were planned at ages seven and thirteen. Parents and other relatives could also make contributions to a CTF, subject to annual limits. At age 18, the child would be allowed to use the account for any purpose.

While the CTF was a universal program in that eligibility was defined solely by birth date and not by household income or assets, to target children from lower income families, children from these families received an additional £250, for a total of £500, each time the government made a public contribution. For purposes of the CTF, low-income was defined as those eligible for the full Child Tax Credit which, in 2005, was for families with annual gross incomes below £13,190.² This amount was adjusted annually for inflation.

Once an account was established, CTF assets could be invested in three different ways, depending on the preferences of the adults. Assets could be invested in a Stakeholder Account, a savings account, or a non-Stakeholder Account invested in stocks. Savings accounts are the lowest risk but also offer the lowest growth option. Stakeholder Accounts allow for higher

² Estimates suggest that about half of families with children would be eligible for the full Child Tax Credit.

growth and diversified risk because the funds are invested in a range of stocks; once the child turns 13, the funds are moved to lower risk investments. If the government opened an account for the child, it would be established as a Stakeholder Account.

The CTF program continued throughout the tenures of Prime Minister Blair and Prime Minister Brown's. The program, however, came to a sudden and unexpected end after Prime Minister David Cameron and the coalition government assumed power in May 2010. As part of their austerity measures, they reduced the initial CTF endowment for children born after July 2010 to £50 (£100 for lower income children) and ended the CTF effective January 2011. As a result, any child born after January 1, 2011 did not receive a CTF and only children that reached age seven between September 1, 2009 and July 31, 2010 received the additional contribution at their seventh birthday. With the end of the program, all CTF assets were transferred to Individual Savings Account (ISA). While an ISA also allows for tax-free savings, unlike a CTF, no public contribution is provided for these accounts.

Policy Context

The CTF came after a period of reforms to social support programs as part of Prime Minister Blair's efforts to abolish child poverty within twenty years and to halve it within ten years (Gregg et al. 2006; Waldfogel 2010). A timeline of these major reforms is provided in Appendix A. Households with very young children were of particular interest for support. Beginning in April 1999 and lasting until 2010, rates within the universal Child Benefit increased, particularly for the family's first child. Income Support benefits (cash welfare) also increased in April 1999 for families with children under age 11. In April of 1999, a grant program for low-income pregnant women to assist with purchasing essential items for a newborn (the Sure Start Maternity

Grant) increased from £100 to £200 and then to £500. The government then created the Children's Tax Credit for 2001 and 2002 to direct additional resources to children.

The British government directed more services to children, as well. A universal preschool program began for all four-year olds in September 1998 and extended to three-year olds in 2004. The government expanded child care, particularly for lower income families, and increased child care quality standards. Educational reforms aimed at improving student achievement were implemented, including class size reductions in primary school, curriculum requirements for primary school teachers, additional funding to secondary schools in lower income neighborhoods, and incentives for young adults from lower income families to remain in school.

The Blair government promoted work with a series of reforms to the Family Credit, a wage subsidy for lower income parents working at least 16 hours per week. In 1999, the Working Families Tax Credit (WFTC) replaced the Family Credit. Subsequent reforms in 2003 split the WFTC into the Working Tax Credit (WTC) and Child Tax Credit (CTC). The CTC subsumed the Children's Tax Credit and the child-related benefits of the WFTC, thereby, allowing non-working families to be eligible for these benefits. The CTC was composed of two elements: the family element, which doubled in size for the child's first year (up until age 1), and an amount per dependent child. In total, with these changes, benefit levels increased, income limits relaxed, and, in 2003, the childless gained eligibility for wage subsidies.

Finally, the Blair government made efforts to promote financial inclusion by increasing opportunities for banking, credit, savings, and insurance services. As part of this effort, low-cost bank accounts called Basic Bank Accounts were created to complement an electronic transfer mandate for public benefit programs, access to affordable credit services increased, and additional opportunities for savings were created and promoted.

Intergenerational Mobility in the UK

Compared to other Western European countries, economic mobility across generations in the UK is relatively low. In fact, intergenerational mobility in the UK is roughly similar to the US (Blanden et al. 2005). Unlike the US, intergenerational mobility in the UK has fallen in recent years, a trend attributed to the increasing relationship in Great Britain between family income and access to higher education among more recent cohorts (Blanden et al. 2005).

One factor contributing the lack of intergenerational mobility is lack of assets. Many households have very few financial assets. In fact, a Financial Services Authority survey found that 43% of individuals had no financial assets and an additional 15% had financial assets totaling less than one-half of monthly income (Atkinson et al. 2006). These statistics are corroborated with tabulations from the Family Resources Survey, a nationally representative survey of UK households that collects information in income and assets. Over the 2000 through 2012 period, 58.1 percent of families with children reported less than £1,500 in financial assets; only 15% reported £8,000 or more in financial assets. Thus, despite the absolute amount of CTF balances being relatively small for families that make no additional contributions outside of the public contribution, for many families this could still be a relatively valuable asset upon adulthood.

III. Literature Review

The strategies parents follow when investing in their children's long-run human capital, especially when children differ in their innate characteristics, has been of long standing interest. Two competing theories exist for how parents respond to child initial endowments. The model proposed by Becker and Tomes (1986) suggests that parents seek to maximize the return on their investment by investing more heavily in the human capital of their children with greater

endowments. In contrast, Behrman et al. (1982) propose a model that suggests parents seek to equalize the life chances of their children by directing more resources towards their lesser endowed children. The empirical literature on these strategies is mixed, finding support for models that suggest parents make investments that reinforce their endowments (Behrman et al. 1994; Datar et al. 2010) and other research that suggest that parents compensate for their endowments (Behrman et al. 1982; Griliches 1979). Still other work finds no effect of a child's endowment on parental investment decisions (Almond and Currie 2009).

Conley (2008) reconciles the mixed evidence by noting that both Becker and Tomes (1986) and Behrman et al. (1982) assume families do not face capital constraints and, therefore, parents can optimally make investment decisions. As a result, investments may differ by the family's SES. Under Conley's model, as a result of their more limited resources, low SES parents behave strategically and invest in their children with greater endowments. In contrast, by virtue of their greater resources, high SES parents have the luxury of investing in children with lower endowments. As a result, high SES parents compensate their less endowed children by making more investments in these children so as to equalize the outcomes of their children.

Family SES alone can have direct effects on long-term economic well-being. Greater family resources, measured by either income or wealth, during childhood directly allows parents to purchase additional goods and services, including those that promote child well-being, development and, future human capital (Becker 1991; Bianchi et al. 2004; Brooks-Gunn and Duncan 1997; Duncan et al. 2012; Kaushal et al. 2011; Kornrich and Furstenberg 2013). Family assets allow parents to make long-term investments in their children, as well as maintain a high standard of living during an economic shock. Further, assets allow for gifts and bequests, providing greater resources to children as they enter adulthood. Gale and Scholz (1994) estimate

that transfers from parents and other family members to children constitute at least 20 percent of U.S. wealth accumulation.

Household income is positively related to greater expenditures on goods that are specifically assignable to children or which children derive great benefit, and decreased expenditures on goods that may detract from child well-being (Blow et al. 2004; Gregg et al. 2004; Kooreman 2000; Lundberg et al. 1997; Ward-Batts 2008). For example, spending on children's clothing, recreation, and other items increase child well-being (Bradley and Corwyn 2004). Spending on necessities, such as housing or food, also reduce childhood stress and material hardship, thereby improving both current well-being and long term outcomes, even though other household members can also benefit (Gershoff et al. 2007; Newman and Holupka 2014). In contrast, spending on alcohol and tobacco products can negatively affect children, either through altering parental behavior, crowding out other household spending, or directly harming child health (Chatterji and Markowitz 2001; Thomson et al, 2002).

Family resources may have indirect effects on long-term economic well-being by improving a child's home environment. A supportive and stimulating home environment conducive to learning, including spending on child enrichment goods and activities such as books and lessons, may increase human capital by improving cognitive outcomes and academic achievement (Bradley and Corwyn 2004; Brooks-Gunn and Duncan, 1997; Cunha et al. 2005; Kaushal et al. 2011; Yeung et al. 2002). Parents with greater assets may foster a future orientation in their children, encouraging their children to make long-term investments in their human capital (Sherraden 1991).

Family resources may also indirectly affect long-run outcomes because income and assets protect children from the stresses of growing up in poverty (Brooks-Gunn and Duncan 1997;

Duncan et al. 2012). For example, financial hardship likely increases parental stress and detrimental parenting practices. Financial hardship may be related to residing in a community with poor neighborhood influences and/or lack of public services. These problems increase childhood stress, diminish mental health and well-being, and harm child development.

A large empirical literature examines how economic circumstances during childhood affect child outcomes. Most of the literature focuses on income, rather than assets, during childhood and finds that it is positively related to long-run economic well-being.³ Family resources during childhood have been linked to better educational outcomes, including improved cognition, academic achievement, reading and math scores, educational attainment, and postsecondary educational outcomes (Conley 2001; Dahl and Lochner 2012; Duncan et al. 2011; Dooley and Stewart 2004; Hill and Duncan 1987; Milligan and Stabile 2011; Nam and Huang 2009; Williams Shanks 2007). Other forms of assets, such as homeownership, have also been linked to improved educational outcomes, perhaps because asset ownership is associated with greater parental expectations (Zhan and Sherraden 2003; Zhan 2006). Family resources during childhood have also been linked to better health, including both a child's emotional and physical health, as well as rates of maternal depression (Milligan and Stabile 2011; Evans and Garthwaite 2014).

NOTE TO SELF: Sum up your specific research questions here to set up your data/methods/measure section and illustrate how your research questions are directly linked to the analyses.

IV. Data and Methods

The data come from the UK Living Costs and Food Survey (formerly the Family Expenditure Survey). The Living Costs and Food Survey (LCF) collects demographic, income, and

³ The role of familial assets in improving child outcomes has been studied in developing countries (see Chowa et al. 2010 for a review) but work has also found a link in developed countries (see Williams Shanks et al. 2010 for a review).

expenditure data on approximately 6,000 households each year. This expenditure data includes a 14-day detailed expenditure diary, as well as data on recurring payments, irregularly purchased items, and household durable goods. To adjust for price variation across time and within the year, all expenditures are adjusted to January 2010 using the monthly All Items RPI.

