
Cheques and imbalances

How income varies throughout the year for Universal Credit households

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Executive summary

Income volatility can have serious consequences for lowincome families on Universal Credit, affecting their ability to budget and plan ahead. When earnings fluctuate from month to month, even small changes can impact household budgets and benefit awards, and the way councils handle administration and billing.

Volatile income makes it difficult to budget which means that families are at higher risk of falling into problem debt and financial difficulty. Financial instability takes up mental bandwidth and is linked to poorer physical and mental health outcomes, while increasing the poverty premium by, for example, making it harder to pay by direct debit.

In this study, funded by the Joseph Rowntree Foundation, we show the level of income volatility faced by a subset of households receiving Universal Credit.

By following over 70,000 Universal Credit households across seven local authorities from April 2022 to March 2023, we find that:

1. Almost a third of Universal Credit households experience income volatility

- 30% of Universal Credit households experienced at least one month where their take home income changed. This rises to 36% for working households, and 21% for households with no earnings
- One in five households (21%) have highly erratic incomes, where income changes are more frequent. People under 25, single people, Londoners and higher earners are most likely to experience income volatility whether in or out of work

2. Universal Credit dampens earnings volatility for working households, sanctions and deductions exacerbate income volatility and leave households worse off

- Income fluctuates by £111 per month on average per working household. Universal Credit dampens earnings volatility of £161 per month by half, bringing the average size (£) of income fluctuations down to £73 after the UC taper has been applied. However, sanctions and deductions increase volatility to £111.
- Recent changes to the debt deduction cap are welcome. Our modelling shows that this is expected to help 28% of households, based on our sample of Universal Credit recipients.

3. Income volatility for Universal Credit recipients can impact entitlement to other benefits and eligibility for local support

- Fluctuating earnings can mean fluctuating entitlements to passported benefits, such as Healthy Start and free NHS prescriptions. Free School Meal (FSM) entitlement is also impacted by fluctuating earnings, but entitlement is not lost because currently earnings are assessed over a number of assessment periods, and eligibility continues until the end of the child's current phase of education
- Income volatility also impacts eligibility for local support and the costs of collection. Council tax support schemes can require a reassessment for each change in earnings. This can mean a new bill is issued every month, leading to confusion for taxpayers and additional costs such as postage, estimated at an extra £16 million per year, with other costs including extra staffing, administration, arrears and collection expected to be at least as large

The following recommendations would mitigate the negative impacts of income volatility for people on Universal Credit:

1. The government should prioritise efforts to mitigate the impact of sanctions and deductions to reduce income volatility.
2. The government should increase the Universal Credit Standard Allowance alongside introducing a work allowance for under 25s and people without children, as they are most at

risk of income volatility.

3. The government should introduce delayed termination of passported benefits. This would dampen the impact of earnings volatility onto passported support and encourage take up.
4. Councils should introduce income banded and Universal Credit aligned Council Tax Support schemes to lower administration costs. Additional data from DWP covering more households on Universal can support further automation of schemes for households in work.

Our analysis should prompt policymakers to take action and streamline how Universal Credit interacts with other individual local and national systems. Previous analysis by Policy in Practice has shown that £23 billion of benefits go unclaimed each year, in part, because of the complexity of the benefit system. The proposed changes to how Universal Credit operates can help more families to have a sustainable budget.

Chapter 1: Introduction

Volatile income makes it difficult to budget which means that families are at higher risk of falling into problem debt and financial difficulty. Financial instability takes up mental bandwidth and is linked to poorer physical and mental health outcomes, while increasing the poverty premium by, for example, making it harder to pay by direct debit.

Universal Credit (UC) is designed to reduce poverty and boost work incentives for working aged households on low or no income. A decade on, the question remains: has UC delivered or fallen short on its promise to make work pay?

Several studies have highlighted how key design features of Universal Credit drive income volatility (Milar and Whiteford 2020; Tucker and Norris 2018; Tomlinson 2018; Griffiths et al. 2022). One feature often singled out is the monthly Assessment Period (AP). APs are the fixed time intervals used to calculate the amount of UC a claimant is eligible for.

Each AP starts from the date a claim to Universal Credit is successfully made, with payments made typically five days after an assessment period ends, or five weeks after the start of the AP. Mismatches between payments and APs can cause income volatility, even for households with stable earnings.

Few studies map the impact of income volatility on UC households, because until now it wasn't possible. Most data sources available to researchers cannot tell us anything about within-year income volatility. Survey data is limited in how much they tell us how frequently people receive different types of income.

This report shows the scale of income volatility for individuals and families on Universal Credit. It paints a clear picture of the UC households most likely to see their take home income change each month, and by how much. The analysis answers the following research questions:

1. What *proportion* of benefit recipients have month to month income volatility and what is the proportional representation of different types of income?
2. What is the *frequency* of income volatility for each of the income types?
3. What is the *extent* (depth) of income fluctuation for the different types of income?
4. How does the design of the national benefits dampen or accentuate income volatility?
5. How does the design of the local benefits, namely Council Tax Support, dampen or accentuate income volatility?
6. Which groups of benefit recipients experience the most volatility?

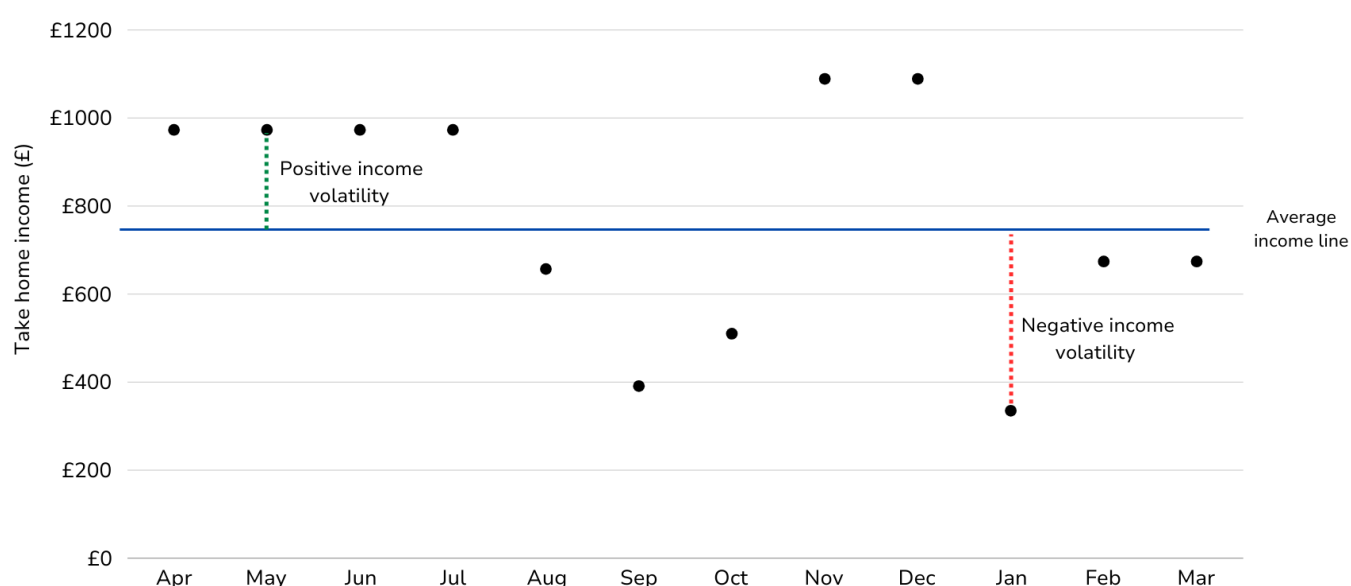
We make use of Universal Credit Data for over 70,000 households in receipt of Universal Credit across seven local authorities from April 2022 to March 2023. Universal Credit data gives us a glimpse into the real circumstances of Universal Credit households each day. This allows us to know the size, frequency and depth of income volatility for households on Universal Credit.

Chapter 2: What is income and income volatility?

Income volatility describes how household income in one assessment period increases or decreases compared to the annualised average income the household receives across the year.

Figure 2.1 charts one household's income across the year. Each black dot represents the household's take home income for a given month. The blue line shows their average monthly take income of £776 per month. Positive income volatility describes instances when income is above the average income line. Negative income volatility describes instances when income is below the average line.

Figure 2.1: Charting household income volatility



Technical appendix 2 describes how we measure income volatility in greater detail.

What is income for a household on Universal Credit?

Households claiming UC typically receive income from the following sources in addition to their Universal Credit award:

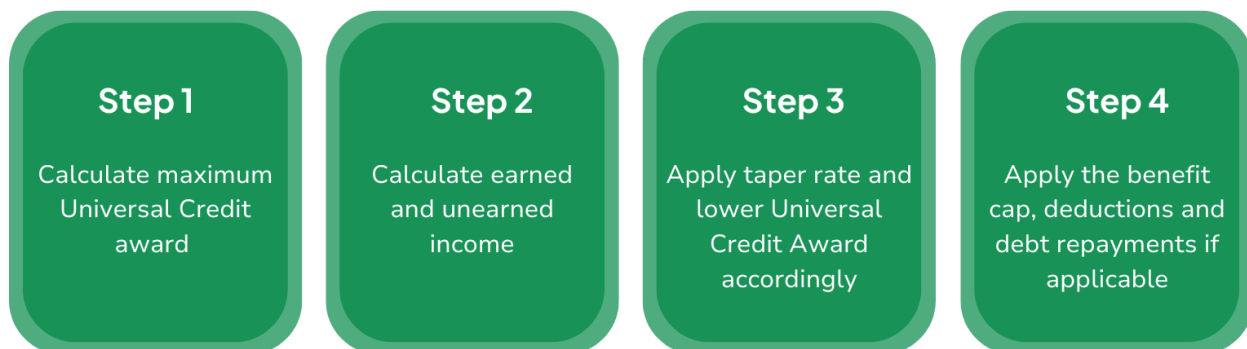
- Earnings from paid employment or self employment
- Benefits outside of Universal Credit, like Carer's Allowance, Child Benefit
- Other income sources like child or spousal maintenance

Within a given AP, Universal Credit brings all of these sources of income together and adjusts the UC payment whenever income from any of its component parts rises or falls. How much a household receives in an AP depends on earnings, UC and any money that is removed because of debt repayments, sanctions and deductions. The final sum of all sources of income received by a UC household, after sanctions and deductions is also known as **take home income**.

UC payments are made typically five days after the end of an AP. In March 2023, 82% of UC payments were made within this five day window.



How to calculate a Universal Credit Award



To assess income volatility and its drivers, we track how income changes in each step of the Universal Credit calculation. Given the fact that Universal Credit was built to respond to changes in income, it is important to map how the addition of each new income source impacts levels of income volatility.

This method also enables us to isolate the main drivers of income volatility, and better understand the role of UC in either dampening or accentuating changes in income from earnings or from benefits outside of UC.

Table 2.1: Take home income volatility calculated step by step

Model	What it tells us
Model 1 Earnings volatility	This model shows monthly changes in earnings from work and tells us the amount a household gets from paid work, and how this changes from one AP to another.
Model 2 Universal Credit (UC) volatility	The total amount of a UC award, after subtracting the tapered earnings and income from benefits outside of UC without including any deductions, sanctions, or payments to landlords. This model tells us how much a household gets on UC, and how this changes from one AP to another due to changes in earnings.
Model 3 Earnings and UC combined volatility	Model 3 shows volatility from combining earnings and Universal Credit. That is, the sum of the income from Model 1 for earnings and Model 2 for Universal Credit award. This model gives us insight into how much UC accentuates or dampens monthly earnings volatility.
Model 4 Earnings, UC and income from other benefits (outside of Universal Credit)	Model 4 shows earnings, UC and income from benefits outside of UC. Income from benefits outside of UC can include income from Carer's Allowance, Maternity Allowance, non UK benefits, Bereavement Allowance or child maintenance. This model tells us how income from other benefits accentuates or dampens the volatility from earnings and UC combined.
Model 5 Earnings, UC, other income and deductions from UC	Model 5 shows take home income taking into account deductions from UC. That is the sum of earnings, the UC award and benefits outside of UC, alongside deductions, including debt, sanctions and payments to landlords. This model tells us the total take home income for the households in a given AP. It also tells us how sanctions and deductions increase or dampen volatility from income.

Headline volatility figures are based on total take home income, or Model 5, and the drivers of income volatility are understood based on the earlier models. Details on how we measure each of the different income types can be found in the Technical appendix 3.

Reporting income volatility

Hills, Smithies and McKnight's (2006) created eight categories describing how household incomes change over a year. The categories are Highly Stable, Stable, Broadly Stable, Stable with blips, Rising, Falling, Erratic and Highly Erratic. We reproduce these categories below:

Table 2.2: Hills, Smithies and McKnight's (2006) models of income volatility explained

Highly stable	Income in 12 Assessment Periods (AP) is within 10% +/- of mean take home income for the year	Rising	Income in first 6 APs is below mean and for the rest of the year was above the mean take home income
Stable cases	Income in at least 11 APs is within 10% +/- of mean take home income for the year, and for the other AP is within 20% +/- mean	Falling	Income in first 6 APs is above mean and for the rest of the year was below the mean take home income
Broadly stable	Income in at least 11 APs is within 15% +/- of mean take home income for the year, and for the other AP is within 25% +/- mean	Erratic income	Income in at least ten APs is more than 15% and less than or equal to 25% +/- the mean
Stable with blips	Income in at least 11 APs is within 15% +/- of mean take home income for the year and one much further away	Highly erratic	All other cases

Making sense of 70,000 household's income volatility journeys is like trying to make sense of a bowl of spaghetti. There is a lot of variation from household to household. However, Hills et al (2006) is a robust framework that captures the most common income volatility journeys for households on

benefits. Its eight categories neatly describe the ways that households can see their income change within a year.

