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## **Abstract**

In April 2013, a significant change to Child Benefit (CB) was introduced in the UK: it switched from a universal benefit to a targeted benefit. The new High Income Child Benefit Charge (HICBC) required families to repay some or all of their Child Benefit via the tax system if either partner's income exceeded £50,000 in a given tax year. This offers the unique opportunity of a 'natural experiment' to test the differences in take-up between a universal and a targeted benefit. While attention has focused on the HICBC's potential disincentive effects on take-up, little is known about how take-up has evolved among lower-income families unaffected by the policy. Using data from nationally representative income surveys from 2008 to 2023 and employing an alternative methodology to that used in official statistics, this study estimates Child Benefit take-up trends. We find that following the introduction of targeting, take-up has declined significantly even among families not subject to the HICBC. We conclude that since the introduction of HICBC, families have incurred substantial cumulative income losses relative to potential entitlement, with the largest proportional losses seen among one-child households with two or more adults. Although this analysis does not establish causality, the findings are consistent with a broader, negative impact of the HICBC reform on the visibility, perceived value, and ultimately the take-up of Child Benefit, even among those not directly targeted by the policy. This case study provides insights and evidence relevant to policymakers considering similar proposals.

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## Introduction

Not all individuals who are eligible for welfare benefits claim the support to which they are entitled (Hernanz et al., 2004). The take-up rate –the proportion of eligible individuals who actually receive a benefit – is a valuable statistic for several reasons. From a policy design standpoint, the take-up rate of a benefit constitutes one important measure of its success. Take-up rates are a practical indicator of benefit delivery effectiveness, assuming the goal is full coverage of the eligible population. This is particularly relevant for means-tested benefits, where lower financial cost is often cited as their primary advantage compared to universal schemes. However, this presumed efficiency relies on assumptions of adequate take-up and minimal inclusion errors (where ineligible people receive support). From a public finance perspective, improved estimates of take-up improve the accuracy of welfare spending forecasts (Office for Budget Responsibility, 2022). Furthermore, the accuracy of economic modelling is also affected by take-up estimates. For example, labour supply models that assume full take-up of in-work benefits such as Universal Credit will overestimate the net income gains from employment, as Brewer (2003) notes.

This study presents novel estimates of trends in benefit take-up over the period 2008–2023 and examines how patterns have changed following significant reforms to the welfare system. It contributes to the wider academic debate on benefit entitlement viewed through universalism vs targeting, in particular the often-cited claim that take-up of universal benefits is higher, a debate summarised in relation to family benefits by Bradshaw (2012), Van Lancker and Van Mechelen (2015), Chen, Leu et al. (2015) and Van Lancker, Ghysels, et al. (2015). Within this debate, we connect the institutional design of social programmes (defined by eligibility rules and benefit level principles) with outcomes for families (with an emphasis on take up). Existing literature in this area is limited and dated. Notable UK studies include Blundell et al. (1988), Fry & Stark (1993), and Hancock et al. (2004), but we currently lack comprehensive up-to-date estimates of take-up following major reforms, particularly the rollout of Universal Credit (UC) and the introduction of the High Income Child Benefit Charge (HICBC). The need for this analysis has become increasingly urgent. The limited official sources that are available suggest that take-up rates have declined. If this decline in take-up is confirmed, it is significant as it indicates that a growing number of individuals and families may be failing to receive the support they are entitled to, with potential implications for poverty, inequality, and policy effectiveness. However, researchers both inside and outside of

government face particular challenges when comparing take-up rates over time due to changes to the welfare system, with the introduction of the HICBC being one example.

While the behavioural and structural determinants of take-up have been analysed elsewhere (Vella & Richiardi, 2024), this study provides updated estimates of take-up for one of the major welfare benefits: CB, which was paid to 6.91 million families, or up a quarter of all households in the UK, as of August 2024 (HMRC, 2025a). It offers a narrative on how take-up rates for CB have evolved since 2008, how any available official estimates compare to our own, and how trends may have been shaped by policy design choices. We employ a state-of-the-art methodological approach to measuring take-up which combines microsimulation techniques with survey data. Our approach is based entirely on publicly available data and is fully transparent and replicable. The objective is to support better evidence for both researchers and policymakers, particularly where gaps currently hinder understanding of welfare reform impacts. The intention is not to provide causal explanations, but rather to offer a clear empirical foundation to set the stage for future research.

The paper is structured as follows. Section 2 presents the political and institutional context of policy on CB in the UK since 2010. Section 3 outlines the data and methods used to produce our estimates. Sections 4 and 5 focus respectively on our new take-up estimates, and comparisons with official figures and those produced by other researchers. Section 6 focuses on interpretation of the drivers of trends in take-up in relation to policy intentions. The final section draws together the findings and reflects on implications for future research.

### **Policy context**

Within the typology of European family policy regimes, the UK is generally characterised as relying heavily on means-testing, complemented by a modest flat-rate non-contributory payment for all children: Child Benefit (Popova, 2016). CB is paid to one parent or guardian of each dependent child, defined as under 16, or under 19 if in full-time education or training. A higher weekly rate is paid for the eldest (or only) child, with a lower rate for each subsequent child. Policy changes since 2010 have reduced its value: the benefit was frozen for three years from 2011, uprated by only 1% annually between 2014 and 2016 (well below inflation), and subject to a further two-year freeze from 2016 to 2018. As of April 2025, weekly rates stand at £26.05 for the eldest or only child and £17.25 for younger children. For comparison, the legal minimum wage for workers aged 21 and over was £12.21 per hour.

Historically, CB was universal, reflecting the principle that all families incur additional costs when raising children regardless of income (Atkinson, 2011). This changed in 2013, when the Coalition Government introduced the HICBC, marking a departure from universality. This provides researchers with the unique opportunity of a ‘natural experiment’ to test the differences in take-up between a universal and a targeted benefit. The reform was justified as part of the 2010 government’s broader agenda to reduce social spending, emphasising deficit reduction as “the most urgent task facing the country” (HMRC, 2013). During this era, savings were sought across several welfare benefits paid to families (Chzhen & Bradshaw, 2025; Reeves et al., 2024). Internal documents identified explicit savings targets for CB, although the policy was publicly presented as an attempt to enhance “fairness in the tax and welfare system” (HMRC, 2013). Officially, the HICBC aimed to ensure that “precious state benefits are properly targeted on those in genuine need ... without adversely affecting those on low incomes” by withdrawing support from households “not at any real risk of falling into poverty” (HMRC, 2013). While there was limited opposition to ending CB for higher-income families, the mechanism chosen to implement the policy proved highly contentious. There are no administrative records kept on the household incomes for single people or couples who are not interacting with the means-tested benefits system. Extending income-testing through the Department for Work and Pensions (DWP) was ruled out on grounds of excessive cost. As a compromise, the HICBC was administered through the income tax system by imposing an additional liability on the higher-earning partner in households above the threshold. However, the UK tax system is based on the principle individual rather than household assessment, and HM Revenue and Customs (HMRC) does not link partners’ records.