I select households with children from the 1998 through 2012 surveys to capture households before, during, and after the CTF. Households from April 1998 through March 2001 are used to examine expenditure patterns in the pre-period, prior to the announcement of the CTF in April 2001. I drop households only with children age 16 or 17 because not all individuals this age are considered children.⁴

Identification Strategy

The introduction and expiration of the CTF provides a unique natural experiment to examine how parents respond to a child savings account and if low SES parents respond differently than higher SES parents. Variation in the CTF arises over time and across households: some children were not eligible for any CTF, some children were eligible for only an initial government contribution, some children from lower income households were eligible for a larger public contribution than households with greater income, and some children received not only the initial contribution but an additional contribution at age seven.

The regression specification compares households over time by presence of child eligible for a CTF account and the socioeconomic status of the household. Separate regressions are run for households with one child, households with two children, and households with three or more children. The basic regression becomes:

⁴ Age 16 is the minimum school leaving age in the UK. The LCF classifies individuals aged 16 to 18 who are not in full-time education, or who are married as adults; children are defined as those under 18 years of age, in full-time education and have never been married.

$$\begin{aligned}
Expenditure_{it} = & \alpha + \beta_1 CTF_Eligible + \beta_2 MedSES + \beta_3 HighSES + \beta_4 MedSES * CTF_Eligible \quad (1) \\
& + \beta_5 HighSES * CTF_Eligible + \pi_1 ChildAge + \varphi_1 X_{it} + \varphi_2 SocialReforms_{it} \\
& + \varphi_3 Econ + \omega + \mu + \tau + \varepsilon_{it}
\end{aligned}$$

where *CTF_Eligible* is an indicator for whether any child in the household was eligible for a Child Trust Fund.⁵ The variables *MedSES* and *HighSES* reflect that the occupation of the household reference person is considered a medium or high socioeconomic status occupation, respectively, so that low SES households serve as the omitted group.⁶ The interaction, therefore, between *CTF_Eligible* and *MedSES* and *HighSES* is the response to the CTF from middle SES and high SES households, respectively.

The remaining variables in the equation attempt to control for other child and household characteristics that may be related to household spending, including differences in expenditure needs and differences in ability to make expenditures across households. *ChildAge* reflects the age of each child.⁷ The matrix X_{it} controls for household characteristics, including the number of children in the household, household size, race/ethnicity of the household head, marital status of the household head, age of the household head, and the natural logarithm of the household's usual real gross weekly income.

The large changes to the social support system, including weekly Child Benefit, maximum possible in-work credit, and potential Sure Start maternity grant are captured by the matrix

⁵ Eligibility is measured based on the child's age at the time of the survey. I take into account both the reported age and the month of the survey to determine which children are likely eligible for the CTF. Because the data does not include individual birthdates, it will be measured with some error.

⁶ The classification of SES changed during the sample period with the 1998-1999, 1999-2000, and 2000-2001 surveys using the prior classification of SES. Because I use only broad groupings of socioeconomic classifications, measurement error should be minimal. The use of a measure of SES requires dropping 4,038 households with children over the sample period due to missing data. Some households do not have a socioeconomic status attached to the reference person because the reference person is a student, never worked, long-term unemployed, or otherwise not recorded.

⁷ For households with three or more children, I replace this continuous variable with a series of dummy variables reflecting four possible age ranges: children age 0 through 4, children age 5 through 10, children age 11 through 15, and children age 16 or 17

SocialReforms.⁸ Macroeconomic conditions, captured by the regional unemployment rate, are controlled for with *Econ*. Fixed effects for region, ω , control for geographic differences in spending patterns across government office regions. Fixed effects for quarter of the year, μ , control for seasonal patterns within the year and year fixed effects, τ , control for other common macroeconomic shocks and policy changes that may affect expenditures.

Expenditure Measures

Following Gregg et al. (2006) and Kaushal et al. (2011), I examine the natural logarithm of the household's real total usual weekly expenditures. I also measure the share of usual real weekly expenditures for nine broad categories of expenditures: fuel, light, and power; alcohol and tobacco; household goods and services; leisure goods and services; motoring fares and other travel costs; food; clothing and footwear; personal goods and services; and, miscellaneous expenditures. Estimates for these outcomes are included in Appendix B.

Because the focus of this research is on parental investments in children, I examine types of expenditures that could be positively related to investment in children. These include real savings (money put into a bank, savings club, bond, or other savings), the normal real weekly share of food expenditures on fruits and vegetables, the normal real weekly expenditure shares of young children clothing and footwear (age 0 through 4); children's clothing and footwear (age 5 through 15).⁹ Savings increase future household resources that could be used to invest in children. Expenditures on fruit and vegetables represent healthy food that may improve child health. As in the literature, specific types of clothing and footwear allows for the separate identification of expenditures that are consumed by specific members of the household and,

⁸ For both Child Benefits and in-work credits, the variables use benefit levels based on the household's demographic characteristics (marital status and number of children) and relevant fiscal year; for Sure Start maternity grants, households with a child under age 1 are assigned the maximum grant for the relevant fiscal year.

⁹ I do not include educational expenditures in these enrichment goods and services because of the large public expansions of early childhood education and changes to the public education system occurring over this time period.

therefore, proxy for how household resources are distributed amongst different members (Blow et al. 2012; Gregg et al. 2006; Kooreman 2000; Kornrich and Furstenberg 2013).¹⁰

I also include items that are related to child enrichment goods and services: the usual real weekly expenditure share on reading material (books, newspapers, magazines, and periodicals); the presence of a computer in the household; the usual real weekly expenditure share on lessons, classes, and other leisure education; the usual real weekly expenditure share on live entertainment, including theatre, ballet, concerts, and other performances; and, the usual real weekly expenditures on admissions to museums, galleries, and parks. While the data do not indicate if these expenditures were specifically made for children in the household, spending in this category relates to educational related items that may improve human capital: reading materials (books, newspapers, magazines, and periodicals), a computer, and classes and lessons (art classes, music classes, language lessons, sports lessons, etc.). Other spending relates to exposure to arts and culture that could also have educational value: live performances and entertainment and admissions to museums, galleries, and parks.

Finally, I also examine expenditures that would be expected to be negatively related to investments in children. These reflect spending that solely benefits adults, may be harmful for a child's home environment, and may crowd-out spending that could benefit children: the share of usual weekly expenditures on women's clothing and footwear (age 16 and over); men's clothing and footwear (age 16 and over); alcohol; tobacco; and, lotteries, betting, and gambling.

Expenditures on alcohol and tobacco capture spending that can harm children well-being and health. Expenditures on lotteries, betting, and gambling include all lotteries, raffles, and sports betting.

¹⁰ For infant clothing and footwear, children's clothing and footwear, women's clothing and footwear, and men's clothing and footwear, I only consider households with persons that meet the age or gender definitions of these items.

Threats to Identification

Given the large number of policy changes occurring during this period other policies that directed greater benefits to households with children could potentially bias the results. While these changes largely occurred prior to the CTF and the regression specification includes controls for in-work credits, Child Benefit increases, the Sure Start Maternity Grants, and fixed year effects, the increasing trend towards directing benefits to lower income households could confound the results.

Summary Statistics

The observable characteristics of the sample are presented in Table 1. Column 1 of Table 1 provides the characteristics for the entire sample. Households in the sample contain, on average, 1.86 children and one-quarter (25.8 percent) of households have a child eligible for a Child Trust Fund. The age of the household's youngest child is, on average, under 2 years old while the age of the household's oldest child is, on average, approximately 9 years old. Among sample households, less than half (42.0 percent) have at least one very young child, defined as a child aged 0 through 4, while almost half (49.7 percent) have a young child, defined as a child aged 5 through 10, and approximately half (44.5 percent) have at least one child aged 11 through 15, and 11.4 percent have a child aged 16 or 17.

In terms of household characteristics, the average household size is 3.80 persons and the vast majority (84.1 percent) are headed by persons who are married, cohabitating, or civil partners. The average age of the head is 40 years old. Few (12.7 percent) of household heads are non-white.

Based on the occupation of the head, a large portion (44.3 percent) is classified as high SES and slightly fewer (38.2) percent is classified as possessing low SES. The remaining 17.5 percent of households are classified as middle SES. Total gross household income, adjusted to 2010

pounds, is £44,043. This income includes an average real weekly Child Benefit of £22.62 and a maximum potential weekly in-work credit of £134. The average maximum Sure Start Maternity Grant in the sample overall is 0.77 owing to the fact that it could only be received only by households with a newborn child.

Columns 2 and 3 compare these characteristics in the period before the CTF was announced and after the CTF was announced. Many of the characteristics appear quite similar over time. However, over time there appears to be some increase in the portion of households considered low SES. This may reflect the change in the survey as to how occupations were classified by SES over this time period. Other noticeable changes occur in the portion of households headed by a non-white – a fact that represents changing demographic trends in the UK – and increases in income over time, which is largely explained by the increased generosity of the social support system in the post-announcement period.

In Columns 4 through 6 of Table 1, I examine the pre-period characteristics of the sample by SES status as a way to understand the baseline estimates I present while Columns 7 through 9 examine the sub-sample of households with eligible children by SES status. For both, trends are similar across SES. Income rises with SES, particularly with high SES households, which suggests that the SES designation is classifying households as expected. Across SES, households in the sample have similar characteristics in both numbers and age of the children. The largest differences across SES are seen for age of the household head and marital status. High SES households have older heads than either low SES or middle SES households and are much more likely to be married or cohabitating.

Table 2 presents the outcomes of interest for items that would be expected to be positively related to child investment, child enrichment goods and services, and items expected to be

negatively related to child investment. Appendix B provides the overall sample means for total expenditures and the nine major expenditure subcategories. The average household spends £599 each week. The largest components of weekly expenditures are for food (22.8 percent), housing (net of low-income housing benefits) (20.6 percent); leisure goods and services (17.2 percent); motoring, fares, and other travel (16.4 percent); household goods and services (15.4 percent).

For expenditures and items that would be expected to be positively related to child investment, the average household puts approximately £6.80 in savings (Column 1). Comparing across time (Columns 2 and 3), weekly savings increases from £6.01 to £7.91 which may reflect increasing household income over this time period and the rise in bank account ownership (Fitzpatrick 2015a, 2015b). The average household in the sample spends 6.6 percent of their food expenditures on fruit and vegetables and there is little change in this over time. Among households with children under age 5 and age 5 through 15, respectively, households spend 1.0 percent and 3.1 percent of their usual weekly expenditures on clothing and footwear. Expenditure shares on child clothing fall over time, particularly for clothing for children age 5 through 15.

Examining SES across the pre-announcement period (Columns 4 through 6) and across households with eligible children (Columns 7 through 9) show that high SES households direct more money towards savings, spend a larger portion of their food expenditures on fruits and vegetables, and spend a smaller portion of their weekly expenditures on child clothing. These differences would be expected by virtue of the greater disposable income for high SES households and higher levels of weekly expenditures.