In our analysis, we simplify this framework into three main categories: Stable, Erratic and Highly Erratic. We've combined trajectory groupings into these three key categories for clarity. If a household has either erratic or highly erratic income, they experience income volatility. We use either term interchangeably within the report.

Table 2.3: Abridged income volatility grouping

Stable	Includes, highly stable, stable, broadly stable, stable with blips	Erratic	Stable with blips, rising and falling cases, and Erratic cases	Highly erratic	All other cases
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The impact of income volatility on households

[Policy in Practice and the Joseph Rowntree Foundation](#) (JRF) previously looked at the impact of income volatility for households on Universal Credit in 2020. Our core findings from the report still stand. When faced with income volatility, households will grapple with a number of tradeoffs to make ends meet. In qualitative interviews, UC claimants shared the stress that fluctuating incomes created for them.

One family shared the difficulty they faced after not receiving their UC despite having to pay their childminders:

"I had to let my childminders know that "I haven't been paid, I can't pay you this month but I still have to go to work and I still have to bring my child here," so I had to open up my Universal Credit claim and show it to them to say zero..."

Families, like the one above, may use credit or take out loans to cover additional costs, dip into savings, appeal to family and friends or go without the essentials. The act of trying to make up these additional costs can be physically and emotionally exhausting.

Uncertainty in payment dates and amounts also limits their ability to set up direct debits and manage bills, increasing their risk of falling into arrears. Where a household is already getting amounts out of the UC deducted for a repayment of an advanced loan, income volatility can exacerbate a household's journey into debt.

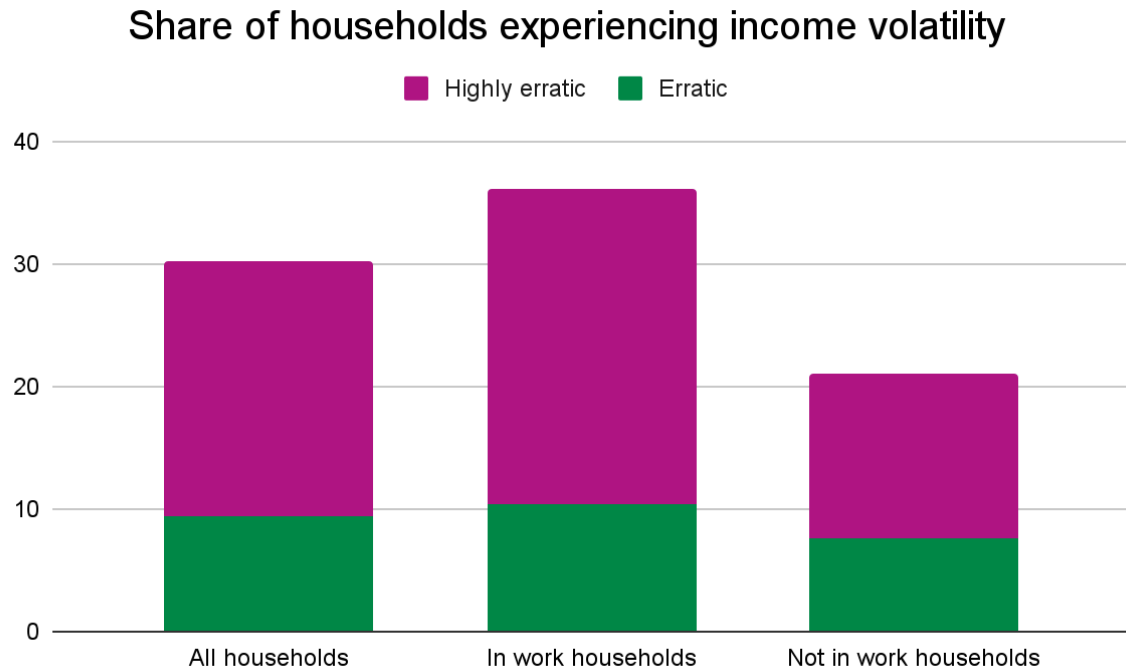
This analysis seeks to understand the scale of income volatility to help determine where policies can have the greatest impact.

Chapter 3: How many households experience income volatility

30% of UC households experience income volatility. This rises to 36% for working households, and reduces to 21% for households with no earnings. One in five households (21%) have highly erratic incomes, where income changes are more frequent.

Nearly one third of UC households faced income volatility within the year. While most have stable take home income with minor changes, many experience UC as a constantly shifting source of income. The figure below shows the share of households with erratic and highly erratic incomes for all households, and for households in work and not in work respectively.

Figure 3.1: Share of households experiencing income volatility



	Stable	Erratic	Highly erratic	Volatile income
All households	69.8%	9.3%	20.9%	30.2%
All working households	63.9%	10.4%	25.7%	36.1%
No earnings	79.0%	7.6%	13.4%	21.0%

Working households have higher rates of earnings volatility. The share of households experiencing income volatility rises to 36.1% of working households.

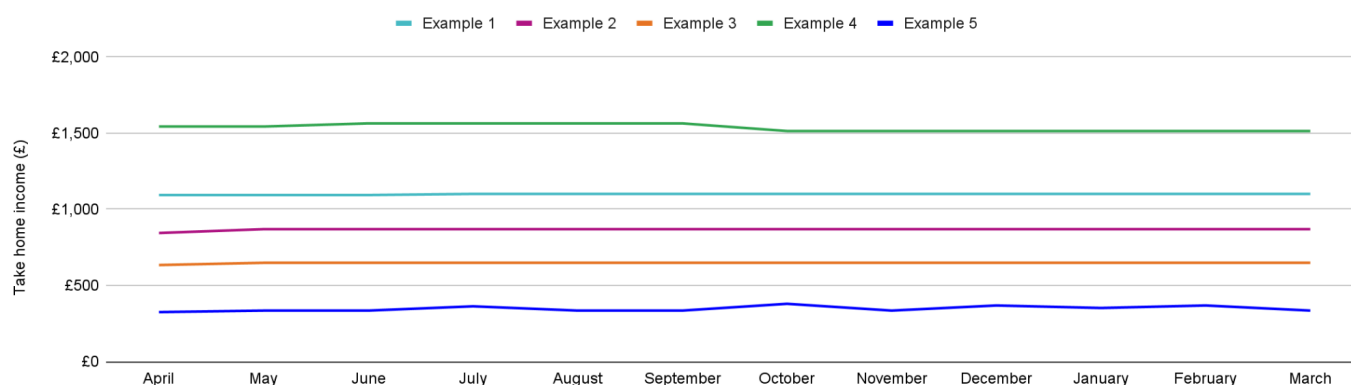
In comparison, 21% of out of work households have volatile income due to having numerous changes in life circumstances like moving house, being assessed for a disability benefit, or receiving income from benefits outside of Universal Credit, such as Carer's Allowance.

Profiles of stable income

Nearly 70% of households in our sample have stable incomes. This random sample of five stable cases illustrates how little some household incomes change from month to month. Generally, these are households in consistent employment and either do not receive income from other benefits, or do not see the income from other benefits change during the year. There are a large number of non-working households in this group.

Figure 3.2: Sample of five households with stable income

Highly stable cases

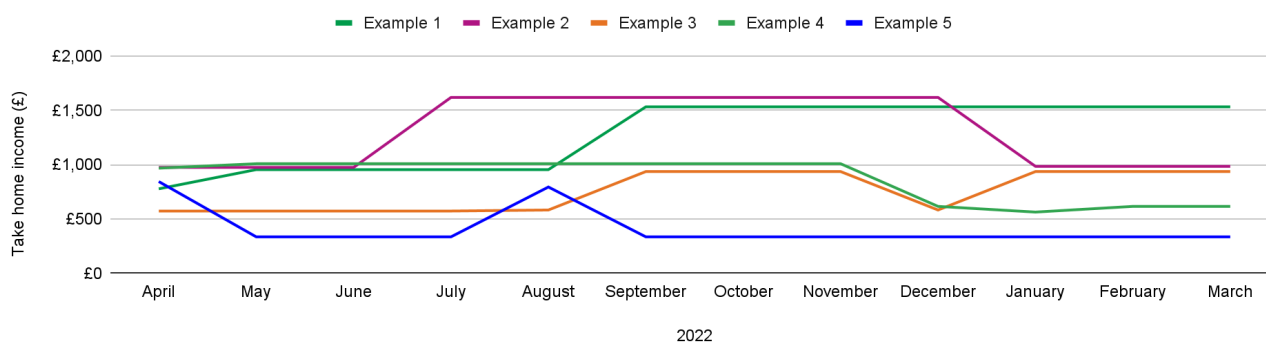


Profiles of erratic income

Over 9% of households in our sample have erratic incomes.

Figure 3.3: Sample of five households with erratic income

Erratic case



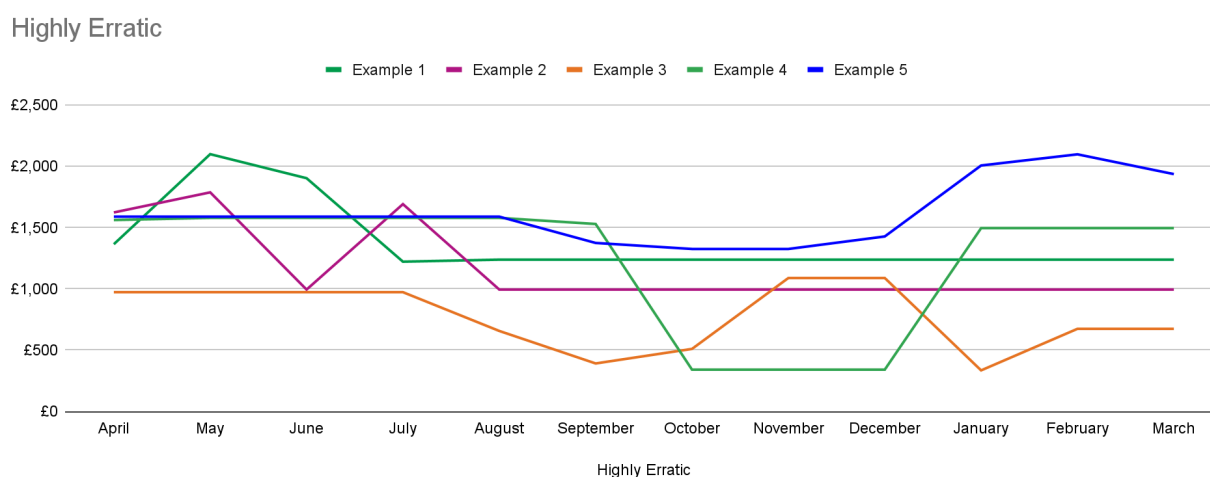
These households see three to four significant changes in their income, some over a short period as illustrated by Example 5 in August. Others see these changes over a longer period, such as example six between May and November.

Generally, households in this group are more likely to have earnings present in at least 11 APs, with some earning no money in one AP. They see regular changes in earnings due to instances where payment frequency and APs are out of sync.

Profiles of highly erratic income

Over 20% of households in our sample have Highly Erratic incomes.

Figure 3.4: Sample of five households with highly erratic income



Generally households in this group are more likely to have earnings in 10 APs, with at least two months where they have no earnings. Households with Highly Erratic income are also more likely to have between £50 to £100 removed from their UC award due to deductions or sanctions monthly. This group is also likely to have variable payment frequencies and amounts from benefits outside of UC.

We see a number of households that would be classed as highly erratic because they do not fit the definitions of the other trajectory groups. Example 2 is an example of a household whose income trajectory does not fit any other Hills and Smithies (2006) categories, and is therefore classified as Highly Erratic. Cases like this highlight the limits of the categorisation framework in exhausting all possible variations of household income volatility.

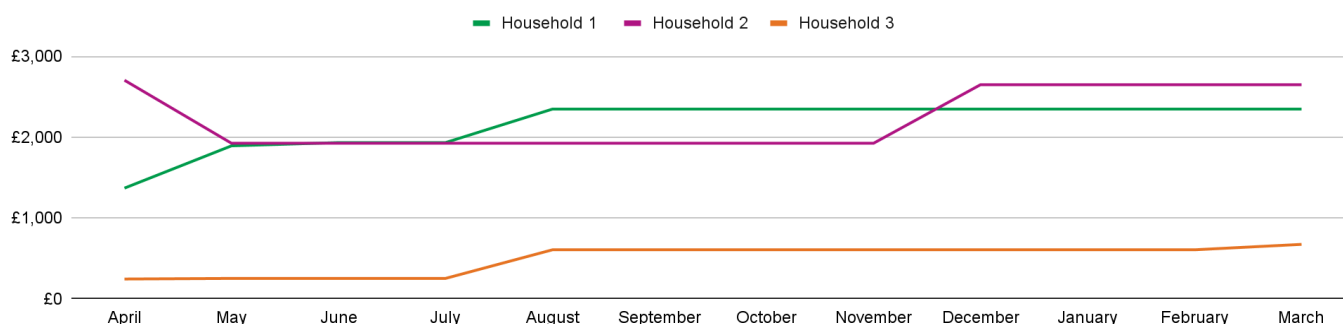
People out of work experience income volatility too

Even people out of work face income volatility, mainly due to changes in the value of benefits outside of UC, or adjustments to their UC elements, sanctions or deductions.