*Table 1 Overview of the features of Child Benefit after the introduction of the HICBC*

<b>Feature</b>	<b>Child Benefit</b>
<b>Complexity on application process</b>	Low: Simple online form or paper application; automatic for most births
<b>Who Is Eligible</b>	All parents/guardians with qualifying children (under 16 or under 20 in education)
<b>Frequency of Payment Changes</b>	Infrequent: Fixed monthly/weekly rates; affected only by policy uprating or HICBC
<b>Payment Frequency</b>	Every 4 weeks (weekly option for single parents or low-income households)
<b>Conditions Attached to Receipt</b>	None (unless affected by HICBC; even then, opt-out is voluntary)

When introduced, the charge applied where either partner's income exceeded £50,000. It was levied at 1% of the CB amount for every £100 above this threshold, rising to full repayment once income reached £60,000. Official documents described this as striking a balance between ensuring “the government supports the majority of Child Benefit claimants, while keeping welfare expenditure sustainable” (HMRC, 2023b). However, because CB entitlement is family-based but the HICBC is assessed individually, the system created notable inequities. For example, a two-earner couple at £49,999 each (£99,998 total) kept all their CB, while a single-earner household at £60,001 total lost all CB. The charge also created steep effective marginal tax rates for affected households, varying with family size: For example, a higher-rate taxpayer with three children could face effective marginal tax rates of around 65–70% within the £50,000–£60,000 withdrawal band, before reverting to the standard higher-rate income tax rate once Child Benefit has been fully withdrawn (Joyce, 2013, 2024).

The administrative burden to individuals was also significant. Many wage earners subject to the HICBC were required to complete a self-assessment tax return for the first time, despite having tax otherwise deducted through Pay-As-You-Earn (PAYE). Failure to comply risked penalties of up to 30% of the unpaid charge. These requirements made the system both unpopular and procedurally complex (Seely & Kennedy, 2025). A further controversy stemmed from the freeze in HICBC thresholds from 2013 to 2024. (HC Deb, 2023). As wages rose, increasing numbers of families were drawn into the charge through fiscal drag: the share of CB claimants affected rose from 13% in 2013 to 26% in 2024 (Joyce, 2024). By 2019–20, around 370,000 more families had lost some or all entitlement compared with 2013–14 (Emmerson et al., 2019). A major revision took effect in April 2024, raising the lower threshold from £50,000 to £60,000 and extending the taper so that full repayment now applies only at £80,000.

Table 2 shows how this worked in practice in 2024/25. This change reduced the proportion of families affected to 22% (Joyce, 2024), while introducing a 100% taper between £60,000 and £80,000. (Joyce, 2024). The system can thus be conceptualised as one of hybrid ‘targeted universalism’.

Table 2 Illustration of the HICBC taper in 2024/25

<b>Earnings</b>	<b>Percentage to be repaid</b>	<b>Benefit charge for one child to be repaid</b>	<b>Benefit charge for two children to be repaid</b>
£60,000	0%	£ -	£ -
£65,000	25%	£338	£562
£70,000	50%	£677	£1,125
£75,000	75%	£1015	£1,688
£80,000	100%	£1,354	£2,251

Although CB is primarily a cash transfer, it also confers a couple of small non-financial benefits. Claimants accrue National Insurance (NI) credits toward their state pension until their youngest child reaches age 12, which protects parents who have gaps in their contribution record. However, for parents who remain in paid employment and pay NI contributions, such higher-income parents, these credits typically provide no pension advantage, and most individuals accumulate sufficient qualifying years over a normal working life in any case (HMRC, 2023). In addition, children in CB-recipient households are automatically issued with an NI number at age 16, although alternative registration services exist for non-claimants. Under the HICBC framework, parents have three options:

- (1) claim and receive CB payments;
- (2) claim but opt out of payments, thereby retaining the small non-financial benefits; or
- (3) not claim at all.

In 2022–23, 440,000 individuals paid a combined £525 million in HICBC liabilities and the number of families who had chosen to opt out and cease receiving payments as of August 2024 was 712,000 (HMRC, 2025a). In summary, UK policy has shifted from a straightforward universal entitlement to CB towards a hybrid model characterised by administrative complexity and reduced visibility of entitlement. The HICBC sits within a broader set of other post-2010 reforms, including the rollout of Universal Credit and a succession of benefit freezes that have eroded the real value of support. This evolution reflects a broader policy trajectory favouring targeting over the simplicity and inclusiveness that historically underpinned CB.

### **Data and methods**

This study contributes to the literature by producing new, harmonised estimates of CB take-up since 2008, accounting for policy changes and administrative complexities. It builds on earlier UK work (Blundell et al., 1988; Fry & Stark, 1993; Hancock et al., 2004). The analysis

presented here is part of a broader study examining take-up across several benefit schemes. In this paper, we focus specifically on CB, which provides a useful case due to its evolution from a universal benefit to one that, since 2013, is means-tested. This shift in design logic enabled us to explore whether changes in take-up behaviour are related to the structure and delivery of the benefit. The UK offers a particularly valuable context for this analysis, given the relative scarcity of recent empirical work on benefit take-up and the significant policy shift introduced by the High Income Child Benefit Charge (HICBC) in 2013. While the reform directly altered entitlement for higher-income families, its indirect effects on claimant behaviour across the income distribution are inadequately quantified.

The Office for Budget Responsibility (OBR) focuses on the value of *actual CB payments made*, as this is what matters for forecasting government expenditure (OBR, 2022). However, this measure is not designed to capture take-up in a behavioural sense. On the other hand, official HMRC statistics on Child Benefit (CB) take-up are difficult to interpret because they define take-up in terms of *claiming*, rather than receipt of payments. Their caseload statistics treat all children as eligible, regardless of whether their parents subsequently repay the benefit through the HICBC or ‘opt-out’ of receiving payments altogether. As a result, individuals who register for CB but receive no net payment after tax are still counted as taking up the benefit. To illustrate the potential scale of distortion of the HMRC statistics, Table 3 shows our estimates of the proportion of families eligible for CB, but who received no net payment in 2023.

*Table 3 Proportion of families with children that are subject to HICBC, by number of children, 2023*

Family size	Proportion subject to HICBC
1 Child	25%
2 Children	32%
3+ Children	20%

*Source: Authors’ estimates using UKMOD with the FRS data.*

Our study therefore contributes novel harmonised estimates of CB take-up among *eligible tax units*, defined in terms of receipt of payments. Our analysis included all eligible families regardless of whether they are affected by the HICBC, but we report estimates separately for those subject to the charge and those who are not. Distinguishing these groups

allows us to isolate take-up among families fully eligible for a financial payment, where non-claiming more clearly reflects genuine take-up behaviour.