With respect to child enrichment goods and services, these constitute an extremely small share of usual weekly expenditures for the average household: reading materials average 0.9

percent of expenditures, lessons and classes constitute 0.7 percent of expenditures, performances constitute 0.2 percent of expenditures, and admissions to clubs and cultural institutions constitute 0.3 percent of expenditures. There is little change in these expenditure shares over time (Columns 2 and 3). High SES households, both in the pre-announcement period and for those with eligible children, tend to spend larger portions of their weekly expenditures on these items than low or middle SES. Previous work also finds that higher income households tend to direct more resources towards these items (Kaushal et al. 2011).

In addition to these expenditure shares, I include a dichotomous variable, a computer in the home, within child enrichment goods and services. Overall, 83.9 percent of households report a computer within their home. More households own computers over time and high SES households are much more likely to own a computer. This could largely reflect larger secular trends.

The final set of expenditure outcomes I examine are expenditures and items that would be expected to be negatively related to child investment. Households with adult females spent 2.6 percent of their usual weekly expenditures on female clothing while households with adult males spent 1.5 percent of their usual weekly expenditures on male clothing. Spending on adult clothing falls slightly over time but expenditures are roughly similar across SES. Spending on alcohol and tobacco constitute 2.9 percent and 2.1 percent, respectively, of usual weekly expenditures while expenditures on lotteries, betting and gambling are 0.7 percent of expenditures. Over time, expenditures on alcohol and gambling decline slightly and expenditures on tobacco dramatically decline. High SES households spend less of their weekly expenditures on alcohol, gambling, and tobacco than other households.

Results

Appendix B includes the natural logarithm of total weekly expenditures and the major 9 expenditure categories. In the interest of space, I do not discuss these estimates in detail.

Table 3 presents estimates for expenditures that should be positively related to child investment. For each item, I present both pre-announcement period results (Odd Columns) and the full sample (Even Columns) for households of one child (Panel A), two children (Panel B), and three or more children (Panel C). The pre-announcement period results provide a baseline comparison to the full sample to provide initial evidence if households at different SES levels make different expenditure choices.

For usual weekly income devoted to savings, in the pre-period, there are no statistically significant differences across SES status across any type of household. Examining the full sample, middle SES households with eligible children devote more to weekly savings than other types of households when the household has one child (£2.71) or three or more children (£2.50). This is a large relative response. In the pre-period, the mean weekly savings contribution was £3.19. There is no statistically significant response for low SES households with eligible children.

In Columns 3 and 4, expenditures on fruits and vegetables as a share of all food expenditures are presented. In the pre-period, both middle and high SES households of all sizes devoted significantly more of their food budget to fruits and vegetables than low SES households. The full sample, however, doesn't show a consistent pattern. For households with one child and households with three or more children, middle SES households with eligible children increased their fruit and vegetable expenditures by more than a percentage point (0.015 for one child households and 0.013 for households with three or more children) while for households with two children, middle SES households with eligible children decreased their fruit and vegetable

expenditures by almost a percentage point (0.007). Low SES households, the omitted group, only increase their expenditures in households with two children and by less than a percentage point (0.006). High SES households with eligible children show either slight declines or no effect.

The lack of consistent results in fruit and vegetable expenditures is in contrast to consistent patterns within food expenditure shares as a whole (Appendix B). For all food expenditures, low SES households with eligible children significantly reduced their food expenditures by between 0.4 and 1.8 percentage points while high SES households with eligible children significantly increased their food expenditures. Less food expenditures for households that are likely lower income could indicate that these households are facing resource constraints and at-risk for food insecurity.

The final two outcomes of Table 3 are estimates for child clothing. For each estimate, the sample is limited to those with a child age 0 – 5 (Columns 5 and 6) and children age 5 – 15 (Columns 7 and 8). Neither pre-announcement estimate suggests that households that differ by SES spend differently than on clothing for children. In the full sample, there is relatively little response to Child Trust Fund eligibility among any household. Only middle SES households with two children and at least one eligible child significantly alter their expenditures on child clothing: for both the share of expenditures on young child clothing and the share of expenditures on child clothing, these households reduce their expenditures by 0.2 percentage points. This is not the expected direction of an effect if these households are directing more resources towards children.

Overall, estimates for expenditures and items that would be expected to be positively related to investments in children do suggest that low SES households respond differently than higher SES households to eligibility for a child savings account. Middle SES households demonstrated

the largest increase in parental investments in children with increases in savings and some increases in food expenditures on healthy foods.

In Table 4, estimates for child enrichment expenditures are presented. As before, the pre-announcement period estimates are contained in the odd columns while the full sample estimates are included in the even columns. For reading materials, high SES households with two and three or more children spend 0.1 percentage points and 0.2 percentage points, respectively, more of their weekly expenditures on reading material than lower SES households. Using the full sample, only households with three or more children respond to the Child Trust Fund. Middle SES households with eligible children spend slightly more (0.2 percentage points) while high SES households with eligible children spent slightly less (0.2 percentage points) than low SES households with eligible children. Given the relatively small share of weekly spending on reading materials – 1.0 to 1.5 percent of weekly expenditures – the magnitude of these effects is reasonable.

Columns 3 and 4 present results for the probability of having a computer in the home. The baseline results confirm the summary statistics that indicate the presence of a computer in the home is highly related to SES across households of all sizes.

In the full sample, low and middle SES households with eligible children increase their computer ownership. For low SES households, households with eligible children increase their computer ownership by 5.7 points among households with one child and 8.7 points for both households with two and three or more children. This is a large effect as pre-period computer ownership rates for low SES households were only 58.6 percent. Middle SES households with eligible children also increase their computer ownership and by an even larger amount with increases of at least 11 percentage points for all types of households. The large effect for these

households comes after a pre-period ownership level of 89.5 percent. High SES households with eligible children have no significant response among households with one child but for those with two children and those with three or more children, they actually decrease their computer ownership relative to other households with eligible children. This could be that high SES households had such high computer ownership rates in the pre-period (90.4%) that lower SES households have begun to catch up.

Estimates for the weekly expenditure share on classes, lessons, and other leisure education are presented in Columns 5 and 6. In the pre-period there is little difference across SES, with the exception of high SES households with two children spend more on lessons than households at other SES levels. Among the full sample, there is no response among low SES households with eligible children in their expenditures on lessons and classes. Middle SES households with three or more children and at least one eligible child, however, increase their expenditures on lessons and classes by 0.4 percentage points. This is quite a large increase in investment as the pre-period mean expenditure share for middle SES households was 0.6 percentage points. High SES households with eligible children exhibit some relative decline in expenditures on lessons and classes (0.2 percentage points) for households with two children.

The final columns of Table 4 examines spending that could generally be classified as arts and culture. There is no difference across SES in expenditure shares devoted to theatre, ballet, concerts, and other live performances in the pre-announcement period and no difference across SES status for households with eligible children, regardless of household size. Admission to clubs, museums, zoos, and other institutions show some difference across SES in the pre-announcement period: middle SES households actually spend less than other households with two children while high SES households spend more than other households with three or more

children. Among the full sample, both middle and high SES households with one eligible child increase their expenditures in this area by 0.1 percentage point while middle SES with an eligible child increase their expenditures by 0.2 percentage points if they have two children. These effects are large, particularly for middle SES households. Before the announcement of the CTF, middle SES households spent 0.3 percent of their weekly spending on these admission fees while high SES households spent 0.8 percent of their weekly spending on these admission fees.

The results for expenditures related to child enrichment again show that middle SES households with eligible children demonstrated the largest response to the child savings account with expenditure increases in reading, computer ownership, lessons and classes, and admissions to clubs, museums, and other cultural institutions. Moreover, the magnitude of their response suggest substantial increases in investment. In contrast, low SES households with eligible children only increased their computer ownership and due to secular trends over this time period, this estimate could be upwardly biased. Finally, high SES households tended to have relative declines in these goods and services, with the exception of some increases in spending on admissions to clubs, museums, and other cultural institutions.

The final table presents expenditures that represent decreases in spending on children as these items are targeted solely at adults and may even have the potential to reduce child well-being. Beginning with women's and men's clothing, there is little difference in the pre-announcement period. Only high SES households with two children spend more on women's clothing while all SES households spend similarly on men's clothing.

In the full sample, middle SES households with two children and at least one child eligible for the Child Trust Fund spend 0.2 percentage points more of their total weekly expenditures on women's clothing. Low SES households with an eligible child and only one child in the

household slightly reduce their total weekly expenditures on men's clothing (0.4 percentage points) while low SES households with two children and at least one child eligible for the Child Trust Fund spend 0.3 percentage points more on men's clothing. As shown in Appendix B, low SES households with two children and at least one child eligible for the Child Trust Fund also increase their total weekly expenditures on clothing and footwear by 0.7 percentage points. The increase in men's clothing is roughly half of the overall increase in clothing and footwear.

Columns 5 through 8 of Table 5 contain estimates for alcohol and tobacco. For both alcohol and tobacco, in the pre-announcement period (Columns 5 and 7, respectively), middle and high SES households of all sizes spend less on these items than low SES households. For both, middle SES and high SES households spend approximately 1.0 percentage point less of their weekly expenditures on these items than low SES households. These estimates confirm the trends from the summary statistics that expenditure shares spent on both alcohol and tobacco are negatively correlated with SES.

In the estimates for the major expenditure categories contained in Appendix B, the reduction in expenditures on these items among households with eligible children was a consistent result across household types. Columns 6 through 8 perform a similar analysis but examine alcohol and tobacco separately. In the full sample, low SES households with eligible children and either one child or two children reduce expenditures on alcohol relative to other low SES households (0.6 percentage points for those with one child and 0.4 percentage points for those with two children). Middle SES households with eligible children of all sizes also reduce the share of weekly expenditures on alcohol by roughly 0.5 percentage points while high SES households with eligible children of all sizes actually slightly increase the share of all expenditures on alcohol by roughly 0.6 percentage points.

For tobacco, declines in expenditure shares are seen for middle SES households with eligible children of all household sizes of roughly 0.1 percentage points and low SES households with an eligible child and two or more children reduce their expenditures by 0.5 to 0.8 percentage points. High SES households with eligible children show some increase in households with two or three or more children.

The reductions in weekly spending on both alcohol and tobacco indicate that the reductions estimated among the broad grouping of alcohol and tobacco expenditures come from reductions in both items. Moreover, the estimated effects are large as low SES households spent 4.2 and 4.5 percent, respectively, of their weekly expenditures on alcohol and tobacco in the pre-period while middle SES households spent 3.0 and 3.4 percent, respectively, of their weekly expenditures on alcohol and tobacco.