These changes often result from the main claimant or child being assessed for a disability benefit, a new claim to Carer's Allowance, rent payments made directly to landlords due to vulnerabilities in the middle of the year, or moving to a different area within the borough and getting an updated UC housing element. In many cases, the new benefit amounts come into effect only after a few assessment periods, creating unnatural peaks and troughs in income.

Figure 3.5: Case studies of three households with erratic income and no earnings

No earnings and erratic income volatility due to changes in UC elements, or unearned income



Household 1 is a single mother with five children. She receives the Standard Allowance, Housing Element and Child Element on UC. Between April and May, she begins to receive the Disabled Child Element for one of her children, who begins to receive DLA or is registered blind. She submits an application for Carer's Allowance and begins to receive this benefit as well. A month later, in June 2024, the Carer's Allowance amount gets uprated, which is delayed as most benefits are uprated in April. Another one of her children gets registered for DLA and she receives an additional disabled child element, all contributing to a volatile income profile.

Household 2 is a couple with no children receiving the Standard Allowance, Housing Element, Carer's Element and has Limited Capacity for Work. They also receive Carer's Allowance. This couple faces housing insecurity so they move from one property to another with the borough. They receive half of the housing element following their move, meaning their UC award is much lower. They also

lose their Carer's Allowance and carer's element once they move. Between November and December the household moves to another property where they receive a larger housing element, and the UC again increases.

Household 3 is a single man who receives the Standard Allowance of UC. He has two sanctions imposed onto his UC award between April and May which causes a minor fluctuation in his take home income. He is being assessed for the Limited Capability for Work or work related activities and only begins to receive this new element between July and August, which changes his benefit value. One of his sanctions is removed between February and March causing a minor increase to his take home income.

In these cases, households see their UC change because of their circumstances. It's not that UC policy isn't working; it's that out of work households also face unpredictable life events that affect their benefits.

This is particularly true for those applying for Carer's Allowance or disability benefits. Many households experience changes in their UC after a Work Capability Assessment or when they start receiving Carer's Allowance. However, these changes often face delays and don't adjust automatically with shifts in circumstances or new benefit applications. As a result, new benefits are typically implemented only after several assessment periods, leading to sudden income spikes and drops.

Impact of highly erratic and erratic incomes

As stated in the previous chapter, income volatility often has a negative impact on households. For both the highly erratic and erratic households, income volatility can affect a household's financial resilience. When a household's income changes from month to month, it can make it difficult to budget. Changing take home income also means households may be less likely to set up direct debits for bills since they do not know how much money they have to meet their costs each month. This increases the risk of falling into debts, and can take a toll on their mental and physical health.

The real life impact of income volatility cannot be overstated. Previous research shows that many people [lose sleep due to stress](#), go without meals or work many jobs, or even [forgo new job opportunities](#) or life changes to try to cope with high levels of income volatility through the year.

Chapter 4: How often do households experience income volatility?

People's experiences of income volatility vary greatly.

- Over two thirds of people on Universal Credit in receipt of council tax support don't see any significant shifts in income month to month
- Around one in ten households see only one month of income volatility in a year
- Similarly, nearly one in ten see month on month changes to their income

Universal Credit dampens income volatility, reducing by two thirds the number of households experiencing income volatility (defined as a greater than 10% change in monthly income). Without Universal Credit, 43% of households would experience month on month income volatility because of fluctuations in earnings and other income. Later chapters will show that without UC, more households would see fluctuating entitlements to other benefits.

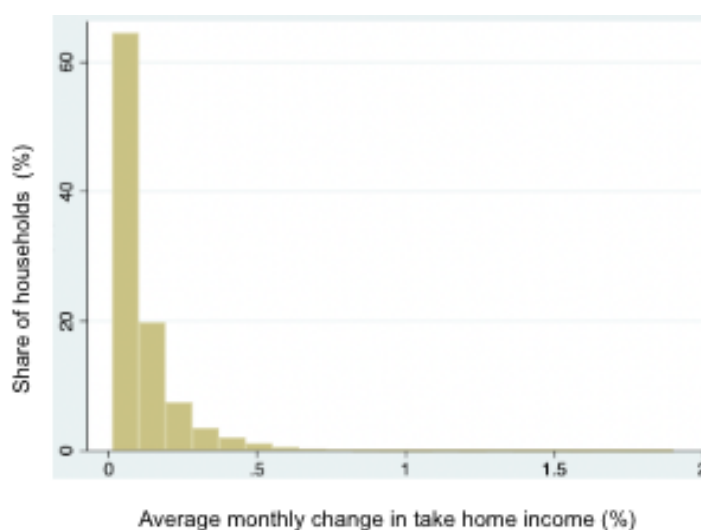
This is a tale of three cohorts. Over two thirds of people on Universal Credit in receipt of council tax support don't see any significant shifts in income month to month. 9% of households experience at least one AP where their take home income fluctuates by more than $\pm 10\%$ of their monthly average. In contrast, another 9% of households experience such fluctuations in at least eleven out of twelve APs within a year.

The design of UC plays a dual role: it contributes to both the high frequency of income volatility for some households, and effectively reduces the frequency with which earnings and changes in other income lead to significant changes in take home income for others.

UC's design partly contributes to the 10% of households that experience month to month income volatility due to the way assessment periods and payment dates are structured.

At the same time, UC also helps keep the number of households experiencing 12 months of volatility relatively low. Without UC, 43% of households would experience month on month income volatility because of fluctuations in earnings. This falls to 9% after Universal Credit.

Figure 4.1: Distribution of average monthly changes in take home income across all households



68% of households see average income changes lower than 10% per month. By our definition, these households would not have income volatility, because their income does not vary more than $\pm 10\%$ from the monthly average.

This means that most households do not see such large changes in their take home income across the year. This is good news for the majority of households, as they are on average not seeing major increases or decreases in their take home pay that would disrupt their monthly budgets.

However, roughly 9% of households experience at least one assessment period where their income fluctuates by more than 10%. Another 9% of households experience such fluctuations every assessment period within a year.

The table below shows the households with income fluctuations of greater than 10% across the entire cohort (out of work and income work).

Table 4.1: Households with income volatility greater than 10% by assessment period

Households with income volatility greater than 10% of the average		
	Households	%
No volatility	47,664	67.9
1 AP	6,229	8.9
2 AP	3,139	4.5
3 AP	1,747	2.5
4 AP	1,210	1.7
5 AP	838	1.2
6 AP	615	0.9
7 AP	609	0.9
8 AP	573	0.8
9 AP	615	0.9
10 AP	773	1.1
11 AP	1,198	1.7
12 AP	4,962	7.1
Total	70,172	100.0

The table shows that over two thirds of households on Universal Credit don't see any significant shifts in income from month to month. Around one in ten households (8.9%) see only one month of income volatility in a year, in contrast nearly one in ten (7.1%) see month on month changes to their income.

Note that the table above shows greater income volatility than is reflected in chapter two. This is because some cases that are classed as stable according to Hills and McKnight, we consider volatile here, such as those facing a one off 10% rise or fall in income greater.

Table 4.2: Households with income volatility greater than 10% by assessment period and work status

	In work		Out of work	
	Number of hhs	%	Number of hhs	%
No volatility	26,577	61.8	21,101	77.6
1 AP	4,269	9.9	1,962	7.2
2 AP	2,343	5.5	797	2.9
3 AP	1,310	3.1	438	1.6
4 AP	959	2.2	251	0.9
5 AP	663	1.5	175	0.6
6 AP	504	1.2	111	0.4
7 AP	517	1.2	92	0.3
8 AP	493	1.2	80	0.3
9 AP	543	1.3	72	0.3
10 AP	659	1.5	114	0.4
11 AP	1,034	2.4	164	0.6
12 AP	3,127	7.3	1,837	6.8
Total	42,998	100.0	27,194	100.0

Although working households see slightly higher rates of income volatility than households out of work, both groups have similar trends. One reason for this is related to the nature of APs and payment dates.

Why mismatching assessment periods are creating month on month income volatility

Each AP determines the monthly UC payment based on the claimant's circumstances and income during that period. UC payments are then made typically within five days of the end of the AP. In March 2023, 82% of UC payments were made within this five day window.

For some cases in our sample, the UC payment shown will be related to the earnings in the same assessment period. This means that Universal Credit will dampen income volatility, as a rise in earnings will be reflected in a lower Universal Credit payment.

However, for one in six households, the UC payment shown will be related to earnings in the previous assessment period. For example:

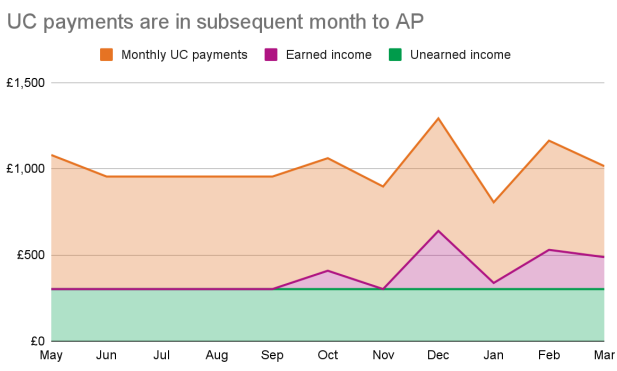
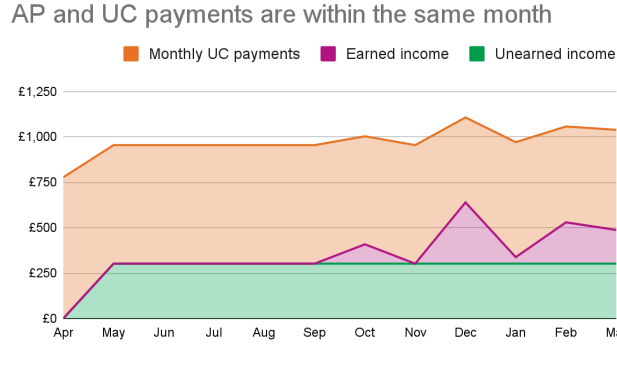
1. Assessment Period for a household is 5 January to 4 February
2. Earned income (pay day) is 25 January
3. UC payment is made 9 February
4. February's UC is therefore based on January's income, and if income drops in February, UC will not compensate until March

For these households, this mismatch between AP and UC can exacerbate income volatility. We show this by looking at one household in detail. Data on payment dates is provided to DWP by HMRC. We were not given permission to use the HMRC data for this research project. Allowing HMRC data to be used for research purposes would enable us to assess this pattern in further detail.

Case study 1: Anita and her mismatched APs

Anita starts working in the second half of the year with variable earnings. We assume that the UC payment relates to earnings in the previous month. The chart to the left hand side shows her income over time.

Table 4.3: Assessment Period modelling

Before - mismatched APs	After - aligned APs
AP and UC payments are in subsequent month to AP	AP and UC payments are in within the same month
UC payments are in subsequent month to AP  Monthly UC payments Earned income Unearned income	AP and UC payments are within the same month  Monthly UC payments Earned income Unearned income

The chart on the left shows what would happen if her earnings and UC payments are within the same AP. Here, the graph shows what would happen if UC claimant, Anita, were paid both her earned income and UC payment within the same calendar month. We use the same earnings from the previous example. The period of employment shows an increase in take home income. UC responds to earned income within the same calendar month, producing greater income stability overall.

In this example, Anita's earned income in November is £0. Responding to this drop, UC in December increases. Anita then earns more in December and UC again responds by paying her less in January. However Anita also earns very little in January meaning her overall take home income for January is the lowest month in the year for her. Anita sees considerable volatility when her AP and UC payments are related to different months.