Non-take-up occurs when eligible individuals or households do not receive the benefits to which they are entitled. Importantly, in this study, we use the term “non-take-up” to refer to the non-receipt of benefits by eligible claimants for a variety of reasons, rather than implying a voluntary decision not to claim. Measuring benefit take-up requires accurate measurement of both eligibility and receipt. Since eligibility is not directly observable in surveys or administrative records, it must be simulated using detailed household-level data on income, family structure, and applicable policy rules. We addressed this challenge using UKMOD, a tax-benefit microsimulation model for the UK and its nations that combines microsimulation techniques with survey data. Tax-benefit microsimulation models (MSMs) are an established method to analyse the effects of public policy on tax incidence, redistribution and poverty analysis at the individual and household level, which started to develop rapidly in the 1990s (Bourguignon & Spadaro, 2006). Specifically, we use the free and publicly available tax-benefit microsimulation model UKMOD (version B2025.06), which is maintained, developed and managed by the Centre for Microsimulation and Policy Analysis at the Institute for Social and Economic Research (ISER), University of Essex (Richiardi et al., 2021; Sutherland & Figari, 2012). Our method closely mirrors that adopted by the DWP, which produces official estimates of benefit take-up using linked Family Resources Survey (FRS) data, administrative caseload records, and a proprietary tax-benefit calculator, the Policy Simulation Model (PSM). By contrast, our approach is based entirely on publicly available data and is fully transparent and replicable.

UKMOD applies annually updated tax and benefit rules to the input data derived from the *Family Resources Survey* (FRS). The resulting simulations are benchmarked annually against external statistical sources on earnings, tax receipts, benefit spending, and the number of taxpayers and recipients (Van de Ven & Popova, 2025). The FRS is known to under-represent high-income households (Jenkins, 2022), but this does not materially affect take-up analysis, so we use the original FRS data with minor adjustments and apply the provided survey weights to ensure national representativeness. Incomes are assumed to be pooled and shared within households, though benefit entitlement in UKMOD is assessed at the benefit-unit level. To allow comparability across households of different size and composition, we use the Modified OECD equivalence scale (1 for the first adult, 0.5 for others, 0.3 per child under 14).

UKMOD allowed us to estimate simulated entitlement for each household in each year from 2008 to 2023, except for 2010 and 2011, when the UKMOD input data are unavailable. By comparing the simulated entitlement with self-reported benefit receipt in the FRS data, we calculated take-up rates over time and across household types. Our headline indicator, the take-up rate, can be expressed as:

$$\text{Take-up rate} = \frac{\text{claimants}}{\text{eligible}} = \frac{\text{observed recipients in FRS}}{\text{simulated eligibility in UKMOD}} \quad (1)$$

We also examined what characteristics are associated with take-up using a regression framework. Estimating models that explored the determinants of non-take-up allowed for the identification of observable features such as income, education, or number of children in the family that may be associated with failure to claim. This approach provided insights into how changes in policy generosity interact with household traits. This is critical for designing effective interventions, particularly for improving targeting and tailoring of take-up campaigns. Of particular interest was family composition because child poverty is impacted to a great extent by family demography, with large families and single parents having a greater risk of being poor (Cutuli, 2025; Ilmakunnas et al., 2025)

Like all studies of this kind, our estimates are subject to several sources of potential error. First, misreporting in the FRS can distort the numerator: underreporting of claiming behaviour leads to understatement, while overreporting of claiming behaviour leads to overstatement. Several forms of misreporting have been studied in the literature. Respondents may misremember the timing of benefit receipt (Celhay et al., 2024), may confuse one benefit with another, particularly when claiming multiple forms of support (Call et al., 2013; Hancock & Barker, 2005; Krafft et al., 2015) or may underreport claiming means-tested benefits due to social desirability bias (Bound et al., 2001; Celhay et al., 2024). Second, inaccuracies in simulating eligibility in UKMOD using imperfect survey data can bias the denominator, either inflating or lowering take-up rates. These limitations are especially salient in the UK, where administrative data access is limited.

Despite these risks, we have confidence in the robustness of our estimates, based on the validation of UKMOD (Van de Ven & Popova, 2023). To address remaining concerns, we conducted robustness checks using an alternative specification that includes observed recipients

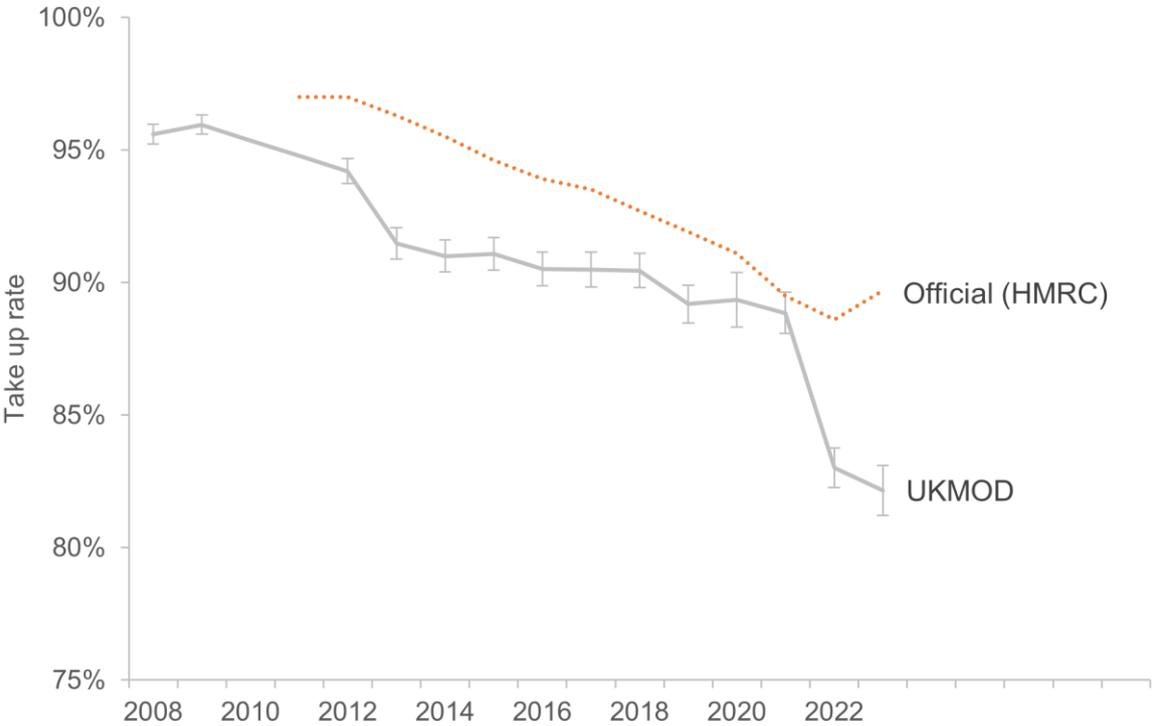
who are not simulated as eligible. This allowed us to test whether measurement error was systematically correlated with time or household characteristics.