The last estimates presented in Table 5 are for expenditures shares on lotteries, betting, and other gambling. As in alcohol and tobacco, expenditures on gambling are related to SES status in the baseline (Column 9) with middle and high SES households spending approximately 0.6 percentage points less on gambling than low SES households. Estimates for the full sample show that among households with eligible children, low and middle SES households reduce their expenditures on gambling by 0.2 percentage points to 0.4 percentage points. High SES households actually demonstrate some increases in weekly expenditures on gambling (0.2 percentage points).

Overall, for expenditures that could be negatively related to child investments, low and middle SES households with eligible children demonstrate large relative declines in most of these expenditure areas while high SES households with eligible children actually show some increases in these expenditure areas. This is particularly true for expenditures that may actually

be harmful to a child's home environment: alcohol use, tobacco use, and gambling. This pattern of differential investments across SES is suggestive of Conley (2008) where lower SES households may be increasing investments in children with greater endowments while high SES households may be trying to equalize investments by spending less on children and more on adult goods.

Changes to Child Savings

To understand why households from the lowest SES did not respond more consistently to the Child Trust Fund, I analyze FRS data on child savings. For the 2005-2006 survey through the 2010-2011 survey, the FRS asked specific questions about the Child Trust Fund, including indicating if a child was eligible for a CTF, whether the CTF was opened for an eligible child, amount of private contributions, and account balances. The FRS does not classify households by SES and instead I compare households above and below median income. Tabulations of this data are provided in Table 6 for all children and by median income levels.

As shown in Table 6, overall, roughly three-quarters (76.6%) of households with eligible children reported opening a CTF account. Particularly striking is the low rates of CTF account openings in the first years of the program (56.8%) and the greater rates of account openings for households above median income. While the rates of account openings among eligible children grew over time, government reviews found that nearly one-quarter of parents did not open an account and rates of account opening differed by household income status (Prabahakar 2010). Focus group data suggests that many parents were overwhelmed and confused by the CTF information from financial providers, as well as were too busy during the child's first year to focus on opening a CTF account (Prabahakar 2010).

Additionally, while the CTF was supposed to target lower income children, the universal nature of the program and the ability to make private contributions ensured that children from

higher income households still received substantial benefits. Nearly 65 percent of children received no additional private contribution into their CTF account. Children from higher income households were more likely to receive a private contribution into their CTF and, conditional on receiving a private contribution, received larger contributions. As a result, the average CTF balance for children from higher income households was greater (£603.81) than the average balance for children from lower income households (£407.60). Moreover, higher income households are more likely to know how their CTF was invested and slightly more likely to invest for growth either in a Stakeholder Account or non-Stakeholder Stock Account.

CTF accounts are not the only savings option for children and almost half of children (46.37%) possessed savings outside of a CTF. Children ineligible for a CTF account were more likely than children eligible for a CTF account to have additional savings (54.10 percent compared to 32.81 percent). This could be a result of either eligible CTF children were relatively younger or the fact that parents began saving for their CTF ineligible children to equalize financial endowments or because the CTF program increased awareness about the importance of assets upon adulthood.

In Figures 1 through 3, child assets from all sources is presented for the 2000-2001 through 2013-2014 surveys. Because only the 2005-2006 through 2010-2011 surveys identified CTF eligible children, I classify CTF eligibility based on child age. Figure 1 presents child assets of all children and by CTF eligibility. Although CTF eligible children tend to be younger than ineligible children, eligible children possess only slightly less assets than ineligible children.

In Figures 2 and 3, I compare CTF eligibility among households below median income. Such comparison allows for children from more similar economic situations to show how CTF eligibility affects child assets. As shown in Figure 2, over time fewer CTF eligible children

possessed the lowest amount of assets (less than £1,500) and more CTF eligible children owned greater levels of assets (£1,500 - £3,000 and £3,000 - £8,000). This is despite the average CTF balance from households below median income at £407.56. Figure 3, which depicts child assets of CTF ineligible children from households below median income, displays a similar trend but it is less pronounced.

PLAN TO DO ESTIMATES HERE. THE DATASET WILL BE A DATASET OF CHILDREN SO FOR FAMILIES WITH MORE THAN ONE CHILD, I CAN DO FAMILY FIXED EFFECTS. I PLAN TO RUN REGRESSIONS WITH AND WITHOUT FAMILY FIXED EFFECTS SO I DON'T HAVE TO DROP ALL FAMILIES WITH ONLY ONE KID.

OUTCOMES WILL BE: TOTAL CHILD SAVINGS, TOTAL FAMILY SAVINGS, ANY PRIVATE CONTRIBUTIONS INTO A CHILD TRUST FUND, AMOUNT OF PRIVATE CONTRIBUTIONS INTO A CHILD TRUST FUND.

Discussion

This natural experiment in the UK to promote economic mobility through a child savings program provides new evidence on the effectiveness of childhood savings accounts in remedying the inequities children from poor families begin life with. Results suggest that while households from the lowest SES show some increases in parental investments in children in response to the Child Trust Fund, middle SES households show the largest responses. Middle SES households tend to respond differently to the CTF than high SES households, as suggested by Conley (2008). Moreover, many of the responses by middle SES households with eligible children suggest greater levels of parental investment indicating that for these households, public investment crowds in parental investment.

It is perhaps surprising that households with the lowest SES did not respond the most to eligibility for the Child Trust Fund because many of these households would be eligible for the

largest public endowment. It could be that their resources are already too tight and with the credit constraints they face, they do not have the income and other resources to substantially increase their investment. These households did reduce their spending on potentially harmful expenditures (alcohol, tobacco, and gambling) that could improve the lives of children in these households. Additionally, low SES households with eligible children did dramatically increase their computer ownership. With the skill demands of the modern labor market, this could help ensure that these children do have at least some basic human capital to begin their adulthood.

A final possibility is that there is little difference in low SES and middle SES households and that the real difference in economic circumstances and investment is between high SES households and all others. The small differences in income levels between low SES and middle SES households provides some evidence that economic resources are roughly similar for these two types of households.

Future work will examine other behavior associated with the Child Trust Fund to determine how it may affect the future well-being of children that received one of these funds, including expanding the analysis of savings behavior, as well as examine other forms of parental investments. These responses might be particularly important for enhancing economic mobility of lower income children.

Figure 1. Child Assets, by CTF Eligibility

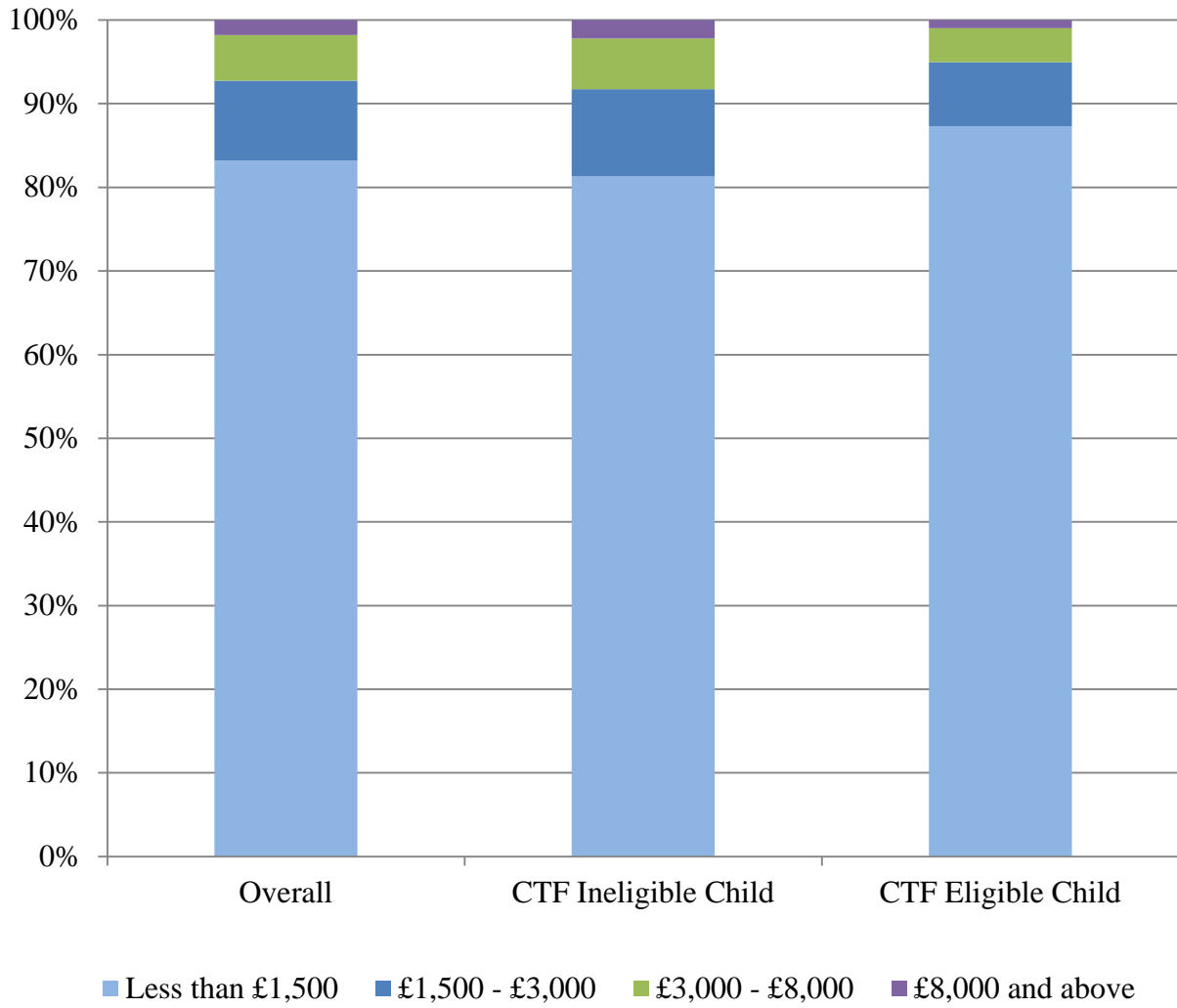


Figure 2. Child Assets of CTF Eligible Children from Households Below Median Income, April 2000 – March 2014