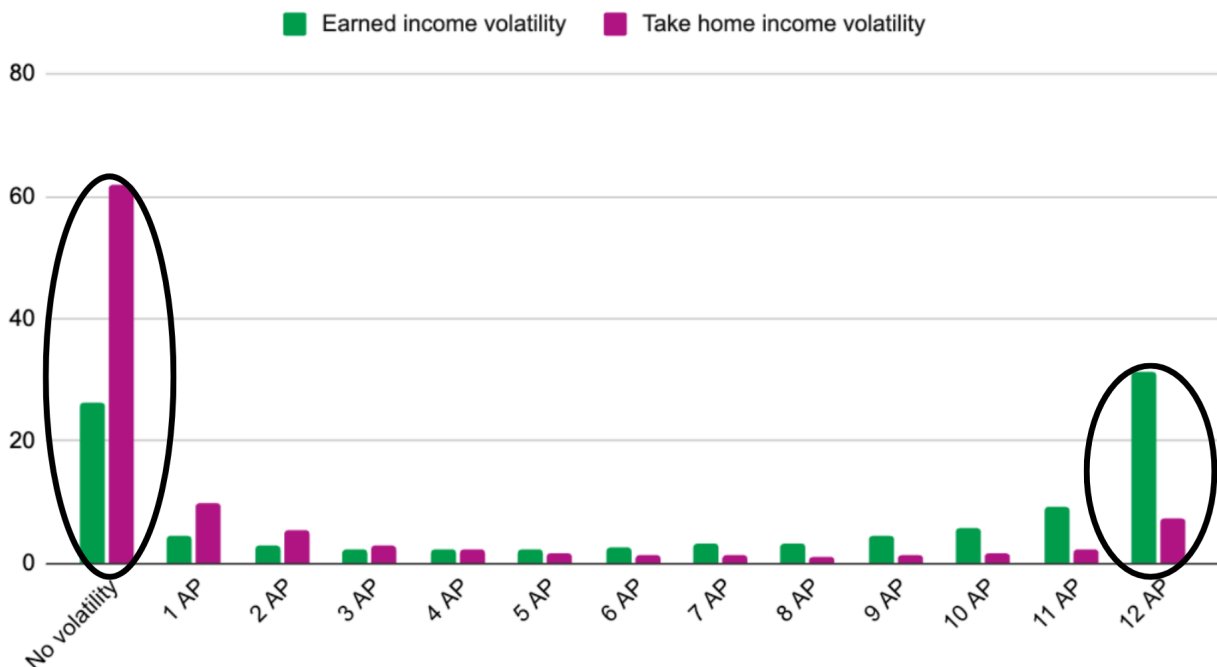
Importantly, this change won't only impact people with earnings: if Anita received two four-weekly payments of Carer's Allowance in December, her income would rise in December and her Universal Credit would fall in January in a similar way.

Why UC helps to reduce the number of times earnings volatility impacts take home income

UC has a dual role in creating and dampening income volatility. Interestingly, working households and non-working households alike see similar trends in the frequency of take home income volatility. Earnings impact the share of households that see their income change. But earnings alone do not drive income volatility.

The graph below compares the number of times a household experiences volatility by income type. The green bars show the share of households experiencing earned income volatility. The pink bars show the share of households experiencing take home income volatility (income after receiving UC and benefits outside of UC). We chart the fluctuations of greater than 10% for those with earnings (in work).

Figure 4.2. Frequency of income volatility by income type for in-work households



Looking at earned income volatility, nearly three in four households in work experience at least one month where their earnings change by more than 10%.

- Similarly, a quarter of households (26.3%) experience no volatility in earnings. After receiving UC, this number rises to 62% of households that see no change in their take home income.
- One third of households (31.4%) experience month on month volatility in earnings. After receiving UC, this number falls by three quarters, with only 7.3% of households seeing month on month volatility in take home income.

Whilst mismatched APs can make income volatility worse, Universal Credit payments tend to reduce steep changes in overall household income, dampening the effect of erratic earnings. This helps to keep households from seeing major shifts in their take home income.

Its dual functionality shows us that Universal Credit can and should do more to reduce the frequency of take home income volatility. However, some of its key design features, like the AP, limits its full potential to help households maintain financial stability.

Allow HMRC data to be used by councils for a more robust understanding of income volatility

We show that a mismatch between Assessment Periods and when people are paid can create income volatility. This is likely to impact about one in six households in work, but without HMRC data, we cannot conclusively say that all of the month on month income volatility is because of a mismatched AP.

In addition, our analysis is based on a subset of Universal Credit recipients, people on Universal Credit and claiming council tax support. This covers 46% of all UC households on average in the participating seven councils (measured on Universal Credit recipients at April 2022).

Enabling the use of earnings data, available in the data but not permitted for the purpose of this analysis, and allowing greater sharing of data on more Universal Credit recipients would help better understand the impacts and interaction of payment dates, assessment periods and income volatility.

More importantly, greater sharing and allowed uses of Universal Credit data would support a wide range of additional research questions and deliver operational benefits, including better targeting of discretionary support to those most at risk.

Chapter 5: What is the average size of income volatility?

Take home income fluctuates by £111 per month on average for a working household. Universal Credit dampens earnings volatility of £161 per month by half, bringing the average size of income fluctuations down to £73 after the UC taper has been applied. However, sanctions and deductions increase volatility to £111.

In this chapter we show that for households who experience changes in their take home income, these changes average around £111 per month. Universal Credit adjusts to changes in earnings. This helps limit the amount of earnings volatility that gets passed onto take home income. This **dampening effect** reduces earned income volatility from £161 to £73 per month or by 54% for working households. When sanction and deductions are included, income volatility rises from £73 to £111 per month or by 52%, offsetting Universal Credit's dampening effect for the households that are in work.

Uncovering the impact that Universal Credit has on earnings

Universal Credit combines multiple types of income from earnings and other benefits outside of UC. The combination of the different parts of UC each have a unique impact on the level of volatility a household experiences each month. When these different income streams are taken into account, we see how Universal Credit interacts with earnings and other benefits.

The chart below shows the average changes for each income type.

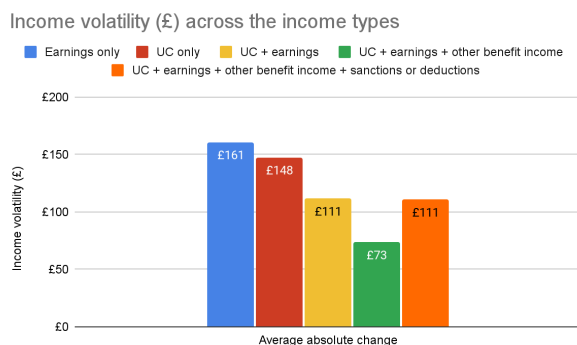
Earnings (**Model 1**) shows the highest average monthly changes, whereas the combination of UC, earnings and income from other benefits outside of UC (**Model 4**) sees the smallest changes.

This tells us that addition of UC and other benefits reduces earnings volatility, demonstrating the potential of UC to dampen fluctuations in earnings.

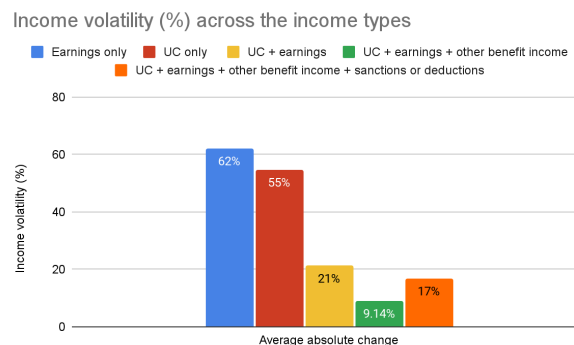
Yet, when sanctions and deductions (**Model 5**) are added in, any dampening impact due to income from other benefits is virtually erased, and income volatility increases.

Figure 4.1: Average changes in income volatility models (£ and %)

Average £ change across income models



Average % change across income models



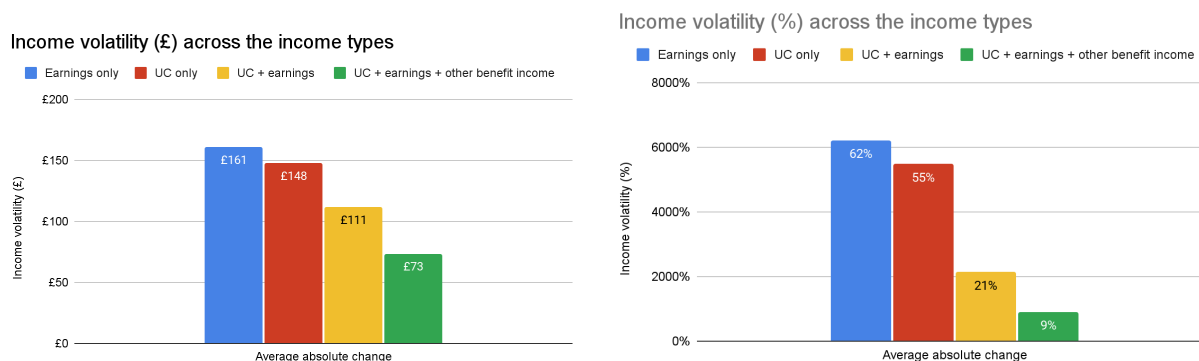
In essence, these chart tells us two things:

1. Universal Credit has a dampening effect on earned income volatility
2. Sanctions and deductions are working against UC's ability to dampen earnings volatility

Universal Credit has up to a £87 or 54% dampening effect on earned income volatility

Earnings volatility is a very common feature for working households on Universal Credit. In the previous chapter, we showed that a third of households experience month on month volatility in earnings. The figure below shows how much of this earnings volatility gets carried into a household's take home income, looking across the four income models.

Figure 4.2: Average changes of earnings, UC award and income from other benefits (£ and %)



The blue bar shows us that working households see changes in earnings worth £161 per month on average, or 62%.

The red bar shows us that for the same working households, the average monthly change in UC is £148. This is about £13 less than the average absolute monthly change in earnings. Essentially, UC volatility mirrors earnings volatility because UC is designed to increase or decrease on a taper due to changes in earnings, after taking into account the work allowance.

The yellow bar shows us that when UC and earnings are combined, without any sanctions or deductions applied, income volatility falls from £161 to £111 per month, which is £50 less or a 31% reduction in income volatility.

If a household then receives income from benefits outside of Universal Credit, such as Carer's Allowance, Child Maintenance or disability benefits, earning volatility is further reduced by up to 54%. The average level of income volatility goes down to £73, which is £87 less (54%) than the average absolute monthly change in earnings alone.

Income from benefits outside of UC are weekly based, so they may fluctuate less than benefits awarded on a monthly basis. Once a household receives this additional support, it helps to reduce the amount and percentage that their take home income will change each month, because this portion of money will not be subject to as much change as earnings or UC.

Sanctions and deductions exacerbate income volatility and leave households worse off

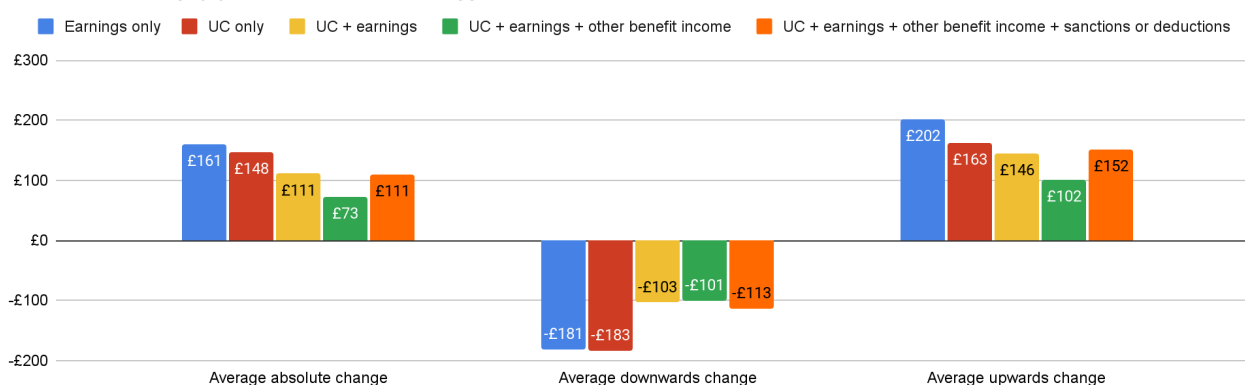
Research shows [mixed results](#) that sanctions help encourage work, or long term employment.

Sanctions are portions of income removed from UC awards when a claimant fails to meet their work related requirements. **Deductions** are debt repayments placed on a household's UC when a claimant owes money to the DWP or other creditors.

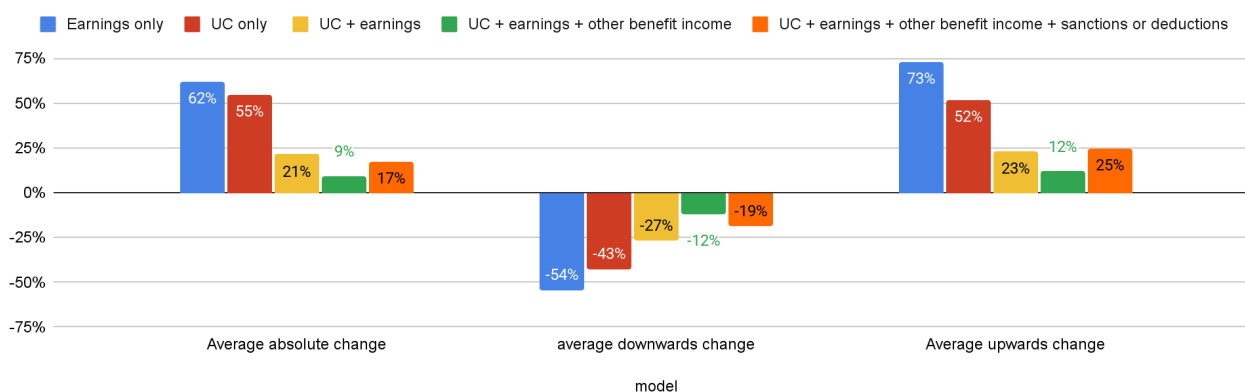
When sanctions and deductions are added in, the dampening effect from the combination of UC earnings, and other benefit income, is virtually erased. The final figure shows the volatility across the five income models, with the new orange bar representing volatility in take home income, which is the sum of all earnings, income from other benefits and UC, including sanctions and deductions. We also show the average upwards and downwards changes.