### Findings

#### *Trends in Child Benefit take up*

One key justification for income-related benefits in the UK is that they allow for more targeted redistribution at lower fiscal cost compared to universal schemes. Against this backdrop, it is particularly informative to examine CB take-up trends before and after 2013, when the benefit shifted away from universality with the introduction of the HICBC. We present harmonised take-up estimates, both including and excluding families affected by the HICBC, which are not available in official statistics. Figure 1 shows that overall CB take-up has declined steadily from 2008 to 2023. In 2008, the take-up rate stood at 96%, remaining high (around 96%) up to the implementation of HICBC in 2013. Immediately following this reform, the take-up rate fell to 91% and steadily declined further, eventually reaching a low of 81% in 2023.

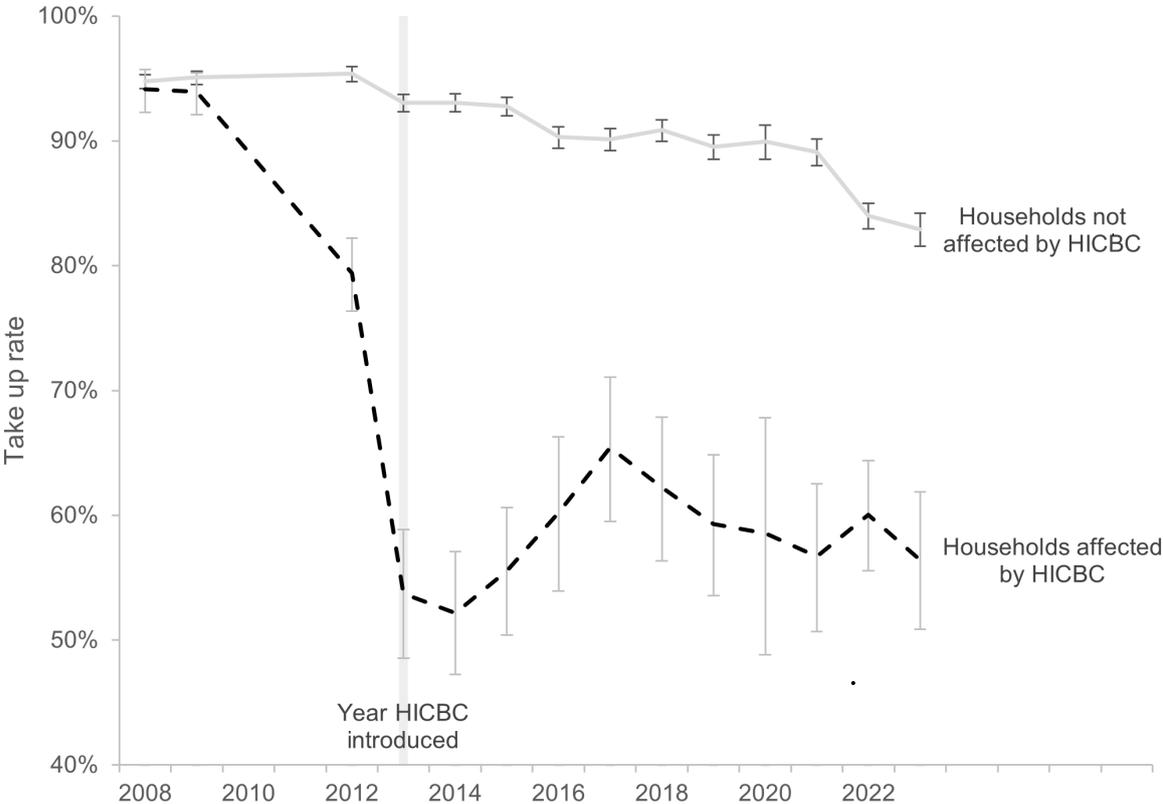
Figure 1 Child Benefit take up rates, UK, 2008-2024



Source: Authors' estimates using UKMOD with the FRS data; HMRC (2018, 2025a). Notes: Lines show estimated Child Benefit take-up rates. Vertical bars represent 95% confidence intervals. FRS estimates are based on the Family Resources Survey.

Figure 2 disaggregates take-up by whether families are affected by the HICBC. Among higher-income families (those with at least one parent earning over £50,000), take-up dropped sharply after the policy’s introduction from 92% to 54% in 2013, then further to 50% in 2015, before partially recovering to around 60% in subsequent years. While confidence intervals are wide, the pattern of steep decline is clear. However, the most significant and policy-relevant finding is that take-up also declined among families *not* affected by the HICBC, as shown by the blue line in Figure 2. This suggests spillover effects of the policy or other unobserved factors contributing to declining claims even among those fully eligible.