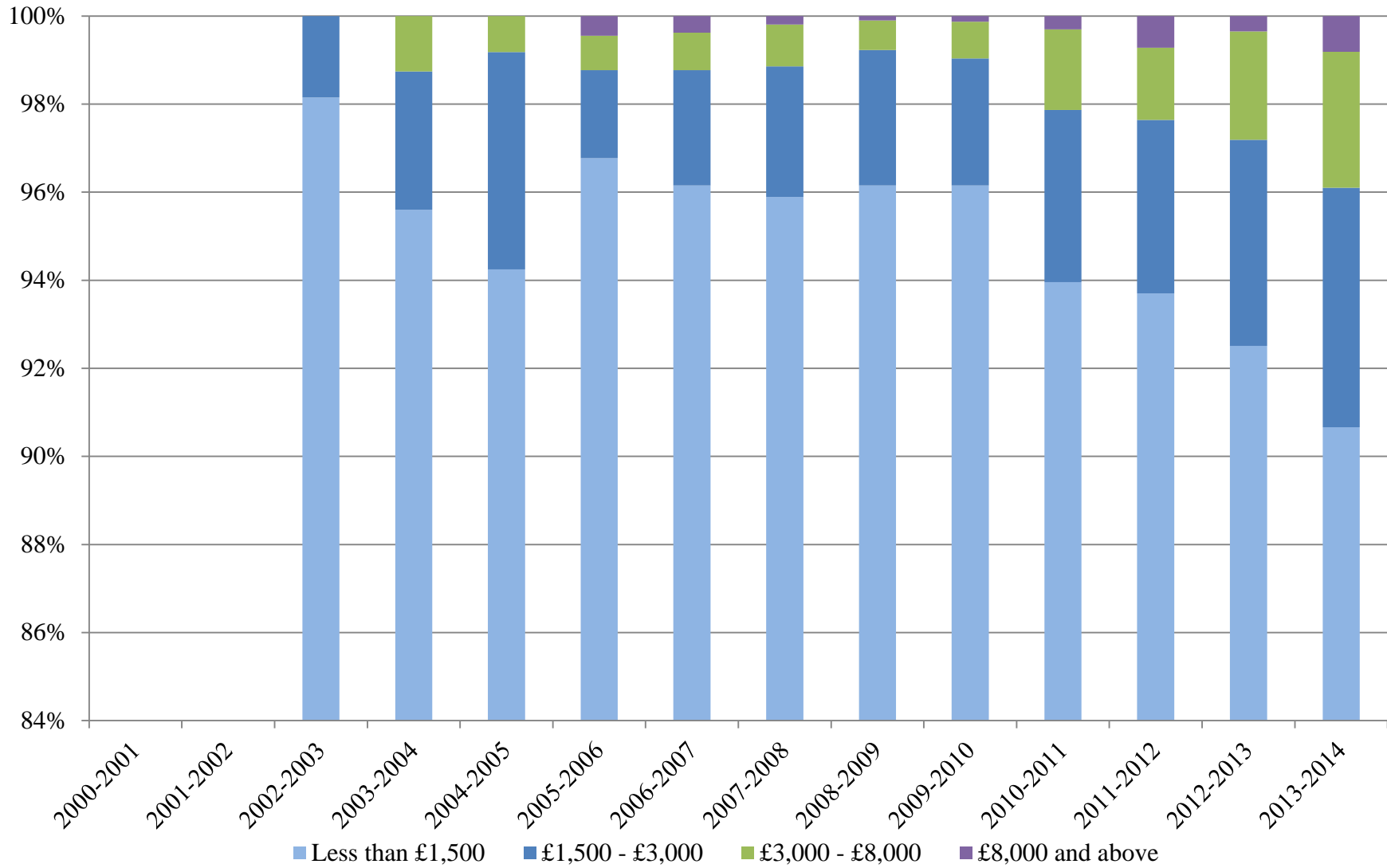


Figure 3. Child Assets of CTF Ineligible Children from Households Below Median Income, April 2000 – March 2014.

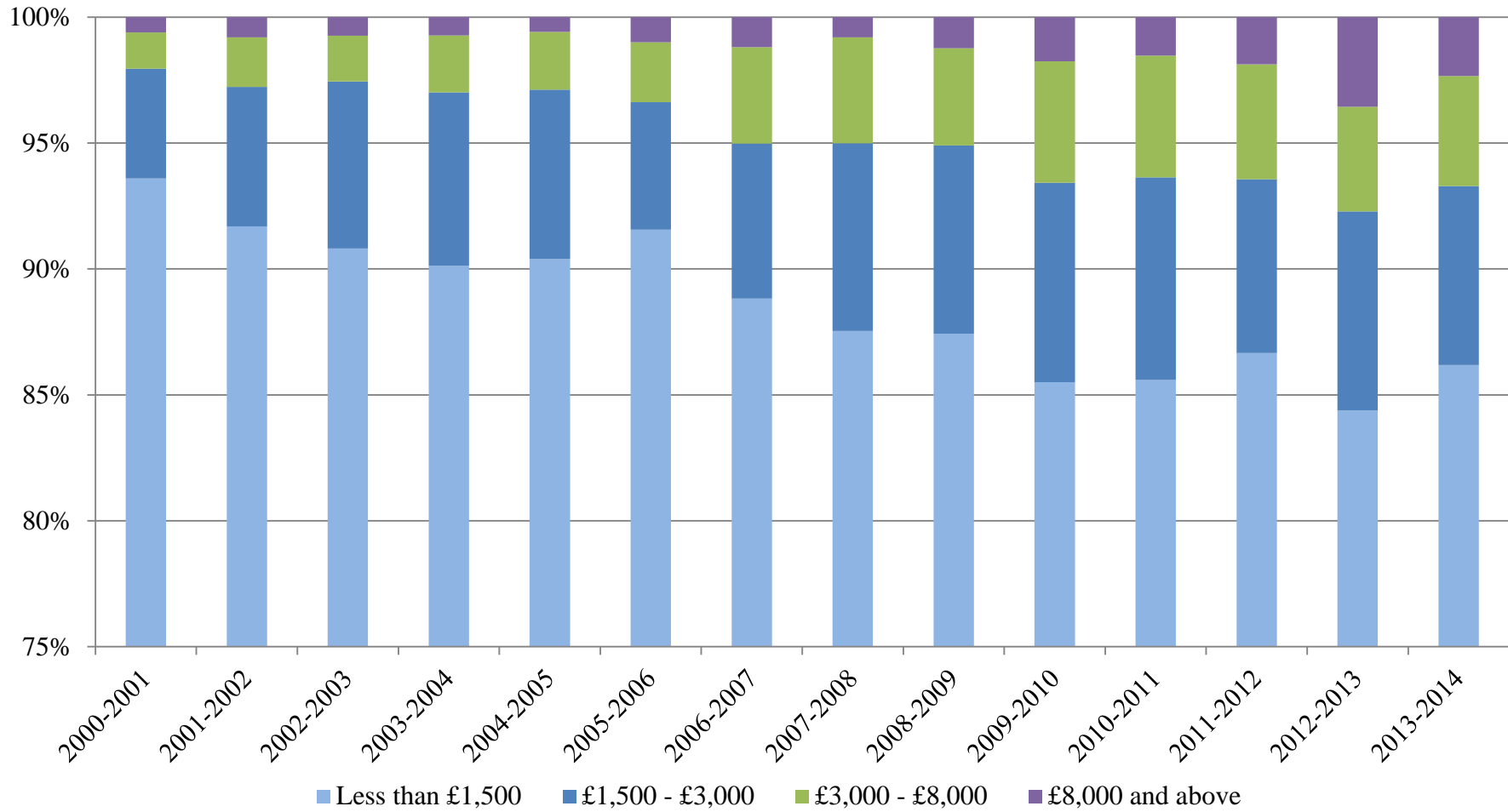


Table 1. Characteristics of Sample, by Time Period and SES Status

	Overall			Pre-Period			Households with Eligible Children		
	Sample	Pre-Period	Post-Period	Low SES	Middle SES	High SES	Low SES	Middle SES	High SES
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>Characteristics of Children</i>									
Any CTF Eligible Child	0.258 (0.437)	-	0.346 (0.476)	-	-	-	-	-	-
Number Of Children	1.864 (0.857)	1.926 (0.902)	1.837 (0.836)	1.985 (0.961)	1.806 (0.855)	1.897 (0.829)	1.923 (0.948)	1.939 (0.934)	1.848 (0.848)
Age of Oldest Child	9.289 (5.122)	9.200 (5.034)	9.316 (5.149)	9.306 (4.991)	8.996 (4.968)	9.129 (5.115)	5.938 (4.610)	6.177 (4.494)	5.391 (4.281)
Age of Youngest Child	7.886 (4.651)	7.732 (4.574)	7.934 (4.674)	7.725 (4.491)	7.647 (4.494)	7.773 (4.712)	4.158 (3.035)	4.410 (3.018)	3.947 (3.014)
Number Of Children Age 0 Through 4	0.521 (0.682)	0.554 (0.699)	0.511 (0.677)	0.567 (0.709)	0.525 (0.672)	0.547 (0.698)	1.057 (0.661)	1.021 (0.671)	1.041 (0.670)
Number Of Children Age 6 Through 10	0.654 (0.761)	0.702 (0.793)	0.639 (0.750)	0.738 (0.810)	0.677 (0.759)	0.663 (-0.779)	0.617 (0.749)	0.670 (0.745)	0.630 (0.767)
Number Of Children Age 11 Through 15	0.565 (0.713)	0.563 (0.733)	0.566 (0.707)	0.570 (0.739)	0.479 (0.676)	0.585 (0.742)	0.210 (0.490)	0.213 (0.520)	0.146 (0.423)
Number Of Children Age 16 Or 17	0.117 (0.335)	0.112 (0.326)	0.121 (0.340)	0.112 (0.326)	0.103 (0.309)	0.101 (0.310)	0.040 (0.208)	0.128 (0.348)	0.031 (0.187)
<i>Characteristics of Households</i>									
Middle SES Household	0.175 (0.380)	0.131 (0.337)	0.190 (0.392)	-	-	-	-	-	-
High SES Household	0.443 (0.497)	0.365 (0.482)	0.468 (0.499)	-	-	-	-	-	-
Real Normal Gross Income	44,043.990 (39,197.835)	39,043.825 (39,371.732)	45,606.850 (39,013.162)	27,552.174 (16,922.482)	29,495.155 (22,139.212)	58,027.383 (55,411.568)	30,065.996 (15,028.796)	34,533.646 (20,109.928)	55,678.036 (34,206.632)
Household Size	3.823 (1.042)	3.832 (1.086)	3.821 (1.028)	3.896 (1.157)	3.420 (1.097)	3.892 (0.940)	3.872 (1.140)	3.877 (1.139)	3.836 (0.940)
Married, Cohabiting, Or Civil Partner	0.841 (0.366)	0.827 (0.378)	0.846 (0.361)	0.812 (0.391)	0.634 (0.482)	0.916 (0.277)	0.825 (0.380)	0.844 (0.363)	0.935 (0.247)
Non-White Head	0.127 (0.333)	0.072 (0.259)	0.144 (0.351)	0.070 (0.255)	0.085 (0.278)	0.070 (0.256)	0.187 (0.390)	0.195 (0.396)	0.150 (0.358)
Age of Head	40.233 (8.412)	38.801 (8.305)	40.680 (8.396)	37.660 (8.496)	37.635 (8.649)	40.762 (7.517)	35.587 (8.915)	37.475 (8.000)	38.524 (7.013)