Figure 4.3: Average change of earnings, UC award, including sanctions and deductions, income from other benefits (£ and %)

Income volatility (£) across the income types



Income volatility (%) across the income types

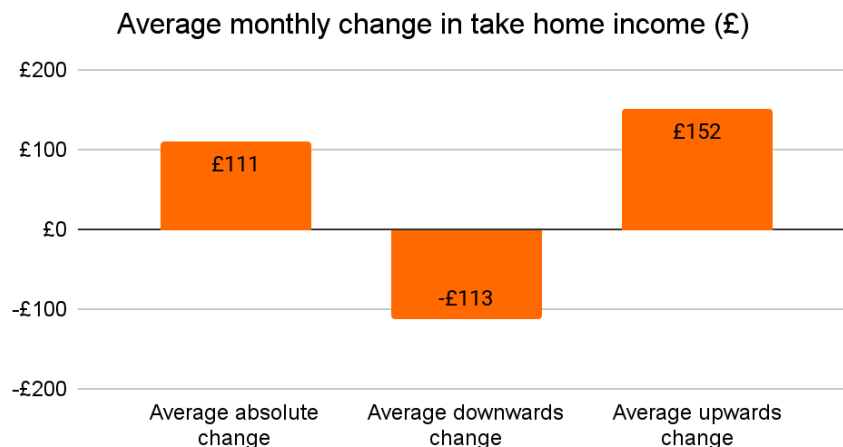


Households with sanctions and deductions are exposed to an additional £38 of income volatility compared to households that have no sanctions or deductions applied. In other words, sanctions and deductions increase income volatility from £73 to £111, or a 52% change. Looking at both upwards and downwards changes in take home income, sanctions and deductions also make households more exposed to upwards and downwards changes in earnings.

Average take home income fluctuates by £111

The absolute average monthly change in take home income for a UC household is £111, including sanctions and deductions. The average downward £ change is £-113, whereas the average upwards change is £152. The bar chart below shows the average changes in take home income for UC households.

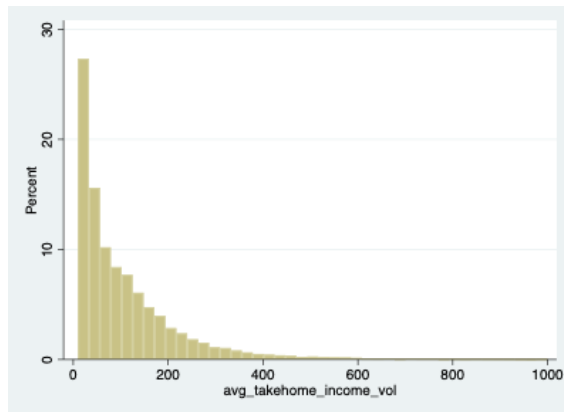
Figure 4.4 Average monthly change in take home income (£)



The images on the next page show the distribution of the changes in take home income. Most people see small upwards, downwards and overall changes in take home income, typically falling between £1 and £20 per month on average.

Figure 4.5: Average absolute changes in take home income

Average absolute £ changes in take home income
for UC household in work



Average absolute % in take home income
for UC household in work

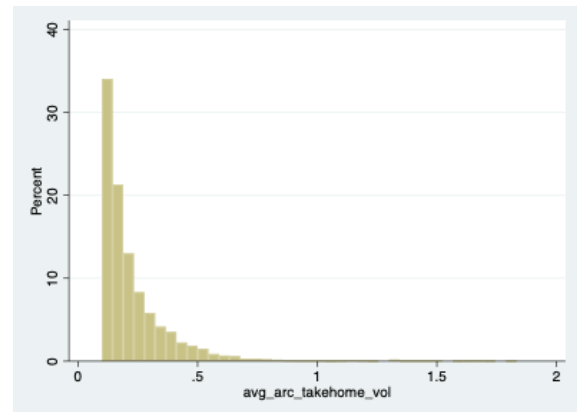
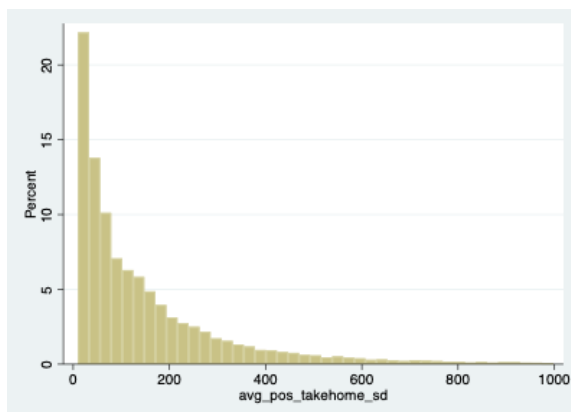


Figure 4.6: Average upwards changes in take home income

Average absolute upwards £ change in take home
income for households in work



Average absolute upward % change in take home
income for households in work

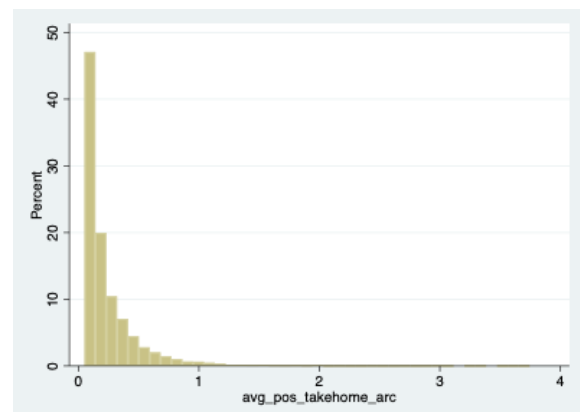
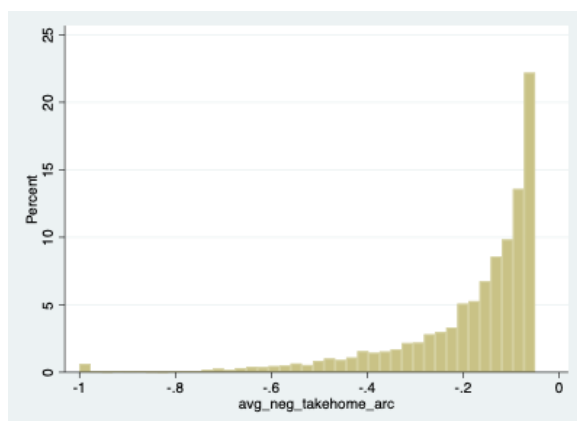
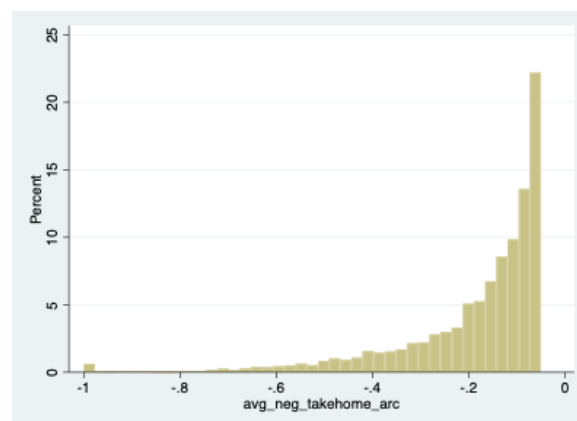


Figure 4.7 Average downwards changes take home income

Average absolute downward £ change in take home
Universal Credit households in work



Average downward % change in take home
for Universal Credit households in work



Across the working cohort, the spread of absolute, upwards and downwards changes in take home income are concentrated between £10 - £60, or about 10% fluctuations.

There are a number of outliers who see their take home income halved or doubled across the year. This is likely due to drastic changes in their earned income, significant changes in circumstances or changes in weekly income from other benefits like Carer's Allowance.

Lowering the impact of sanctions and deductions will have a bigger effect on reducing income volatility than changes in other aspects of Universal Credit

UC dampens income volatility though the withdrawal rate / taper effect, created by the withdrawal rate of UC towards earnings. Sanctions and deductions increase income volatility by as much as UC dampens it. Lessening the amount that a household can have sanctioned or removed from their UC will bolster its ability to combat other changes to a household's earnings or circumstances.

We join [with the JRF in recommending a protected minimum floor to the Universal Credit System](#), to protect households from unaffordable reductions in their UC from debt deductions and sanctions. The policy is set to help 1.9 million families, with an additional £48 per month, at a cost of £150 million.

The new debt deduction cap will limit the maximum deduction from Universal Credit to 15% of the Standard Allowance in most cases, down from 25%

The 2024 Autumn Statement announced a new debt deduction cap, reducing the level of debt repayments to the UC Standard Allowance from 25% to 15%.

Based on what we know from our sample of Universal Credit households in the 2022 - 2023 fiscal year, we estimate that just over one in four households will be impacted by the policy change in April 2025.

To model the full impact of this policy change, we would need further analyses to consider all subsequent changes to Universal Credit since 2022 - 2023. This would include modelling the impact of the benefits uprating in 2023 - 2024 and 2024 - 2025, changes to the national living wage and national insurance (for those with higher earnings), the rise to the Local Housing Allowance in 2023, and changes to sickness pay and employment.

The interactions of all of these policy changes on Universal Credit Standard Allowance and earnings, combined with the changes to the debt deductions repayments will impact income volatility rates.

With this said, we do our best to estimate the size of the cohort who will be impacted by this policy change. Further analysis will be needed to evaluate the impact of all subsequent changes to UC policy on income volatility.

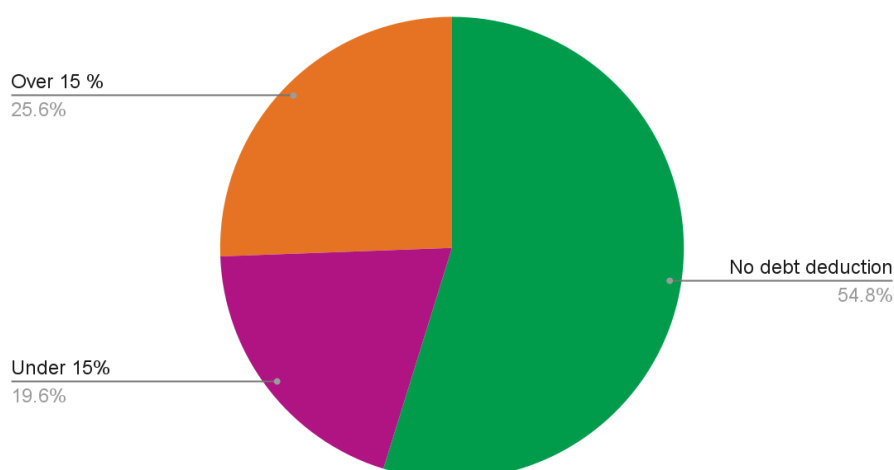
New lower debt deduction cap will impact 26% of households on Universal Credit

In this section, we estimate the size of the cohort impacted. Just under one in two households (31,730 in our dataset) have a portion of their standard allowance removed to cover a debt. The average size of deductions was £65 in March 2023.

Given the inadequate level of the Standard Allowance, without any deductions applied, debt deductions can create additional financial strain for households.

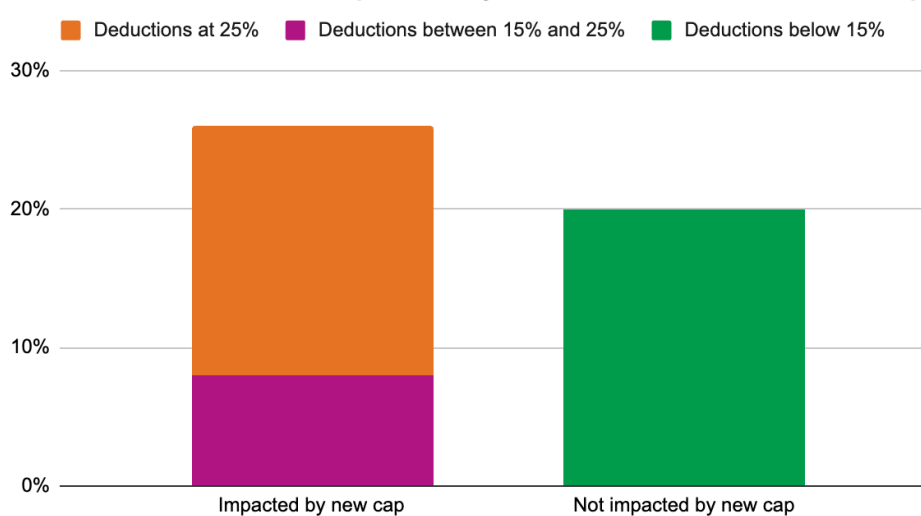
The pie chart below shows the share of households with UC debt deductions.