Figure 2 Child Benefit take-up rates, UK, 2008-2023

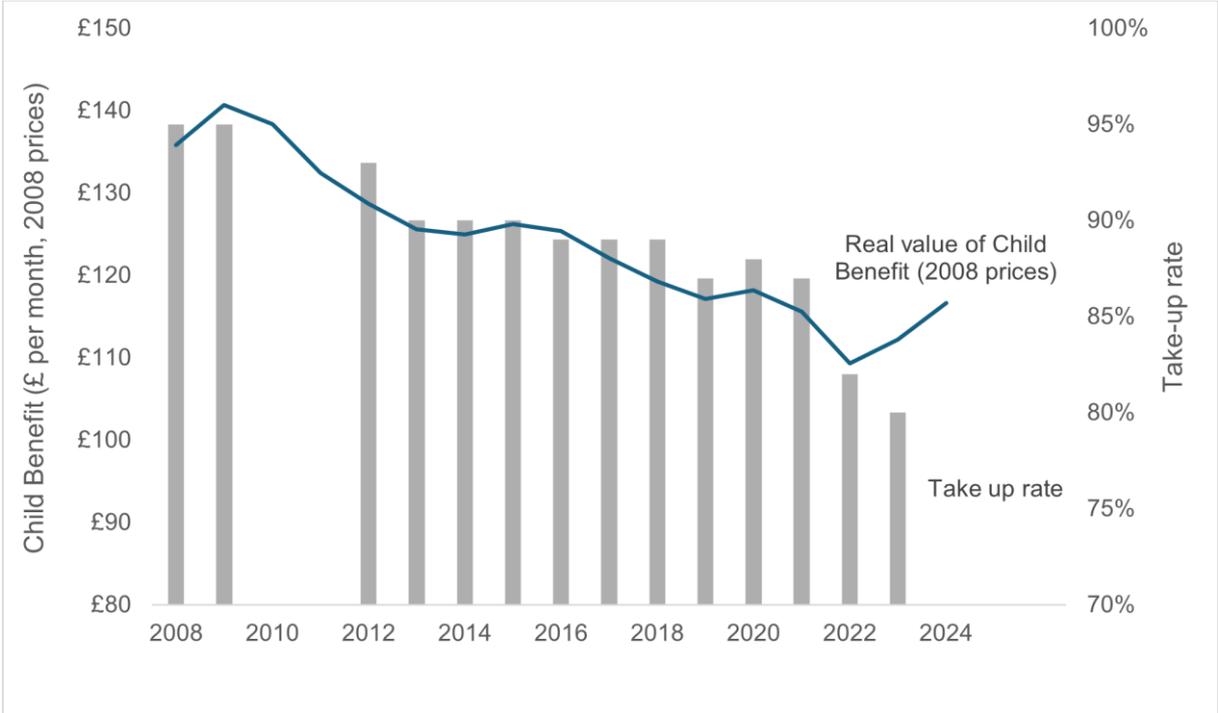


Source: Authors’ estimates using UKMOD with the FRS data.

Figure 3 presents take-up trends alongside changes in the average benefit amount payable to a family with two children (in real 2008 prices). It shows a strong positive correlation between the value of CB in real terms and take-up rates (correlation coefficient = 0.958). For context, in April 2024, the nominal benefit payable for 2 children was £42.55 and the legal

minimum wage for workers aged 21 and over, known as the National Living Wage, was £11.44 per hour. Therefore, CB represented about 10 per cent of the earnings of a full time worker on the minimum wage.

Figure 3 Child Benefit take up rate (%) and benefit amount payable (£) per calendar month (2008 prices), UK, 2007-2024

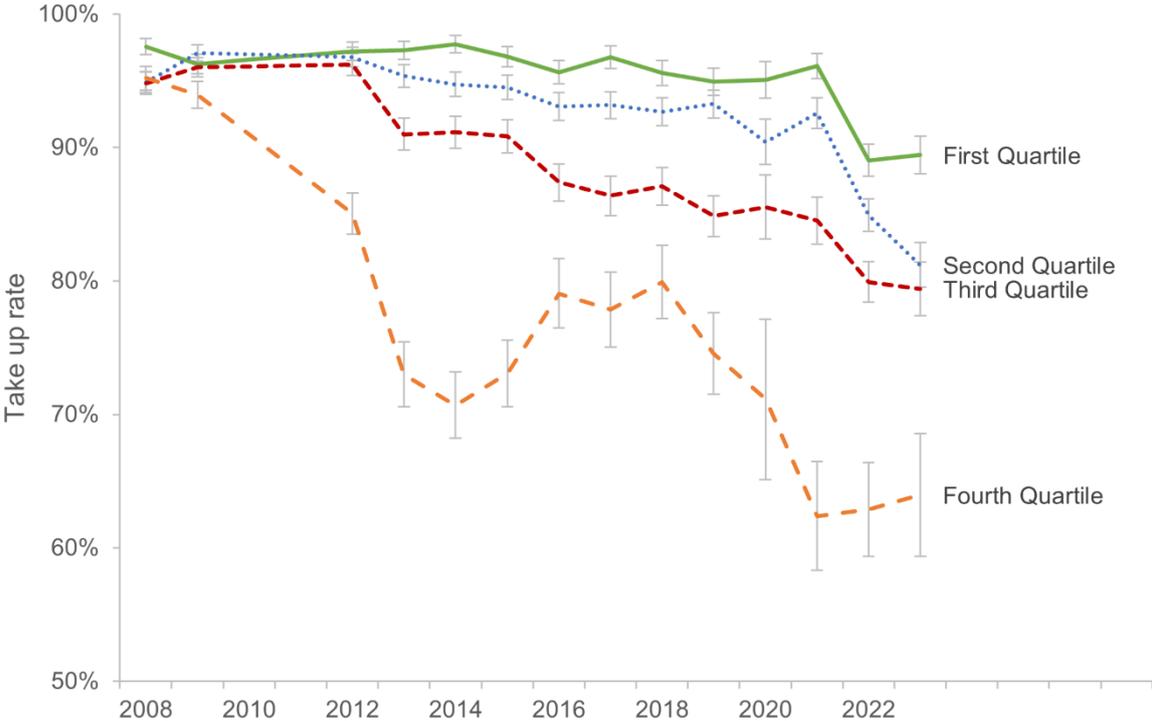


Sources: Authors' estimates of Child Benefit take up using UKMOD with the FRS data; CPI Index 00: All Items 2015=100. Note: Based on CB payable to a family with 2 children. UKMOD estimates are not available for 2010 and 2011. Take up by household, all households whether affected by the HICBC or not.

Figure 4 shows that between 2010 and 2019, take-up declined across all income quartiles. In 2010, take-up was consistently high across income quartiles (95–97%). By 2019, however, take-up in the highest quartile had dropped to 83%, with smaller but still notable declines in the lower quartiles. These trends point to a broad-based reduction in CB take-up, not limited to high-income groups. Income quartile may also proxy for assets and long-run “permanent” income, both likely key factors shaping claiming behaviour. Arguments derived from standard cost–benefit theory predict that parents with higher household incomes would be less likely to take-up the benefit compared to parents with lower household incomes, as they would have less need for it.