Table 1 (continued)

	Overall	Pre-Period	Post-Period	Pre-Period			Households with Eligible Children		
	Sample			Low SES	Middle SES	High SES	Low SES	Middle SES	High SES
	(1)			(4)	(5)	(6)	(7)	(8)	(9)
<i>Economic Environment & Social Reforms</i>									
Regional Quarterly Unemployment Rate	5.828 (1.667)	5.758 (1.519)	5.850 (1.710)	5.890 (1.471)	5.784 (1.560)	5.568 (1.549)	6.463 (1.833)	6.606 (1.800)	6.454 (1.812)
Maximum In-Work Credit	133.943 (42.052)	100.420 (28.531)	144.421 (40.071)	100.752 (27.769)	97.714 (28.220)	100.927 (29.601)	134.186 (19.832)	135.700 (18.790)	135.262 (18.201)
Expected Child Benefit	22.620 (13.664)	8.502 (12.781)	27.033 (10.594)	8.502 (12.995)	7.922 (12.291)	8.708 (12.655)	29.796 (12.303)	30.257 (12.216)	29.199 (10.917)
Maximum Maternity Grant	0.768 (2.575)	0.188 (1.008)	0.950 (2.872)	0.208 (1.054)	0.132 (0.827)	0.180 (1.002)	2.444 (4.275)	2.132 (4.096)	2.315 (4.156)
Observations	24,304	6,058	18,246	3,054	792	2,212	2,014	1,150	3,011

Notes: Author's calculations using 1998 – 2012 LCF. Standard deviations in parentheses.

Table 2. Expenditure Outcomes for Households with Children, by Time Period and SES Status

	Overall Sample	Pre- Period	Post- Period	Pre-Period			Households with Eligible Children		
				Low SES	Middle SES	High SES	Low SES	Middle SES	High SES
<i>Expenditures & Items Expected to be Positively Related to Child Investment</i>									
Savings	6.796 (51.343)	6.008 (27.235)	7.914 (56.152)	3.741 (26.675)	3.185 (13.311)	10.796 (34.246)	2.421 (10.832)	4.302 (19.979)	11.178 (52.171)
Expenditures on Fruits & Vegetables (as a Share of All Food Expenditures)	0.066 (0.052)	0.065 (0.044)	0.068 (0.051)	0.046 (0.035)	0.067 (0.057)	0.085 (0.040)	0.062 (0.052)	0.069 (0.050)	0.083 (0.054)
Expenditure Share On Clothing, Children Under Age 5	0.010 (0.023)	0.013 (0.028)	0.008 (0.018)	0.013 (0.028)	0.012 (0.024)	0.010 (0.021)	0.010 (0.022)	0.008 (0.018)	0.007 (0.015)
Expenditure Share On Clothing, Children Age 5 Through 15	0.031 (0.049)	0.040 (0.061)	0.026 (0.039)	0.042 (0.062)	0.043 (0.069)	0.035 (0.051)	0.029 (0.041)	0.024 (0.032)	0.019 (0.026)
<i>Child Enrichment Expenditures & Items</i>									
Expenditure Share On Books, Newspapers & Periodicals	0.009 (0.013)	0.013 (0.017)	0.009 (0.012)	0.010 (0.011)	0.014 (0.015)	0.015 (0.022)	0.007 (0.011)	0.006 (0.009)	0.007 (0.010)
Computer in the Home	0.839 (0.368)	0.685 (0.466)	0.878 (0.327)	0.586 (0.497)	0.895 (0.315)	0.904 (0.296)	0.794 (0.404)	0.875 (0.331)	0.947 (0.223)
Expenditure Share on Lessons, Classes, & Leisure Education	0.007 (0.018)	0.006 (0.013)	0.008 (0.018)	0.003 (0.014)	0.006 (0.008)	0.008 (0.012)	0.003 (0.012)	0.006 (0.014)	0.007 (0.018)
Expenditure Share on Theatre, Ballet, Concerts & Performances	0.002 (0.011)	0.001 (0.007)	0.002 (0.011)	0.000 (0.002)	0.001 (0.009)	0.003 (0.011)	0.001 (0.006)	0.001 (0.009)	0.002 (0.012)
Expenditure Share on Club, Museum, & Park Admissions	0.003 (0.012)	0.004 (0.013)	0.003 (0.011)	0.002 (0.006)	0.003 (0.007)	0.008 (0.019)	0.002 (0.009)	0.003 (0.012)	0.003 (0.010)
<i>Expenditures & Items Expected to be Negatively Related to Child Investment</i>									
Real Expenditure Share On Adult Male Clothing (Age 16+)	0.015 (0.034)	0.019 (0.044)	0.013 (0.029)	0.020 (0.044)	0.018 (0.039)	0.019 (0.044)	0.011 (0.025)	0.011 (0.023)	0.011 (0.027)
Expenditure Share On Adult Female Clothing (Age 16+)	0.026 (0.044)	0.030 (0.051)	0.025 (0.040)	0.030 (0.052)	0.031 (0.050)	0.031 (0.049)	0.021 (0.036)	0.021 (0.035)	0.020 (0.033)
Expenditure Share on Alcohol	0.029 (0.040)	0.038 (0.048)	0.027 (0.035)	0.042 (0.054)	0.030 (0.040)	0.036 (0.039)	0.021 (0.031)	0.022 (0.031)	0.023 (0.028)
Expenditure Share on Tobacco	0.021 (0.047)	0.034 (0.062)	0.013 (0.032)	0.045 (0.069)	0.034 (0.063)	0.013 (0.036)	0.019 (0.036)	0.011 (0.027)	0.005 (0.017)
Expenditure Share on Lotteries, Betthing, & Gambling	0.007 (0.018)	0.011 (0.021)	0.006 (0.017)	0.015 (0.026)	0.008 (0.015)	0.007 (0.014)	0.006 (0.014)	0.005 (0.011)	0.003 (0.015)
Observations	24,304	6,058	18,246	3,054	792	2,212	2,014	1,150	3,011

Notes: Author's calculations using 1998 – 2012 LCF. Standard deviations in parentheses. All expenditures adjusted to constant January 2010 pounds. Unless otherwise noted, all expenditure shares are the share of usual weekly total expenditures.

Table 3. Expenditures Shares and Items Expected to be Positively Related to Child Investments

	Savings		Expenditure Share on Fruits and Vegetables (as a share of all food expenditures)		Expenditure Share on Clothing for Young Children (Age 0-5)		Expenditure Share on Child Clothing (Age 5-15)	
	Pre-Period	Full Sample	Pre-Period	Full Sample	Pre-Period	Full Sample	Pre-Period	Full Sample
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel A. Households with One Child								
Eligible Child	-	3.360 (2.575)	-	0.003 (0.002)	-	-0.000 (0.002)	-	-0.000 (0.004)
Middle SES	-0.804 (6.288)	-0.256 (1.860)	0.011*** (0.003)	0.012*** (0.002)	-0.003 (0.003)	-0.002 (0.001)	-0.002 (0.005)	-0.000 (0.002)
Middle SES * Eligible Child	-	2.708* (1.598)	-	0.015*** (0.002)	-	-0.001 (0.001)	-	-0.002 (0.001)
High SES	3.981 (5.174)	0.958 (3.753)	0.017*** (0.003)	-0.006* (0.004)	-0.001 (0.002)	0.002 (0.002)	-0.006 (0.004)	0.000 (0.006)
High SES * Eligible Child	-	1.467 (2.898)	-	-0.001 (0.003)	-	0.002 (0.002)	-	0.007 (0.005)
Observations	2,014	8,950	2,011	8,941	891	3,884	1,123	5,066
Panel B. Households with Two Children								
Eligible Child	-	1.990 (19.879)	-	0.006*** (0.002)	-	0.001 (0.002)	-	0.002 (0.002)
Middle SES	-9.156 (55.485)	-0.697 (13.745)	0.013*** (0.003)	0.009*** (0.001)	-0.003 (0.003)	-0.003** (0.001)	-0.006 (0.004)	-0.002 (0.001)
Middle SES*Eligible Child	-	-3.463 (27.541)	-	-0.007** (0.003)	-	-0.002** (0.001)	-	-0.002* (0.001)
High SES	-20.326 (42.778)	-2.766 (11.429)	0.014*** (0.002)	0.014*** (0.001)	-0.002 (0.002)	0.002 (0.002)	-0.003 (0.003)	-0.003 (0.003)
High SES * Eligible Child	-	-15.496 (21.439)	-	-0.004* (0.002)	-	-0.001 (0.001)	-	-0.004 (0.003)
Observations	2,488	10,712	2,488	10,707	992	4,034	2,104	9,109

Table 3. continued

	Savings		Expenditure Share on Fruits and Vegetables (as a share of all food expenditures)		Expenditure Share on Clothing for Young Children (Age 0-5)		Expenditure Share on Child Clothing (Age 5-15)	
	Pre-Period	Full Sample	Pre-Period	Full Sample	Pre-Period	Full Sample	Pre-Period	Full Sample
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel C. Households with Three or More Children								
Eligible Child	-	-1.085 (2.071)	-	0.000 (0.003)	-	0.002 (0.002)	-	0.004 (0.004)
Middle SES	0.214 (2.500)	-0.192 (1.724)	0.008* (0.005)	0.010*** (0.002)	0.001 (0.003)	0.001 (0.001)	0.008 (0.007)	-0.003 (0.003)
Middle SES * Eligible Child	-	2.499* (1.425)	-	0.013*** (0.002)	-	-0.000 (0.001)	-	0.000 (0.002)
High SES	2.268 (1.744)	0.443 (2.427)	0.012*** (0.003)	-0.010** (0.004)	0.0001 (0.002)	-0.003 (0.002)	0.003 (0.005)	-0.003 (0.005)
High SES * Eligible Child	-	0.331 (1.902)	-	0.001 (0.003)	-	-0.001 (0.002)	-	-0.005 (0.004)
Observations	1,201	4,285	1,201	4,282	632	2,128	1,169	4,170

Notes: Author's calculations using 1998 – 2012 LCF. Standard errors in parentheses. Sample sizes for clothing and footwear limited to those with a child in the age range. All expenditures adjusted to constant January 2010 pounds. Unless otherwise noted, all expenditure shares are the share of usual weekly total expenditures. All estimates include the complete set of controls described in the text.