UC households impacted by debt deductions in March 2023



The following chart shows the number of households that will be impacted by the new UC debt deduction cap. Over one in four households (25.6%) will see the level of their debt repayments lowered due to this new policy.

Share of households impacted by the lower debt deduction cap



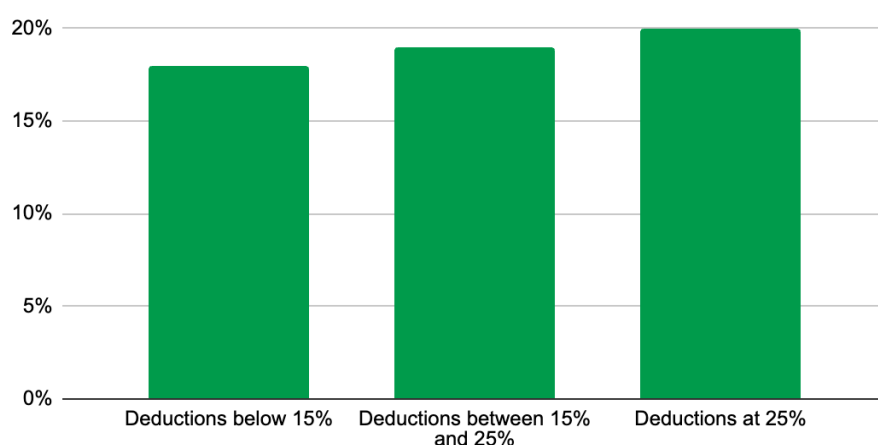
One in five households (13,777) faced debt deductions less than 15% of their Standard Allowance, losing about £35 from their Standard Allowance in one AP. These households will continue to see £35 removed from their Standard Allowance from April.

Roughly one in ten (5,623) households faces debt deductions between 15% and 25% of their Standard Allowance. These households lose about £72 from their Standard Allowance in one AP and will see the amount of repayments reduced from April 2025.

One in five households (12,330) faced debt deductions worth 25% of their Standard Allowance, losing about £97 from their Standard Allowance in one AP. These households will also see the amount of repayments reduced from April 2025.

Across all deduction bands, roughly one in five households facing any level of debt deduction has highly erratic incomes. These households are most likely to see the largest more frequent changes in month on month take home income. The bar chart below shows the share of households facing highly erratic income.

Share of households with highly erratic income by debt deduction band



The new debt deduction to have tradeoffs, reducing some income volatility whilst prolonging period of debt repayments

Lowering the amount that can be removed from the Standard Allowance due to debt deductions, will likely increase UC's potential to dampen some of the income volatility households face. This policy will be a welcome change for the 28% of households with deductions between 15% and 25%, and will lower income volatility for these households.

However, this policy will not eradicate income volatility. 45% of households will still face deductions at some point through the year. Even with lower deductions many households will continue to face highly erratic incomes due to other factors like fluctuating earnings or changes of circumstances.

These households will also be repaying their lower debt deductions for a longer period of time, prolonging the period of time that their Standard Allowance is reduced.

Chapter 6: How income volatility for UC households impacts other benefits

Fluctuating earnings often means fluctuating entitlement to passported benefits, such as Healthy Start and free NHS prescriptions, and can discourage take up. Delayed termination of passported benefits can dampen the impact of earnings volatility onto passported support.

This chapter explores the impact of income volatility on passported benefits, specifically Free School Meals, Healthy Start and free NHS Prescriptions, before presenting a selection of policy options to make UC work for more households.

We find that 43% of working households with children lose Healthy Start eligibility at least once a year because of earnings volatility. Similarly, 55% of working households lose eligibility for NHS prescriptions at least once a year because of changes in earnings.

Universal Credit, Free School Meals, Healthy Start and free NHS prescriptions work together

Receiving Universal Credit can make households eligible for other benefits like Free School Meals (FSM), Healthy Start (HS) and free NHS Prescriptions. Box 5.1 provides an overview of FSM, Healthy Start and free NHS prescriptions.

Box 5.1 : Overview of Free School Meals, Healthy Start and Free NHS Prescriptions

We look at receipt of three benefits that a UC household would become eligible for because they receive UC and have earnings below a specific threshold.

Healthy Start	NHS free prescriptions	Free School Meals
Benefit for pregnant women and families with young children to buy fruit, milk and veg	Benefit for certain age groups to receive prescriptions at no cost	Benefit for school aged children to receive meals during school day
- UC household must have net earned income below £408 pm in most recent AP Four weekly checks of earned income to ensure the household remains eligible. If their earned income goes above the threshold, then the household's benefits are stopped immediately - Households can reapply if their incomes do go below the threshold again, but advice is to double check with the NHS	- UC households must have net earned income of below £435 pm if single, or £935 pm if a couple, during the most recent AP - Households lose eligibility once earned income goes above the threshold. Households are encouraged to check that earned income has not gone above the threshold before claiming this support - Can be fined up to £100 if you claim NHS free prescriptions and are not eligible	- UC households must have annual net earned income of below £7,400 or £616 pm* in most recent AP - This income threshold can vary. FSM guidance classifies that the thresholds "are designed to take into account claimants whose earnings may fluctuate on a monthly basis." - Households receive FSM until the end of their current phase of education, even if they come out of eligibility during the year due to earnings fluctuations. See the FSM guidance for more details.

Each of the passported benefits have additional eligibility requirements. For FSM, HS and free NHS prescriptions, household earnings are taken into account.

Earnings volatility often has a direct impact on eligibility for passported benefits. This means that households can move into and out of entitlement due to fluctuations in their earned income.

The extent to which UC dampens earnings volatility is irrelevant if benefits like FSM, HS and free NHS prescriptions consider earnings prior to receipt of UC to determine household eligibility.

Free School Meals shows that eligibility to these passported benefits can be smoothed. Fluctuating earnings *does not* mean fluctuating Free School Meals entitlement because earnings are assessed over a number of assessment periods, and include delayed termination, whereby a household continues to receive FSM until the end of the relevant child's current phase of education.

Healthy Start and free NHS prescriptions may consider adopting a delayed termination approach similar to FSM to help reduce the number of times households move into and out of eligibility.

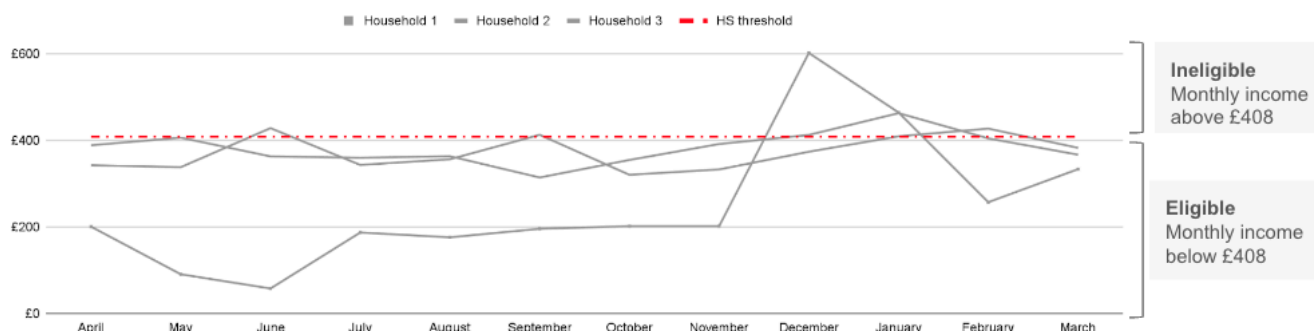
Fluctuating earnings means fluctuating eligibility for Healthy Start

56% of working households with children have consistent earnings below the £408 eligibility threshold. 43% of working households will lose eligibility for Healthy Start at least once in the year because HS goes above the £408 earnings threshold in at least one AP. They will have to reapply for the benefit once their income goes below the eligibility threshold.

In this example, Household 3 loses eligibility four times in the year. The other households lose eligibility twice a year.

Figure 5.1: Modelling changes in Healthy Start eligibility for households with income volatility

43% of household lose Healthy Start eligibility because of fluctuating earnings

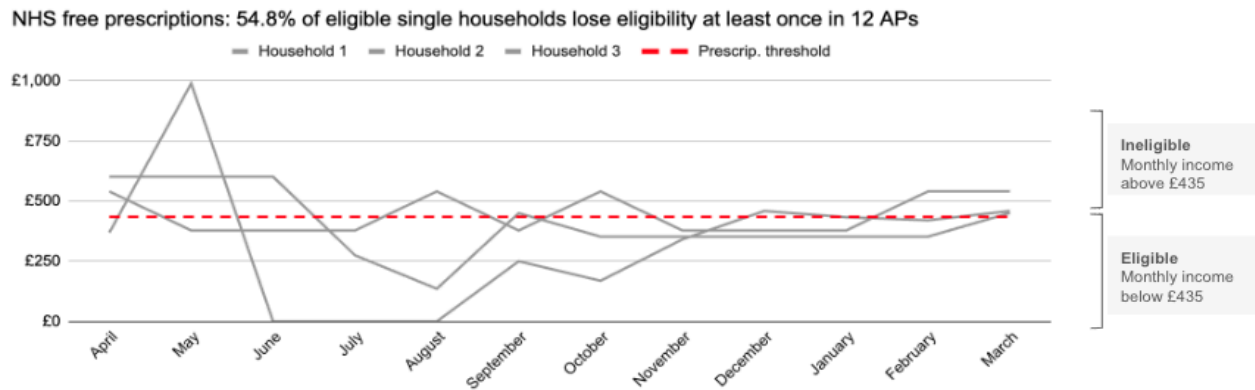


Fluctuating earnings mean fluctuating eligibility to free NHS prescriptions

35.2% of single working households have consistent earnings below the £435 eligibility threshold. 54.8% of households will lose eligibility for free prescriptions at least once in the year because HS goes above £435 earnings threshold in at least one AP.

NHS Business Services Authority recommends households on UC check their eligibility for the free prescriptions prior to claiming it. If someone claims and they are not entitled due to fluctuating incomes, they will risk a £100 fine.

Figure 5.2: Modelling changes in NHS prescriptions eligibility for single households with income volatility

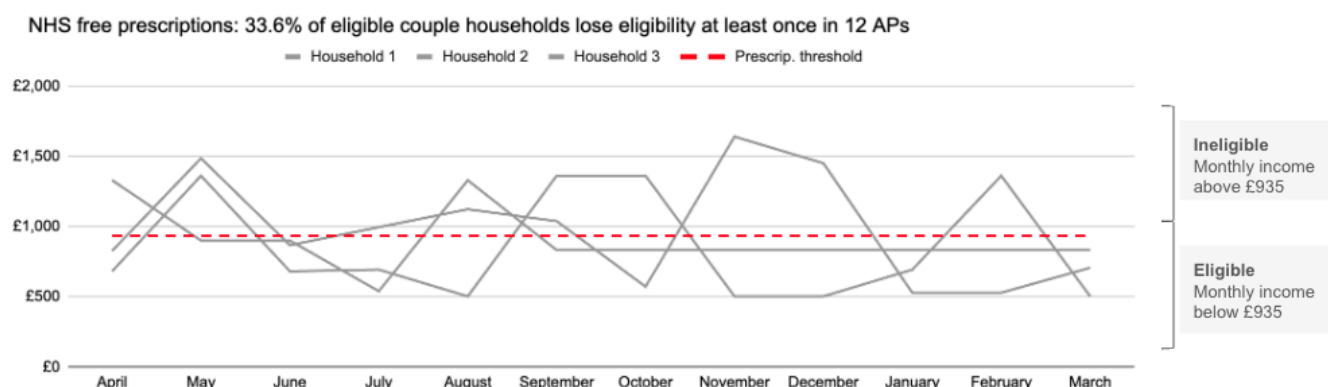


The rates for couples are similar, reproduced in the graph below. For eligible couples, the NHS almost doubles the earnings threshold for free prescriptions. This results in a slightly lower share of couple households losing eligibility due to earnings fluctuations, compared to singles.

66.4% of working couples have consistent earnings below the £935 earnings threshold. 33.6% of households will lose eligibility for free prescriptions at least once in the year because their earnings go above the threshold in at least one AP.

Higher earnings thresholds don't eliminate earnings volatility, but help reduce the number of times those on the lowest incomes don't miss out on passported benefits.

Figure 5.3: Modelling changes for free NHS prescriptions for couple households in work



FSM entitlement is also impacted by fluctuating earnings, but entitlement is not lost due to delayed termination and rolling earnings thresholds

FSM accommodates for changes in UC earnings and can serve as a benchmark for other benefits outside of UC. FSM earnings thresholds were built to accommodate for earnings volatility, by delaying the cancellation of the benefit after rising above the earnings threshold until the end of the relevant child's current phase of education.

FSM has three different thresholds and assessment period lengths, so households with the one-off income fluctuation can still qualify for FSM if the average of their monthly income over two or three APs is below a different (higher) threshold. These rolling thresholds work to dampen earnings volatility.

Coupled with this, households do not have FSM terminated immediately if their average monthly earnings rise above the threshold. Termination is delayed until the end of the child's current phase of education, this way the child does not lose their lunches in moments where parents have erratic work schedules.

Overall, FSM policies offer solutions to mitigate against the loss of benefits eligibility due to earnings volatility. HS and Free NHS prescriptions might consider delayed loss of benefit or establishing a rolling earnings threshold.