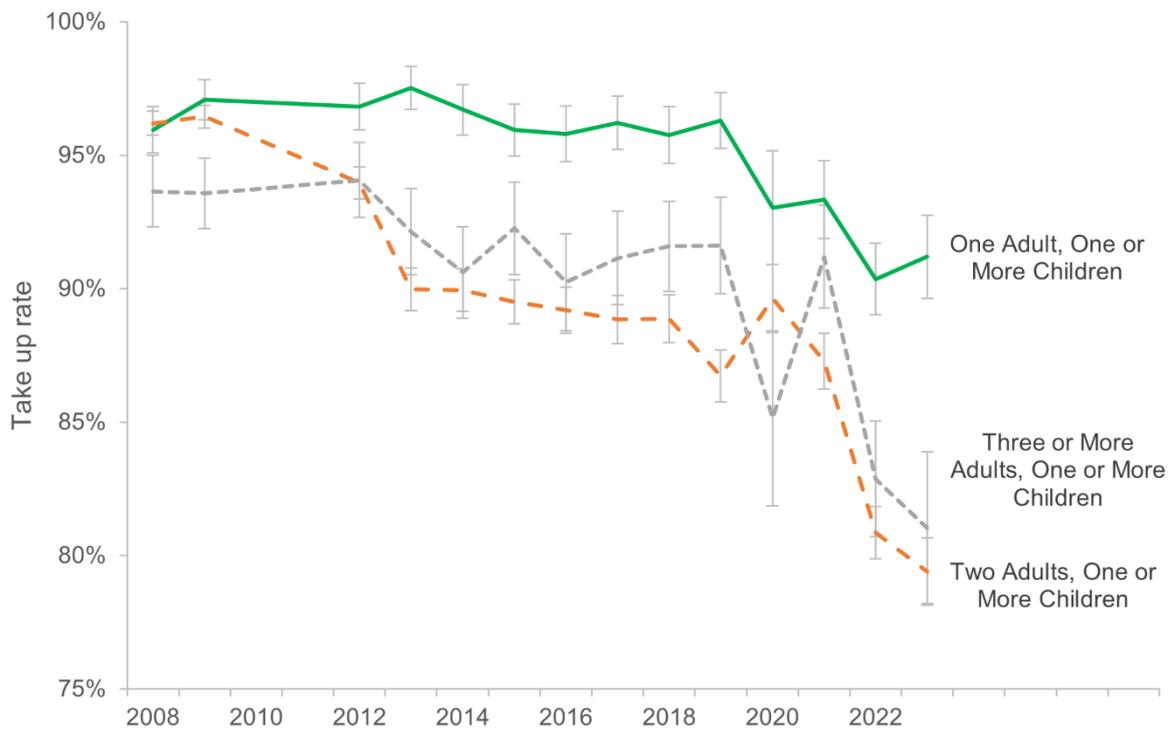
Figure 5 shows that the rate of decline has less steep for lone parents households, compared to couples. Finally, another important metric is the expenditure-weighted take-up rate - the amount of unclaimed benefit. We calculate this to have been £1,768 million in 2023.

Figure 4 Child Benefit take up (%), by income quartile, UK, 2008-2023



Source: Authors' estimates using UKMOD with the FRS data

Figure 5 Child Benefit take up, by household type, UK, 2008-2023



Source: Authors' estimates using UKMOD with the FRS data

### *Characteristics of eligible non-claimants*

The implications of incomplete take-up are twofold. From the perspective of policy effectiveness and equity, low take-up weakens the redistributive capacity of welfare states and limits their ability to protect households from economic hardship (Matsaganis et al., 2008). To indicate the potential scale of this problem, Table 4 shows our estimates of the size of unclaimed CB in just one year – 2023 – broken down by family size. We estimate £1.77 billion went unclaimed in that year. From a more functionalist perspective, however, non-take-up has been interpreted as a mechanism that screens out less needy households, thereby containing public expenditure (Nichols & Zeckhauser, 1982). Which of these interpretations is more accurate depends on the profile of non-claimants: if those who fail to claim benefits are disproportionately vulnerable, non-take-up represents a failure of social protection; if they are largely better-off households with small entitlements, non-take-up may reduce fiscal cost without undermining equity. In this section, we address which of these implications dominates using empirical evidence.

*Table 4 Child Benefit statistics - families not subject to the HICBC only, by number of children, 2023*

Family size	Take-up rate	Unclaimed CB millions, per year	£
1 Child	80%	627.9	
2 Children	85%	698.1	
3+ Children	88%	442.2	

*Source: Authors' estimates using UKMOD with the FRS data.*

Table 5 shows that eligible non-claimants differ systematically from claimants across a range of characteristics. Overall, the groups least likely to take up their entitlement are higher-income, better-educated, male-headed, and homeowner households, particularly those located in London and the South East. With respect to financial resources, non-take up is strongly concentrated among households in the highest income quartile (56.0 per cent compared with 32.5 per cent of claimants) and households that report greater financial capital (mean log value = 5.09 versus 3.75). Take-up increases with potential benefit amount payable, which itself is linked to number of children. Non-claimants have on average fewer eligible children (1.55 versus 1.76) and a smaller mean entitlement (log of benefit = 4.38 versus 4.65). Non-claimants are more often male-headed households (67.5 per cent compared with 57.5 per cent among claimants) and two-parent families. Heads with higher education are less likely to claim, as are non-disabled and employed parents. Furthermore, non-claimants are more likely to be owner-occupiers (61.9 per cent versus 54.8 per cent) whereas social housing tenants are much more likely to claim (12.1 per cent versus 26.4 per cent). Regionally, non-take-up is highest in London and the South East.

Table 5 Descriptive results

Variables	Eligible and non-take-up		Eligible and take-up	
	Mean	St.Error	Mean	St.Error
BU head: female	32.5%	0.6%	42.5%	0.2%
BU head: age, years	41.974	0.122	39.581	0.039
BU head: age sq, years	1,851.619	10.762	1,646.936	3.157
BU head: tertiary education	45.1%	0.6%	22.2%	0.2%
BU head: disabled	1.9%	0.2%	4.6%	0.1%
BU head: in work	88.9%	0.4%	83.0%	0.2%
BU head: unemployed	1.8%	0.2%	3.2%	0.1%
BU head: lone parent	19.7%	0.5%	28.9%	0.2%
BU head: female##lone parent	11.3%	0.4%	26.9%	0.2%
Market income: Q1	8.4%	0.4%	17.2%	0.2%
Market income: Q2	13.1%	0.4%	21.8%	0.2%
Market income: Q3	22.5%	0.6%	28.5%	0.2%
Market income: Q4	56.0%	0.7%	32.5%	0.2%
Log of real equivalised financial capital	5.089	0.052	3.753	0.017
Tenure: Owner outright or on mortgage	61.9%	0.6%	54.8%	0.2%
Tenure: Renter	26.0%	0.6%	18.8%	0.2%
Tenure: Free/reduced/social rent	12.1%	0.4%	26.4%	0.2%
Number of eligible children in BU	1.546	0.010	1.761	0.004
Log of real CB amount	4.382	0.008	4.654	0.002
North East	2.8%	0.2%	4.5%	0.1%
North West	10.4%	0.4%	12.3%	0.1%
Yorkshire and the Humber	6.5%	0.3%	9.2%	0.1%
East Midlands	6.5%	0.3%	7.6%	0.1%
West Midlands	7.8%	0.3%	9.6%	0.1%
East of England	10.4%	0.4%	9.2%	0.1%
London	19.8%	0.5%	12.4%	0.1%
South East	16.1%	0.5%	12.5%	0.1%
South West	6.8%	0.3%	8.4%	0.1%
Wales	3.5%	0.2%	5.3%	0.1%
Scotland	8.5%	0.4%	8.1%	0.1%
Northern Ireland	1.0%	0.1%	1.0%	0.0%

Source: Authors' estimates using UKMOD with the FRS data. Data from 2008 to 2023 are pooled (N=52,793). Notes: BU head is head of a benefit unit. Market income quartiles are defined using equivalised market income of those eligible for CB rather than the whole population.