Table 4. Goods and Services Related to Child-Enrichment Goods and Services

	Expenditure Share on Books, Newspapers, & Periodicals		Computer in the Household		Expenditure Share on Classes, Lessons, & Other Leisure Education		Expenditure Share on Theatre, Ballet, Concerts, & Live Performances		Expenditure Share on Club, Museums & Park Admissions	
	Pre-Period	Full Sample	Pre-Period	Full Sample	Pre-Period	Full Sample	Pre-Period	Full Sample	Pre-Period	Full Sample
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Panel A. Households with One Child										
Eligible Child	-	-0.0004 (0.001)		0.057*** (0.018)	-	0.0004 (0.001)	-	0.0004 (0.0005)	-	-0.0001 (0.001)
Middle SES	-0.001 (0.001)	-0.0004 (0.0001)	0.092*** (0.030)	0.065*** (0.013)	0.0003 (0.001)	0.001* (0.001)	0.001 (0.001)	0.001* (0.0003)	0.001 (0.001)	-0.0002 (0.0004)
Middle SES*Eligible Child	-	0.001 (0.001)	-	0.112*** (0.011)	-	0.0004 (0.001)	-	-0.0003 (0.001)	-	0.001* (0.0008)
High SES	0.001 (0.001)	0.001 (0.0004)	0.165*** (0.025)	-0.007 (0.026)	0.001 (0.001)	0.002*** (0.0005)	0.001 (0.0004)	0.001* (0.0003)	-0.001 (0.001)	-0.0004 (0.0003)
High SES*Eligible Child	-	0.001 (0.001)	-	-0.017 (0.020)	-	-0.002** (0.0008)	-	-0.0005 (0.001)	-	0.001* (0.001)
Observations	2,014	8,950	2,014	8,950	2,014	8,950	2,014	8,950	2,014	8,950
Panel B. Households with Two Children										
Eligible Child	-	0.001 (0.001)	-	0.087** (0.040)	-	-0.0003 (0.001)	-	0.0002 (0.001)	-	-0.001 (0.001)
Middle SES	-0.0001 (0.001)	-0.0003 (0.0004)	0.086*** (0.027)	0.115*** (0.033)	0.001 (0.001)	0.002*** (0.001)	-0.001 (0.001)	-0.0002 (0.0004)	-0.002*** (0.001)	-0.0006 (0.0004)
Middle SES*Eligible Child	-	-0.0004 (0.001)	-	-0.067 (0.046)	-	0.0003 (0.001)	-	0.0002 (0.001)	-	0.002** (0.0008)
High SES	0.001* (0.001)	0.001 (0.0004)	0.132*** (0.021)	0.206*** (0.027)	0.004*** (0.0009)	0.005*** (0.001)	0.000 (0.001)	0.001* (0.0004)	-0.001 (0.001)	0.00004 (0.0003)
High SES*Eligible Child	-	0.0001 (0.001)	-	-0.162*** (0.036)	-	-0.002* (0.001)	-	-0.0001 (0.001)	-	0.001 (0.001)
Observations	2,488	10,712	2,488	2,128	2,488	10,712	2,488	10,712	2,488	10,712

Table 4. continued.

	Expenditure Share on Books, Newspapers, & Periodicals		Computer in the Household		Expenditure Share on Classes, Lessons, & Other Leisure Education		Expenditure Share on Theatre, Ballet, Concerts, & Live Performances		Expenditure Share on Club, Museums & Park Admissions	
	Pre-Period	Full Sample	Pre-Period	Full Sample	Pre-Period	Full Sample	Pre-Period	Full Sample	Pre-Period	Full Sample
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Panel C. Households with Three or More Children										
Eligible Child	-	0.000 (0.001)	-	0.087** (0.040)	-	-0.000 (0.001)	-	-0.001 (0.001)	-	0.001 (0.001)
Middle SES	0.001 (0.002)	-0.000 (0.001)	0.088* (0.046)	0.115*** (0.033)	0.002 (0.002)	0.001 (0.001)	0.002 (0.001)	0.000 (0.001)	0.001 (0.001)	-0.000 (0.001)
Middle SES*Eligible Child	-	0.002*** (0.001)	-	0.206*** (0.027)	-	0.004*** (0.001)	-	-0.000 (0.000)	-	0.001 (0.001)
High SES	0.002* (0.001)	-0.000 (0.001)	0.188*** (0.032)	-0.067 (0.046)	0.001 (0.002)	-0.000 (0.002)	-0.000 (0.001)	0.000 (0.001)	0.003** (0.001)	-0.001 (0.001)
High SES*Eligible Child	-	-0.002* (0.001)	-	-0.162*** (0.036)	-	-0.001 (0.001)	-	0.001 (0.001)	-	-0.001 (0.001)
Observations	1,201	4,285	1,201	4,285	1,201	4,285	1,201	4,285	1,201	4,285

Notes: Author's calculations using 1998 – 2012 LCF. Standard errors in parentheses. All expenditures adjusted to constant January 2010 pounds. Unless otherwise noted, all expenditure shares are the share of usual weekly total expenditures. All estimates include the complete set of controls described in the text.

Table 5. Expenditure Items Negatively Related to Child Investments,

	Expenditure Share on Women's Clothing		Expenditure Share on Men's Clothing		Expenditure Share on Alcohol		Expenditure Share on Tobacco		Expenditure Share on Lotteries, Betting, & Gambling	
	Pre-Period	Full Sample	Pre-Period	Full Sample	Pre-Period	Full Sample	Pre-Period	Full Sample	Pre-Period	Full Sample
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Panel A. Households with One Child										
Eligible Child	-	0.002 (0.002)	-	-0.004* (0.002)	-	-0.006*** (0.002)	-	-0.000 (0.002)	-	-0.002* (0.001)
Middle SES	-0.001 (0.004)	0.001 (0.002)	-0.002 (0.004)	-0.002 (0.002)	-0.011*** (0.003)	-0.003** (0.001)	-0.008** (0.004)	-0.000 (0.002)	-0.006*** (0.002)	-0.004*** (0.001)
Middle SES*Eligible Child	-	0.001 (0.002)	-	0.001 (0.001)	-	-0.005*** (0.001)	-	-0.007*** (0.001)	-	-0.005*** (0.001)
High SES	0.001 (0.003)	-0.001 (0.003)	0.001 (0.003)	0.002 (0.003)	-0.009*** (0.003)	0.007*** (0.003)	-0.009*** (0.003)	-0.008*** (0.001)	-0.007*** (0.001)	0.002* (0.001)
High SES*Eligible Child	-	0.000 (0.003)	-	0.002 (0.002)	-	0.007*** (0.002)	-	0.001 (0.003)	-	0.002** (0.001)
Observations	1,721	7,559	1,276	5,980	2,014	8,950	2,014	8,950	2,014	8,950
Panel B. Households with Two Children										
Eligible Child		0.003 (0.002)		0.003** (0.002)		-0.004** (0.002)		-0.005*** (0.002)		-0.002** (0.001)
Middle SES	-0.0004 (0.003)	0.001 (0.001)	-0.0003 (0.003)	0.001 (0.001)	-0.010*** (0.003)	-0.003*** (0.001)	-0.002 (0.003)	-0.005*** (0.001)	-0.006*** (0.001)	-0.004*** (0.001)
Middle SES*Eligible Child		0.002** (0.001)		0.001 (0.001)		-0.005*** (0.001)		-0.010*** (0.001)		-0.004*** (0.001)
High SES	0.005* (0.002)	-0.002 (0.003)	0.002 (0.002)	-0.001 (0.002)	-0.008*** (0.002)	0.004* (0.002)	-0.013*** (0.003)	0.002 (0.002)	-0.008*** (0.001)	0.003** (0.001)
High SES*Eligible Child		-0.001 (0.002)		-0.000 (0.002)		0.006*** (0.002)		0.008*** (0.002)		0.002 (0.001)
Observations	2,363	10,117	2,001	8,824	2,488	10,712	2,488	10,712	2,488	10,712

Table 5. continued

	Expenditure Share on Women's Clothing		Expenditure Share on Men's Clothing		Expenditure Share on Alcohol		Expenditure Share on Tobacco		Expenditure Share on Lotteries, Betting, & Gambling	
	Pre-Period	Full Sample	Pre-Period	Full Sample	Pre-Period	Full Sample	Pre-Period	Full Sample	Pre-Period	Full Sample
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Panel C. Households with Three or More Children										
Eligible Child		-0.002 (0.003)		0.003 (0.003)		0.000 (0.002)		-0.008** (0.003)		-0.002** (0.001)
Middle SES	-0.007 (0.005)	-0.003 (0.002)	-0.003 (0.007)	0.002 (0.002)	-0.006 (0.004)	-0.006*** (0.002)	-0.015** (0.006)	-0.014*** (0.002)	-0.005** (0.002)	-0.004*** (0.001)
Middle SES*Eligible Child		-0.002 (0.002)		-0.000 (0.002)		-0.006*** (0.002)		-0.016*** (0.002)		-0.005*** (0.001)
High SES	-0.005 (0.004)	0.009** (0.004)	0.002 (0.004)	0.000 (0.004)	-0.005* (0.003)	0.008** (0.003)	-0.016*** (0.004)	0.008** (0.004)	-0.007*** (0.001)	0.002 (0.001)
High SES*Eligible Child		0.002 (0.003)		-0.001 (0.003)		0.002 (0.003)		0.014*** (0.003)		0.002** (0.001)
Observations	977	3,543	781	3,019	1,201	4,285	1,201	4,285	1,201	4,285

Notes: Author's calculations using 1998 – 2012 LCF. Standard errors in parentheses. All expenditures adjusted to constant January 2010 pounds. Unless otherwise noted, all expenditure shares are the share of usual weekly total expenditures. All estimates include the complete set of controls described in the text.