The best way to dampen the impact of earnings volatility on benefits entitlements is to remove earnings thresholds altogether

The [Social Security Advisory Committee \(SSAC\)](#) looked at the problem of having income thresholds for passported benefits in 2012, the outset of Universal Credit. The core recommendations from this report still stand:

- Ensure that everyone on UC is eligible to receive all the current passported benefits
- Extend Free School Meals to all (primary) children and free prescriptions to everyone as in the devolved administrations, irrespective of economic circumstances

The best way to prevent changes in earnings from impacting benefits entitlements is by not considering earnings altogether.

Where possible, policies should consider removing earnings from the consideration of eligibility for FSM, HS, free NHS prescriptions or Warm Homes Discounts. Instead, the receipt of Universal Credit should be enough of an indication that a household is on a low income.

We recognise that this would be costly to the government to implement. Our previous analysis estimates that extension of programmes like Free School Meals would cost the government [roughly £692 million](#) and impact around 2 million children growing up in UC households.

Should this option not be available to policy makers, we have also considered other ways to dampen earnings volatility, without entirely removing the earnings assessment.

A lower cost and pragmatic option would be that any in-year changes of income are ignored if a household is eligible at any point in the year. The household will continue to receive the passported benefit until the end of the year, even if their income changes due to one or two abnormal periods of higher earnings.

This **delayed termination of benefits** helps to encourage take up and ensures families receive much needed support for their food and health costs, even when the claimant earns above the threshold during the year, supporting the move into work.

This would create minor overpayments for households who do lose eligibility yet continue to receive this support during the cooling period before eligibility is terminated. The government should not treat these overpayments as a recoverable overpayment because the value of benefits like Healthy Start is relatively low.

Policy recommendations: Benefit passporting or adopting a delayed termination approach for benefits outside of UC

Passported benefits make households eligible for other benefits or schemes because they receive a qualifying benefit.

The government should consider passporting households in receipt of UC for FSM HS and NHS prescriptions, and **remove the earnings threshold** to ensure all households with the lowest incomes get this additional support. The extension of FSM, HS and NHS prescriptions to all UC households would show that the government is committed to removing one of the few remaining poverty traps in Universal Credit, making work pay for households on the lowest incomes.

Alternatively, policy makers may consider **implementing delayed termination** of HS and NHS prescriptions. Households would not immediately lose eligibility due to one or two abnormal periods of higher earnings, and would be given the time to budget accordingly.

Chapter 7: How income volatility for UC households impacts local Council Tax Support Schemes

Income volatility also impacts eligibility for local support. Council tax support schemes can require a reassessment for each change in earnings, however small. This can mean a new bill is issued every month, leading to an estimated cost in postage of £16 million per year. Other costs include staffing, additional administration, arrears and collection costs, all of which are likely to be at least as large.

Councils can reduce these additional administration costs by introducing income banded support schemes, or amending their regulations, for example to assess income on a monthly basis. Universal Credit aligned schemes can further streamline assessment, and additional data from DWP covering more households on Universal Credit can support auto enrolment.

We focus on how UC income volatility impacts locally administered benefits like Council Tax Support.

What is Council Tax Support?

Localised Council Tax Reduction provides support to working aged households that are liable for council tax. Within this project we focus on the two most popular kinds of Council Tax Support (CTS) schemes, explored in the box below:

Box 7.1 : Default and income banded Council Tax Support Schemes

Default scheme	Income banded scheme
- Assessment of eligibility and levels of support were calculated in a 1:1 relationship, meaning for every penny over a set threshold, Council Tax Support is reduced, commonly at a 20% taper rate - In 2024 - 2025, 75% of CTS schemes in England were based on the standard scheme	- Allows for income fluctuations within a set range. Any change to income within this range will not trigger a reassessment of Council Tax Support - In 2024-25, 25% of CTS schemes in England were income banded schemes.

How Universal Credit and Council Tax Support work together

The Universal Credit Datashare (UCDS) is the ideal dataset to understand the impact of UC income volatility on standard and income banded CTS schemes because it is actively used by councils for the administration of CTS.

For each UC assessment period, the local authority's benefits system processes a UCDS notice and if there is a change in circumstances, such as a change to earned income, the UCDS notice triggers either an automatic change or notifies an officer to process a manual change in circumstances.

We modelled two CTS claims, one with a scheme based on the default scheme and one with an income banded scheme, to demonstrate how changes to a household's earnings and UC award can have a direct impact on a household's CTS award. The income banded scheme produced half as many changes to Council Tax Support and, in this instance, reduced the overall Council Tax bill by more than £50.

CTS model 1: Schemes based on the default scheme are not as effective in dampening fluctuation in earnings, UC awards, Council Tax Support awards and Council Tax bills as banded schemes

First we model a single household who is applying for CTS under a scheme based on the default scheme.

Kevin is 40, single with no children and works whilst also claiming Universal Credit. His local council provides a maximum of 80% of a Council Tax bill in Council Tax Support. His council also has a 'standard' Council Tax Reduction Scheme, meaning that for every change, no matter how small, a Council Tax Support change is processed and a Council Tax adjustment notice is produced.

Kevin has erratic earned income because he works variable hours at a shop along the High Street. Below we reproduce how his earnings Universal Credit impacted his CTS awards.

Figure 7.2: Case study of impact of income volatility on Standard Council Tax Support Scheme

	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Earned income	£650	£720	£745	£670	£670	£720	£690	£720	£720	£690	£690	£690
UC	£393	-£26	-£14	£40	no change	-£26	£17	-£31	no change	£31	no change	no change
CTS	£393	£104	£50	£130	no change	£66	£36	£30	no change	£18	no change	no change
New CT bills	New bill	New bill	New bill	New bill		New bill	New bill	New bill		New bill		

For Kevin, this earnings pattern, when combined with his council's CTS scheme, means he will receive eight Council Tax bills this year. Each bill will outline new instalment dates, with different amounts.

For households like Kevin's, high levels of income volatility create disruption and confusion about how much Council Tax to pay each month. Many changes in residual Council Tax liability also mean

that the household may not be able to pay by Direct Debit. Lastly they are also more likely to miss a CT payment due to new instalment dates, increasing the chance of falling into CT arrears.

Where the customer has not signed up for e-billing, councils incur a postage and printing cost for each new bill issued and are more likely to get more calls to customer services. Where households fall into debt, they are more likely to incur recovery charges to collect their debts.

CTS model 2: Income banded scheme help to reduce the number of times CTS award and the Council Tax bill change due to changes in earnings and Universal Credit awards

Now we look at another similar single household, Stuart lives in the neighbouring council area where there is a banded Council Tax Support scheme.

Under this scheme, Stuart can earn up to £740 a month without a Council Tax Support adjustment. Stuart has exactly the same earned income and circumstances as Kevin. Below we reproduce how his earnings impact on his Universal Credit and CTS awards.

Figure 7.3: Case study of impact of income volatility on Income banded Council Tax Support Scheme

	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Earned income	£690	£720	£720	£690	£690	£690	£660	£720	£720	£690	£690	£690
UC	£393	-£26	-£14	£40	no change	-£26	£17	-£31	change	£31	change	change
CTS	£393	no change	£144	£9	no change	no change	no change	no change	no change	no change	no change	no change
New CT bills	New bill		New bill	New bill								

For Stuart, his income fluctuations mean he will receive three Council Tax bills this year. This is five fewer bills, or 63% less postage. Stuart is also more likely to pay by Direct Debit as his instalments remain consistent for most of the year. As a result he is more likely to pay at all. Stuart is also less

likely to require customer support to explain his bill, adjust his payment dates or discuss late payments.

Banded schemes have a dampening effect on Universal Credit income volatility

The two examples provided show the exact same circumstances for two individuals with erratic earnings. The difference is the CTRS scheme.

To illustrate the cost implications for councils, for those living in a standard CTRS borough, this can mean 12 Council Tax bills.

The costs of volatility in Council Tax administration

In chapter 3, our analysis showed that 43% of UC claimants experience some level of income volatility in all 12 Assessment Periods. If we assume that these households live proportionally in the 75% of CTS boroughs with default CTS schemes, then an estimated 1.4 million households are impacted.

Where customers have not signed up for e-billing, households can receive 12 Council Tax Bills, and for each bill to cost £1 in printing and postage, this has a cost of over £16 million in Council Tax bills alone.

Other costs include staffing, additional administration, arrears and collection costs, all of which are likely to be at least as large as the postage example estimated above.

The cost implications of changing council tax bills illustrated above can be mitigated by designing council tax support schemes that factor in expected earnings volatility.

Policy recommendations: Amend Council Tax Support regulations to align with Universal Credit by changing the way income is assessed, for example through income banded schemes

Changing standard Council Tax Support schemes to income banded schemes can help the household as much as the council.

For households this means fewer changes in the CTS award, the ability to set up a direct debit with the council and reduced chance of falling in CT arrears.

For the council this means reduced billing and administration for CTS, and can create up to £16 million savings in Council Tax postage.

Modelling Council Tax Support schemes that take income volatility into account

Councils are having to redesign their Council Tax Support schemes, in response to budget constraints and the impact of national welfare reforms, including the introduction of Universal Credit.

Policy in Practice has been helping local authorities model localised council tax support since it was first localised in 2013. Our extensive experience comprises modelling over 100 schemes for dozens of local authorities. Our service includes a detailed analysis of the cost and social impacts of different schemes, as well as advice to help design a proposed scheme that meets local objectives.

We have seen the following trends in local council tax support scheme designs, largely in response to income volatility and the introduction of Universal Credit.

- 62 of 350 (18%) CTR schemes changed in 2024/25
- 14 of 75 banded schemes (19%) changed over the same period
- The average maximum award was just over 90%

But this hides a wide level of variation in scheme designs, for example half of all London Boroughs offered 100% support to at least some households, while maximum support for some groups was as low as 50%. Lowering administration costs and increasing automation has been one of the key drivers of the changes to CTR schemes.

- The number of banded schemes increased by 20% in 2024/25
- A number of authorities asked us to model de minimis changes, whereby bills remain unchanged unless earnings are above an agreed threshold
- Councils were also considering discount schemes, primarily in order to reduce administration costs, although we caution against these because of the loss of Universal Credit data, which can be used to help target other local support

For councils looking to amend their schemes this year, we would recommend that they agree clear objectives with their members; model the impact of changes to their scheme both on their finances and on their residents, while taking into account wider cost of living impacts; consider greater automation of assessment including auto enrolment and 'Apply Once' integration with benefit calculators; and allow plenty of time for modelling and reflection, ahead of consultation.

Chapter 8: Demographics impacted most by income volatility

Age, region, and earnings can make households more likely to have highly erratic incomes.

- People under 25, singles, Londoners and higher earners are most likely to experience income volatility, whether in or out of work
- A lower standard allowance and lack of a work allowance for under 25s and singles is a driver of income volatility. Increasing the standard allowance can help to smooth earnings volatility for these at risk groups

Our research shows that households of different ages, living in different regions, with different levels of earnings see slightly different rates of income volatility.

Younger UC households are more likely to have highly erratic incomes than older households. Changes in take home income are highest for those between the ages of 18 and 24. Similarly, single people are more likely to experience income volatility than couples.

Both trends are largely due to the fact that the UC standard allowance rates and minimum wage for younger people are lower, thereby limiting the dampening effect on UC on income volatility.

Table 8.1: Heat map comparing the rates of income volatility across different demographics

Subgroup	Stable	Erratic	Highly erratic	Subgroup	Stable	Erratic	Highly erratic
All households	69.8	9.3	20.9	Single	68.9	9.7	21.5
Women	77.0	6.8	16.0	Couple	73.6	7.9	18.6
Men	75.0	7.0	18.0	No children	67.8	9.8	22.4
18-21	62.7	11.3	25.9	children	74.9	8.1	17.0
22 - 24	68.2	9.9	21.9	No earnings	79.0	7.6	13.4
25 - 29	77.0	6.8	16.2	In London	65.9	10.4	23.8
30 - 34	78.1	6.6	15.3	Outside London	73.6	8.3	18.1
35 - 39	77.6	7.7	14.8	Lower Quint	64.2	11.8	24.1
40 - 44	77.1	7.7	15.2	Median	64.2	10.4	21.4
45 - 49	76.4	7.1	16.5	Upper Quint	64.9	10.4	21.4
50 - 54	77.5	7.1	15.4	Outliers	58.5	10.4	31.2
55-59	78.6	6.2	15.2	Carer	69.9	10.0	20.1
60-66	80.8	6.2	13.0	Disability	71.7	8.6	19.7

Our analysis shows that those with higher earnings are more likely to have erratic income than those with lower income.

Those with higher wages tend to have larger upwards and downwards changes in take home pay due to having more opportunities to take on additional hours at work.

Londoners are more likely to have higher rates of income volatility than those living outside of the capital. This is driven by the fact that there were more working households with erratic incomes among Londoners compared to those living outside of the capital.

There are small differences in the rate of income volatility between men and women. Generally, both groups experience income volatility at similar rates.

One in five households on UC have highly erratic incomes. The table below shows how this number changes based on age, gender, level of earnings, household type and other demographic features. The table is colour coded to reflect the groups with the highest share of households in a trajectory group.