Table 6 shows the results of Probit regression model that explains a meaningful share of variation in claiming behaviour (Pseudo R<sup>2</sup>=0.137; 83% correct predictions). The results suggest that take-up has declined steadily over time from 2013 onward even after controlling for household and individual characteristics, indicated by progressively larger negative

coefficients. The results indicate that higher-income families are progressively less likely to take up CB and greater financial wealth is also associated with lower probability of take-up. Male-headed couples are substantially less likely to claim than female lone parents. Furthermore, each additional eligible child in the household increases the likelihood of take-up. Employment is associated with non-take-up, compared to economic inactivity. Being a private sector tenant is associated with non-take-up compared to living in social housing or being an owner-occupier.

*Table 6 Results of Probit regression analysis*

Variables	Model without simulated benefit amount		Model with simulated benefit amount	
	Coefficient	St. Error	Coefficient	St. Error
BU head: female	-0.11***	0.02	-0.12***	0.02
BU head: age, years	0.03***	0.01	0.03***	0.01
BU head: age sq, years	-0.00***	0.00	-0.00***	0.00
BU head: tertiary education	-0.37***	0.02	-0.36***	0.02
BU head: disabled	0.27**	0.11	0.27**	0.11
BU head employment status (reference=inactive)				
BU head: in work	0.44***	0.05	0.44***	0.05
BU head: unemployed	0.17*	0.10	0.17*	0.10
BU head: lone parent	-1.00***	0.05	-1.01***	0.05
BU head: female###lone parent	1.43***	0.05	1.44***	0.05
Market income quartile (reference=Q1)				
Market income: Q2	-0.12***	0.04	-0.13***	0.04
Market income: Q3	-0.17***	0.04	-0.18***	0.04
Market income: Q4	-0.50***	0.04	-0.45***	0.04
Log of real equivalised financial capital	-0.01***	0.00	-0.01***	0.00
Tenure (reference=Owner outright or on mortgage)				
Tenure: Renter	-0.35***	0.02	-0.36***	0.02
Tenure: Free/reduced/social rent	0.11***	0.04	0.09**	0.04
Number of eligible children in BU	0.16***	0.01	-0.05***	0.02
Log of real CB amount			0.50***	0.03
Region (reference=London)				
North East	0.43***	0.05	0.43***	0.05
North West	0.28***	0.04	0.28***	0.04
Yorkshire and the Humber	0.42***	0.04	0.41***	0.04
East Midlands	0.33***	0.04	0.32***	0.04

West Midlands	0.31***	0.04	0.31***	0.04
East of England	0.19***	0.04	0.19***	0.04
South East	0.17***	0.03	0.17***	0.03
South West	0.40***	0.04	0.41***	0.04
Wales	0.44***	0.05	0.43***	0.05
Scotland	0.24***	0.04	0.23***	0.04
Northern Ireland	0.28***	0.08	0.28***	0.08
Year (reference=2008)				
2009	0.07	0.05	0.05	0.05
2012	-0.08	0.05	-0.05	0.05
2013	-0.36***	0.04	-0.30***	0.04
2014	-0.38***	0.04	-0.31***	0.04
2015	-0.34***	0.04	-0.28***	0.04
2016	-0.44***	0.05	-0.35***	0.05
2017	-0.43***	0.05	-0.32***	0.05
2018	-0.42***	0.05	-0.30***	0.05
2019	-0.50***	0.05	-0.37***	0.06
2020	-0.47***	0.07	-0.35***	0.07
2021	-0.51***	0.05	-0.37***	0.05
2022	-0.70***	0.04	-0.52***	0.04
2023	-0.75***	0.05	-0.60***	0.05
Constant	0.93***	0.17	-1.11***	0.20
Observations	52,793		52,793	
Pseudo R Squared	0.137		0.152	
Share of those who take-up	89.3		89.3	
Correct predictions	82.8		83.3	

*Source: Authors' estimates using UKMOD with the FRS data. Notes: The level of significance of the estimates is as follows: \*\*\*\*  $p < 0.001$ , \*\*  $p < 0.01$ , \*  $p < 0.05$ , +  $p < 0.1$ . Inactive category includes all individuals who are not in work or unemployed*

### Comparison with other estimates

Official statistics on CB take-up are produced by HMRC. These estimates are constructed using three key data sources: (i) administrative records for the caseload, (ii) population estimates from the Office for National Statistics (ONS), and (iii) Labour Force Survey (LFS) data to adjust for participation in education among 17- to 19-year-olds (HMRC, 2024). The take-up rate is defined as the proportion of all eligible children for whom CB is being claimed, including cases where families have opted out of receiving payments due to the HICBC. In addition to HMRC statistics, the Office for Budget Responsibility (OBR) also publishes CB take-up estimates, using a different methodology more closely tied to forecasting benefit expenditure (2022). Our estimates broadly align with HMRC's the OBR's in showing a

steady decline in CB take-up from 2012 to 2019. This consistency affirms the reliability of all three approaches in capturing general trends.

However, our estimated take-up rates are systematically lower than those reported in the official statistics. This discrepancy arises primarily from differences in how "claims" are defined. Unlike HMRC, we exclude opt-out claims from our take-up measure, as our focus is on actual income receipt rather than administrative status. While our estimates reflect a similar trend to official statistics, they diverge somewhat more post-2020, especially for specific subgroups. Notably, HMRC data shows that in August 2023, families with one or two children were more likely to have opted out of CB payments due to the HICBC, compared to larger families (HMRC, 2024). This is consistent with our estimates, which also show lower take-up among smaller families. The likely explanation is that smaller families receive a lower benefit amount, making the net gain after the HICBC less attractive. However, administrative data may undercount the number of children in such families if claimants do not update their records after opting out. By contrast, our population survey-based estimates are not affected by such reporting omissions. Furthermore, in the official statistics based on administrative data, families who have opted out of payments may not inform the authorities when they have subsequent children since they would not receive any payment in any case, which will affect the reliability of these data. On the other hand, our estimates based on population surveys are not skewed by this effect.

Finally, external organisations such as Ghelani & Walker (2024) have attempted to estimate the value of unclaimed CB. Their analysis assumed a take-up rate of 89%, which our findings suggest may be optimistic, implying that the true amount of unclaimed benefit may be even larger than previously thought.