Table 6. Child Trust Fund Account Openings, Contributions, and Balances of Children, FY2005-FY2011

	By Household Income		
	All Children	Below Median Income	Above Median Income
	(1)	(2)	(3)
Does Eligible Child have a CTF?			
All Years	76.59%	73.00%	80.56%
FY 2005-2006	56.76%	54.04%	59.82%
FY 2006-2007	72.86%	68.37%	77.95%
FY 2007-2008	76.20%	72.60%	80.37%
FY 2008-2009	78.43%	74.68%	82.46%
FY 2009-2010	80.89%	77.30%	84.82%
FY 2010-2011	81.75%	78.57%	85.19%
Private Contributions			
No private contributions	64.91%	73.34%	56.46%
Parent Contributed	28.55%	20.75%	36.37%
Contribution from Parent	£271.915 (392.1498)	£180.621 (260.2602)	£321.845 (440.2513)
Grandparent Contributed	10.19%	7.83%	12.56%
Contribution from grandparent	£263.759 (453.501)	£226.055 (409.958)	£287.309 (477.345)
Other Relative Contributed	3.30%	2.70%	3.91%
Contribution from Other Relative	£144.617 (222.338)	£147.162 (251.524)	£142.854 (199.971)
Non-Relative Contributed	2.12%	1.90%	2.34%
Contribution from Non-Relative	£104.913 (165.193)	£100.224 (166.829)	£108.226 (164.506)
Balance in Child Trust Fund	£505.624 (615.9769)	£407.559 (415.3018)	£603.807 (753.2584)
Child Trust Fund Type			
Stakeholder Account	36.40%	34.48%	38.31%
Savings Account	29.18%	29.94%	28.42%
Non-Stakeholder Stock Account	11.71%	10.02%	13.41%
Don't Know	22.71%	25.56%	19.87%
Any non-CTF savings for child?	46.37%	32.59%	39.82%
CTF eligible child	32.81%	22.27%	43.37%
CTF ineligible child	54.10%	38.87%	68.72%

Notes: Unweighted tabulations of Family Resources Survey (FRS) data from FY 2005-2006 through FY 2010-2011. Data contains all children.

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Appendix A. Timeline of Policy Reforms

April 1999	Child Benefit rates increased, particularly for first child in family. Increases continued until 2010. Income Support (cash welfare) benefits increased for families with children under age 11. Increased generosity of maternity grants to low-income pregnant women and renamed them the Sure Start Maternity Grant.
October 1999	Childcare Tax Credit introduced (subsumed into the Working Tax Credit in April 2003).
April 2001	Prime Minister Tony Blair proposes the Child Trust Fund Children's Tax Credit established (subsumed into Child Tax Credit in April 2003).
April 2003	Prime Minister Tony Blair pursues plans to establish the Child Trust Fund Child Tax Credit and Working Tax Credit replace the Working Families Tax Credit. Children's Tax Credit subsumed into the Child Tax Credit. Childcare Tax Credit subsumed into Working Tax Credit.
May 2004	Child Trust Fund Act Passes
January 2005	Child Trust Fund launched with children born on or after September 1, 2002 sent vouchers to establish their accounts.
April 2005	Child Trust Fund accounts become fully operational
September 2009	Parents of eligible children reaching age seven began receiving second voucher.
April 2010	Government began contributing an additional £100 annually into the accounts of disabled children and £200 annually into the accounts of severely disabled children.
May 2010	Prime Minister David Cameron assumes power. By the end of the month, the government announces that the Child Trust Fund program will end.
August 2010	Prime Minister David Cameron reduces the initial CTF endowment for children born after July 2010. The government stops sending vouchers to children reaching the age of seven.
January 2011	Child Trust Fund ended

Appendix B. Effect of Child Trust Fund Eligibility and Socioeconomic Status (SES) on Household Spending

	Ln (Total Expenditures)	Housing (Net) Share	Fuel, Light, & Power Share	Food Share	Alcohol & Tobacco Share	Clothing & Footwear Share	Hhold Goods & Services Share	Personal Goods & Services Share	Leisure Goods & Services Share	Motoring, Fares, & Travel Share	Misc Goods & Services Share
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Panel A. Households with One Child											
Eligible Child	0.016 (0.019)	0.017*** (0.006)	-0.002 (0.002)	-0.016*** (0.004)	-0.006** (0.003)	-0.001 (0.004)	0.007 (0.006)	0.000 (0.002)	0.012** (0.006)	-0.010 (0.006)	-0.001* (0.001)
Middle SES	0.116*** (0.014)	0.005 (0.004)	-0.001 (0.001)	-0.015*** (0.003)	-0.011*** (0.002)	-0.001 (0.003)	0.004 (0.004)	0.003** (0.002)	0.005 (0.004)	0.009** (0.004)	0.002*** (0.001)
Middle SES*Eligible Child	0.049* (0.028)	-0.021** (0.009)	-0.002 (0.002)	0.006 (0.006)	0.008* (0.004)	0.001 (0.005)	-0.008 (0.008)	-0.002 (0.003)	0.007 (0.009)	0.010 (0.009)	-0.001 (0.001)
High SES	0.166*** (0.012)	-0.006* (0.004)	-0.002* (0.001)	-0.013*** (0.003)	-0.014*** (0.002)	-0.004 (0.002)	0.003 (0.003)	0.005*** (0.001)	0.025*** (0.004)	0.006 (0.004)	0.001 (0.000)
High SES * Eligible Child	-0.011 (0.021)	-0.023*** (0.007)	0.003 (0.002)	0.018*** (0.005)	0.011*** (0.003)	0.010*** (0.004)	0.000 (0.006)	-0.002 (0.002)	-0.023*** (0.007)	0.006 (0.007)	0.000 (0.001)
Observations	8,950	8,950	8,950	8,950	8,950	8,950	8,950	8,950	8,950	8,950	8,950
R-squared	0.579	0.138	0.201	0.252	0.135	0.077	0.080	0.053	0.116	0.084	0.014
Sample Mean	6.085 (0.682)	0.229 (0.133)	0.045 (0.039)	0.203 (0.098)	0.051 (0.063)	0.065 (0.076)	0.160 (0.120)	0.042 (0.046)	0.165 (0.136)	0.173 (0.131)	0.006 (0.017)
Panel B. Households with Two Children											
Eligible Child	0.007** (0.003)	0.012** (0.005)	-0.004*** (0.002)	-0.004 (0.004)	-0.009*** (0.002)	0.007** (0.003)	0.001 (0.005)	0.002 (0.002)	0.002 (0.006)	-0.006 (0.006)	-0.002*** (0.001)
Middle SES	-0.000 (0.002)	0.002 (0.004)	-0.002* (0.001)	-0.011*** (0.003)	-0.008*** (0.002)	-0.000 (0.002)	0.002 (0.004)	0.004*** (0.001)	0.000 (0.004)	0.011*** (0.004)	0.002*** (0.001)
Middle SES*Eligible Child	-0.004 (0.005)	-0.009 (0.007)	0.001 (0.002)	-0.005 (0.006)	0.007* (0.003)	-0.004 (0.005)	0.012 (0.007)	-0.005** (0.003)	0.001 (0.009)	0.003 (0.008)	0.001 (0.001)
High SES	0.001 (0.002)	-0.001 (0.003)	-0.001* (0.001)	-0.016*** (0.002)	-0.015*** (0.001)	0.001 (0.002)	0.004 (0.003)	0.005*** (0.001)	0.015*** (0.004)	0.009*** (0.003)	0.001 (0.000)
High SES* Eligible Child	-0.003 (0.004)	-0.022*** (0.006)	0.002 (0.002)	0.010** (0.004)	0.015*** (0.003)	-0.003 (0.004)	0.012** (0.006)	-0.004* (0.002)	-0.016** (0.007)	0.004 (0.006)	0.001 (0.001)
Observations	10,712	10,712	10,712	10,712	10,712	10,712	10,712	10,712	10,712	10,712	10,712
R-squared	0.076	0.128	0.170	0.254	0.130	0.076	0.077	0.032	0.122	0.060	0.013
Sample Mean	6.272 (0.619)	0.217 (0.120)	0.043 (0.036)	0.218 (0.098)	0.045 (0.056)	0.069 (0.073)	0.151 (0.112)	0.040 (0.041)	0.184 (0.144)	0.173 (0.127)	0.006 (0.015)

Appendix B. continued

	Ln (Total Expenditures)	Housing (Net) Share	Fuel, Light, & Power Share	Food Share	Alcohol & Tobacco Share	Clothing & Footwear Share	Hhold Goods & Services Share	Personal Goods & Services Share	Leisure Goods & Services Share	Motoring, Fares, & Travel Share	Misc Goods & Services Share
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Panel C. Households with Three or More Children											
Eligible Child	-0.009 (0.027)	0.010 (0.008)	0.000 (0.002)	-0.018*** (0.006)	-0.007* (0.004)	0.003 (0.005)	0.001 (0.008)	0.002 (0.003)	0.004 (0.009)	0.005 (0.009)	0.001 (0.001)
Middle SES	0.114*** (0.021)	-0.003 (0.006)	-0.001 (0.002)	-0.017*** (0.005)	-0.020*** (0.003)	-0.001 (0.004)	0.015** (0.006)	-0.001 (0.002)	0.030*** (0.007)	-0.002 (0.007)	0.000 (0.001)
Middle SES * Eligible Child	0.051 (0.037)	-0.006 (0.011)	-0.006** (0.003)	0.002 (0.009)	0.016*** (0.005)	0.003 (0.007)	0.001 (0.010)	-0.003 (0.004)	-0.024* (0.012)	0.015 (0.012)	0.001 (0.002)
High SES	0.167*** (0.017)	0.003 (0.005)	-0.002 (0.002)	-0.028*** (0.004)	-0.023*** (0.002)	-0.002 (0.003)	0.008 (0.005)	0.000 (0.002)	0.032*** (0.006)	0.010* (0.006)	0.001* (0.001)
High SES*Eligible Child	-0.004 (0.029)	-0.005 (0.009)	-0.000 (0.003)	0.019*** (0.007)	0.017*** (0.004)	-0.002 (0.006)	-0.003 (0.008)	0.000 (0.003)	-0.026*** (0.010)	0.001 (0.009)	-0.002 (0.001)
Observations	4,285	4,285	4,285	4,285	4,285	4,285	4,285	4,285	4,285	4,285	4,285
R-squared	0.547	0.135	0.189	0.319	0.184	0.091	0.061	0.053	0.126	0.059	0.018
Sample Mean	6.233 (0.619)	0.202 (0.122)	0.047 (0.038)	0.246 (0.112)	0.047 (0.062)	0.077 (0.080)	0.151 (0.110)	0.038 (0.038)	0.178 (0.137)	0.168 (0.126)	0.007 (0.019)

Notes: Author's calculations using 1998 – 2012 LCF. Standard errors in parentheses.