## **Discussion**

HMRC claims that “the overall reduction is likely related to the introduction of the HICBC in 2013, which meant that some families no longer claimed Child Benefit, knowing that they would need to pay a tax charge or opt-out of payment”(2025a). Our analysis using different data and methods also indicates that the introduction of the HICBC in 2013 has been a key driver behind the decline in CB take-up, which is consistent with HMRC’s analysis (2025a). The timing of the initial drop in take-up aligns closely with the HICBC's implementation, suggesting a causal link. The policy created new disincentives for higher-income families, either through direct financial penalties or the administrative burden of self-assessment,

resulting in many ceasing to claim altogether or opting out of payment. Additionally, the HICBC ended the universal character of CB, and general awareness of the HICBC may have contributed to confusion and deterrence even among families not directly subject to the charge.

Figure 2 illustrates that take-up fell most sharply among those directly affected by the HICBC. However, even among families considered not subject to the charge - those with incomes below the threshold - take-up also declined post-2013. This trend, captured by the green line in Figure 2, suggests that the effects of the HICBC have extended beyond its direct targets. Misconceptions around eligibility, complexity, and potential liabilities appear to have discouraged broader segments of the population from claiming. Research commissioned by HM Revenue and Customs (HMRC, 2019, 2025b) supports this interpretation, highlighting widespread confusion about eligibility rules and fear of inadvertently triggering a tax charge. Many families, particularly those near but below the £50,000 income threshold, erroneously believe they are ineligible or fear retrospective penalties if their income increases. This "precautionary non-claiming" is further supported by qualitative findings from interviews, which revealed widespread concern about making errors on applications, being liable for repayment, or facing fines (HMRC, 2022). The value of the benefit has also eroded in real terms due to the 2016–2020 benefit freeze, which further reduced its attractiveness. This may have contributed to declining take-up, particularly among families for whom the payment is relatively small.

Our empirical findings are consistent with theoretical explanations of incomplete take-up found in the literature, which typically cite three main barriers: stigma, transaction costs, and imperfect information (see Eurofound, 2015 for a comprehensive review of explanations for non-take-up). In the case of CB, we argue that stigma is likely to play a limited role given the relatively high income threshold for the HICBC. Instead, imperfect information and transaction costs appear to be more significant. Imperfect information is especially salient. Many families are unaware that claiming CB, regardless of payment, helps protect entitlement to National Insurance credits for the state pension and establishes the child's National Insurance number. While these non-monetary benefits are meaningful, they are distant in time, and may be undervalued due to present-biased decision-making (time myopia). As behavioural economics suggests, individuals often weigh immediate costs more heavily than long-term benefits.

In a recent report (HMRC, 2025b) qualitative interviews revealed that the perception that income does impact what is received as part of CB was one of the main reasons that many non-claimants had not claimed CB. As they had assumed that they earned too much to be eligible, and had not looked into CB any further. Even those who were likely to not be liable for HICBC often thought they earned too much to claim. However, many of those who are not liable to HICBC also believed their income was too high to claim, which some link to not claiming wider benefits. They were often aware that income impacts CB claims, but were less sure about how, and presumed it affects eligibility. Participants from all groups cited concerns about being “caught out” on income if their income changes while claiming CB. Many were scared of getting it wrong on their application, and some raised stories they had heard about other parents having to pay back considerable amounts to HMRC after they had been found to have made an error while claiming (HMRC, 2025b). This perception exists even among those who are not liable for HICBC. Some, primarily those on lower incomes or not from the UK, linked this fear back to their difficulty understanding the language used by HMRC on CB (HMRC, 2025b).

Transaction costs are another major barrier. A substantial amount of evidence has documented that take-up is lower for schemes that involve large transaction costs arising from application processes being complex, tedious and time-consuming (Kleven & Kopczuk, 2011). Although families would be financially better off claiming CB and paying back the charge through self-assessment if both parent’s taxable income is less than £80,000, many are deterred by the administrative burden. For salaried employees accustomed to Pay-As-You-Earn (PAYE), registering for and completing a self-assessment tax return represents a substantial perceived and actual hurdle. The parent has to register for self-assessment and send in a tax return every year. If the tax return is not filed correctly or on time, claimants may incur penalties, adding further risk. If they do need to pay the charge, and do not file a tax return, they could be fined up to 30% of what they owe by HMRC. Even among those who understand how the HICBC works, many feel that the loss of the monetary benefit eliminates the incentive to claim (HMRC, 2025). Moreover, the administrative data underlying official statistics may underreport eligible children. Families who opt out of CB may fail to notify HMRC of subsequent births, leading to underestimates in the number of eligible children in official records. By contrast, our population survey-based estimates are not susceptible to this kind of administrative undercounting.

Taken together, these findings suggest that the decline in CB take-up is not merely a reflection of the institutional design of social programmes, such as financial incentives or

eligibility criteria, but is connected to the outcomes for families through behavioural responses to policy complexity, uncertainty, and perceived hassle affecting even those for whom claiming would be beneficial.

### **Conclusions**

While this analysis does not establish a definitive causal link, the weight of evidence suggests that the introduction of the HICBC in 2013 has had significant and unintended negative consequences for CB take-up. We find that take-up has declined not only among families directly affected by the HICBC but also, and significantly, among those not subject to the charge. Families eligible for less than £89 every four weeks (in 2008 prices) have seen the sharpest reductions in claiming rates. Similarly, households with more adults and one-child households have experienced the largest proportional drops in take-up. The consequence is substantial cumulative income loss relative to what families could have received. These losses are not evenly distributed, with the biggest ‘losers’ one-child households with two or more adults. This pattern of non-take-up is consistent with the hypothesis that the HICBC has weakened the visibility, reduced the perceived value, and increased the complexity associated with claiming CB, even for those not directly liable for the charge. Looking forward, it will be informative to observe how the government’s recent announcement will affect take-up. The policy (not yet implemented at the time of writing) will allow employed individuals to pay the HICBC through their PAYE tax code without registering for self-assessment. This will remove the burden to complete an annual return, if one would not be needed otherwise, reducing transaction costs.

A natural extension of this analysis would be to calculate how the contribution of CB to reducing child poverty has changed over time, given the reality of incomplete take-up. This will add to our knowledge on the impact of child benefits on poverty, in particular how child benefit systems should be designed to yield the most beneficial results in terms of poverty reduction. This is all the more relevant considering that the long-standing wisdom that universally designed benefits outperform targeted benefits in terms of poverty reduction has recently been disputed (Van Lancker & Van Mechelen, 2015).

In summary, while the HICBC may have achieved its fiscal objective of reducing spending on CB, its broader effects suggest it has undermined the simplicity and reach of a benefit that was once near-universal. The reform appears to have inadvertently discouraged

take-up across the income spectrum, with long-term implications for both income distribution and administrative efficiency.

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