Age

One in four UC households where the main claimants is between 18 and 21 has an erratic income. This number falls to one in six for UC claimants over the age of 25.

Younger people are more likely to be in precarious employment, and are more likely to be juggling education and employment, making their income subject to more variations.

However, we expect to see more stable employment as careers progress and fewer instances where earnings change from month to month.

Additionally, the benefit system may also be contributing to the high rate of younger people with high levels of income volatility. For those under 21 years old, the standard allowance is lower than the rate of those above 21.

Similarly, the minimum wage is currently lower for people under 21, although the government plans to equalise this for younger people. The lack of a work allowance for those under 25 also limits the dampening effect of UC on earnings volatility for younger UC households.

Region

Nearly one in four Londoners have highly erratic income. This number falls to roughly one in six for claimants living outside the capital.

Within our cohort, Londoners are more likely to be in work (28%) than those living outside of the capital (22%). Since earnings volatility is a major driver of income volatility, the higher proportion of people in work in London means that Londoners are more exposed to changes in take home income.

Regional labour market patterns can also influence income volatility. Higher housing and living costs may be driving this as London's job density rate is the highest in the UK, meaning more people in London have more than one job in order to cope with higher living costs. Zero hour contracts and juggling multiple jobs can make households more likely to face income volatility.

Household type

More than one in five single people have highly erratic incomes. This number falls to roughly one in six couples on UC.

Within our cohort, single people are more likely to be in work (75%) than couples (25%). Single people also have smaller standard allowances than couples, and are less likely to have a work allowance.

Yet they are more likely to be exposed to major changes in earnings than couples because they are most likely to have employment, and only have one wage coming in each month, compared to dual earning couples meaning they are more likely to have a highly erratic income.

Earnings

Considering earnings, households who are earning the most are more likely to have erratic incomes. Roughly one in three households who are earning more than £9,230 per year have highly erratic incomes. For households earning less than £2,320 per year, this number falls to one in four with highly erratic income.

This is driven by the fact that households with higher earnings are more likely to have opportunities to work additional hours. Higher earners are more likely than others in work to see larger positive increases in their take home income (25%), compared to other groups.

Gender and disability

Within this study, we find little differences in income volatility by gender or disability. Both groups have small differences compared to the overall cohort.

There are also small differences in the rate of highly erratic incomes between carers, those with disabilities and the overall cohort. However, households with a disability or a carer are more likely to have erratic incomes compared to other groups.

This is likely driven by the volatility resulting from changes in circumstances and benefit values after someone becomes a carer or develops a disability. These life changes do not produce nearly as much volatility as changes in earnings. However, they are still a source of income changes for UC households.

Demographic trends are consistent between working and non working households

We looked at the trends for households in and out of work across, isolating the groups highlighted in the previous section: younger people, single people, Londoners and higher earners.

Table 8.2 Demographic trends across working and non-working households

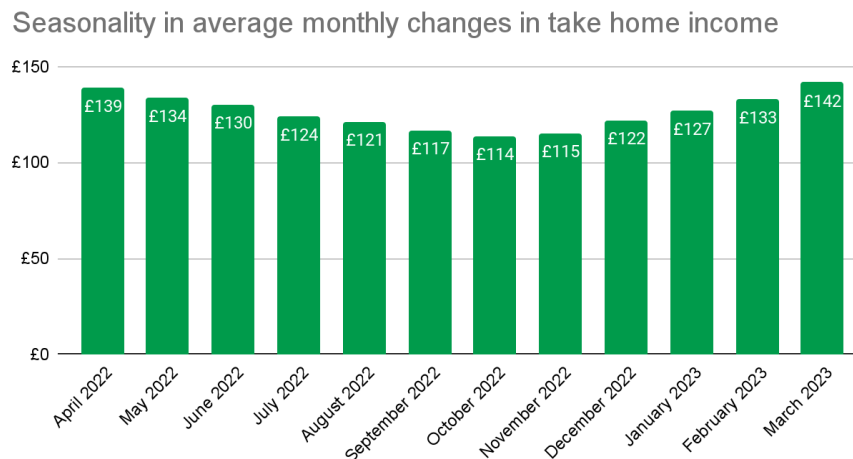
	Households in work			Households out of work			
	Stable	Erratic	Highly erratic		Stable	Erratic	Highly erratic
In work	63.9	10.4	25.7	Out of work	79.0	7.6	13.4
18 -21	53.2	12.8	34.1	18 -21	78.0	8.4	13.6
22 - 24	61.2	10.9	27.9	22 - 24	79.3	7.1	13.7
single	61.3	11.2	27.5	single	78.1	8.0	14.0
no children	60.3	11.3	28.3	no children	79.3	7.4	13.3
In London	60.6	11.4	28.0	In London	78.1	8.0	14.0
disabled	54.2	12.7	33.1	disabled	76.0	7.7	16.3
Higher earners	64.9	9.1	26.0				

Generally, the same subgroups are most likely to experience income volatility whether in work or out of work. However, working households are more likely to experience higher rates of highly erratic incomes than those out of work, across all subgroups. This is likely due to the fact that earnings volatility is a main driver of income volatility for a household on UC.

Volatility is lowest in autumn and peaks in Spring

Volatility appears to be seasonal. The figure below shows a seasonal trend in income volatility across the year. April sees a large change in take home income, likely due to uprating and the other policy changes. From May until November income volatility is smaller in £ value. Then from December until March earning shifts are larger in £ value.

Figure 8.1: Seasonal changes in income volatility



The Resolution Foundation found a similar pattern in their 2018 work on income volatility. Their analysis of PAYE data also sees changes in income in March and April. The study found well established patterns illustrating how changes in pay between March and April were [four times larger \(at 0.8 per cent\) than the average monthly pay change recorded between all other months \(0.2 per cent\)](#)

Policy recommendation: Increase the standard allowance and introduce a work allowance for people without children

Age, gender, region and earnings can make households more likely to have highly erratic incomes.

This is because a lower standard allowance and no work allowance for under 25s and single people means that a change in their earnings or income will have a higher proportional impact on what they take home.

Increasing the standard allowance can help to smooth earnings volatility for these at risk groups. Policymakers should consider giving households under 25s the same standard allowance for

Universal Credit as for people who are over 25, and consider uprating the standard allowance to help smooth income volatility for these at risk groups.

Further consideration of cost of living for those in London and seasonal labour market conditions can help to understand why these households experience higher levels of income volatility

Conclusion and recommendations

This report aimed to show the scale of income volatility for over 70,000 households on Universal Credit, to make us aware of the issue of income volatility, its scale and impacts on people affected.

When faced with income volatility, households can grapple with a number of stressful tradeoffs to make ends meet. Uncertainty in payment dates and amounts can limit their ability to set up direct debits and manage bills, increasing their risk of falling into arrears. Universal Credit both dampens and accentuates income volatility, depending upon when they are paid, whether they face deductions and when their assessment period starts and ends.

This is a limited analysis on a subset of UC households receiving Council Tax Support. If we had information on all households on UC, and access to all HMRC data available in the UCDS, we would have found greater levels of income volatility impacting claimants.

The following recommendations would mitigate the negative impacts of income volatility for people on Universal Credit:

1. The government should prioritise mitigating the impact of sanctions and deductions to reduce income volatility. Recent changes to the debt deduction cap is welcome. Our modelling shows that it is expected to help 28% of households with debt deductions in place, based on our sample of Universal Credit recipients.
2. The government should introduce delayed termination for Healthy Start and free NHS prescriptions. This would dampen the impact of earnings volatility onto passported support and encourage take up.
3. Councils can lower administration costs by introducing income banded and Universal Credit aligned support schemes. Additional data from DWP covering more households on Universal Credit can support auto enrolment.

4. A lower standard allowance for under 25s and the lack of a work allowance for people without children is a driver of income volatility. Increasing the standard allowance and introducing a work allowance can help to smooth earnings volatility for these at risk groups.

Overall, this analysis should prompt us to take action and streamline how Universal Credit interacts with other individual local and national systems.

Previous analysis by Policy in Practice has shown that £23 billion of benefits go unclaimed each year, in part, because of the complexity of the benefit system. The proposed changes to how Universal Credit operates can help more families to have a stable budget and lead more meaningful lives.

Technical appendices

Appendix 1: Glossary and list of acronyms and abbreviations

Assessment Period (AP): Assessment periods (AP) are the fixed time intervals used to calculate the amount of UC a claimant is eligible for. Each AP determines the monthly UC payment based on the claimant's circumstances and income during that period

Council Tax Support or Council Tax Reduction (CTS or CTR): Local benefit for households on low incomes to help with their Council Tax bill. Each council runs its own scheme in England, which means how much a household gets will vary depending on where they live

Dampening effect: The £ or % reduction in earnings volatility after a household receives Universal Credit

Delayed termination: Policy option where any in year changes of income are ignored if a household is eligible at any point in the year. They will continue to receive the passported benefit until the end of the year even if their income changes due to one or two abnormal periods of higher earnings

Deductions: debt repayments placed on a household's UC when a claimant owes money to the DWP or other creditors

Earned income: Net earnings are any salary a household receives from work after taxes

Free School Meal (FSM): Benefit for households with school aged children to receive meals during school day

Free NHS Prescriptions: Benefit for certain age groups to receive prescriptions at no cost

Healthy Start (HS): Benefit for school aged children to receive meals during school day

Income volatility: Income volatility describes how income in one month or assessment period increases or decreases compared to the average income the household receives in any given month. Households have volatile incomes when their income varies more than $\pm 10\%$ from average monthly income. Income volatility is measured as both the £ change and percentage change from the average. We show both absolute, positive and negative

Sanctions: portions of income removed from one's UC award when a claimant fails to meet their work related requirements

Take home income: The final sum of all sources of income (earnings from work, income from Universal Credit, income from benefits outside of Universal Credit) received by a UC household, after sanctions and deductions

Universal Credit (UC): National benefit for working aged people on a low income or out of work

Universal Credit Datashare (UCDS): A daily data feed of Universal Credit data from the DWP for the administration of housing benefit, council tax reduction, and local welfare support. It contains the household and individual level data for households claiming Universal Credit (UC) and Council Tax Support (CTS).

Appendix 2: Data and methodology

This study makes use of the Universal Credit Datashare (UCDS) in order to understand income for a household on Universal Credit. This data set is actively used by councils for the administration of Council Tax Support. These administrative records can be converted into a high-frequency (monthly) longitudinal dataset, allowing for analysis of within-year trends for UC households. With rich information about household composition, earnings and income from benefits, this dataset is an ideal source for analysis of income fluctuations.

What is the Universal Credit Datashare?

Councils receive a daily feed of Universal Credit data called the Universal Credit Datashare (UCDS) from the Department for Work and Pensions for the administration of Housing Benefit, Council Tax Reduction and Local Welfare Support.

The UCDS contains both household level data for those claiming UC and Council Tax Support (CTS) and the UC households who have recorded an intention to claim CTS, known as an 'interest marker', but have not yet claimed CTS. These files provide daily updates on any new UC claims, changes in household circumstance and termination records for when a household is no longer receiving UC.

UCDS includes income from all relevant sources, household composition, disability, other benefits, as well as sanctions and deductions. The list below shows the broad categories of data provided within the UCDS:

- The monthly value of the Universal Credit award, and its components (standard allowance, housing element, childcare element, carer element, disability)
- Monthly earned income used for the assessment of Universal Credit
- Income from other benefits
- Deductions from Universal Credit either as part of debt repayment or in the form of sanctions
- UC termination date and reason

- Household composition and age of residents

Tracking changes in the UCDS tells us how Universal Credit will impact eligibility for national benefits that exist outside of UC such as Free School Meals (FSM), Healthy Start (HS) and free NHS Prescriptions. UCDS allows us to see which households gain or lose benefits entitlements due to changes in earnings or income from Universal Credit.

More broadly, the UCDS tells us about the financial circumstances for UC households. This data provides us real time information on households' financial circumstances, enabling us to see how often and by how much UC households experience volatility. Because it breaks down income into its component parts, such as UC award, earned income, income for benefits outside of UC, we can also isolate which type of income creates the most volatility for a household on UC.

All data analysed for this project was collected during the financial year from **April 2022 to March 2023**, aligned with a local authority Council Tax billing year. While the individual local authorities are anonymised in our reporting, four were London boroughs and three were authorities outside of London.

The timeframe for evaluation was also selected to control for the impact of uprating on income volatility. Benefits are uprated between March and April, and are a natural source of income volatility because it boosts benefit values by inflation. We ensure that all April files capture the benefit values only after they have been uprated for 2022 uprated values.

Legal gateways for using the UCDS

Paragraphs 12-14 of the *Social Security (Information-sharing in relation to welfare services) Regulations 2012*, provide that data can be shared for purposes related to the design and administration of council tax reduction schemes.

For data that is sourced from DWP, Section 131 (1) of the *Welfare Reform Act 2012* provides the overall power for DWP to share data with LAs. The governance arrangements for this project are designed within the agreements in the Memorandum of Understanding between DWP and LAs.

Our sample covered 1.5% of all UC households in the UK

The UCDS is a robust source of information for UC households. It shows real people, real circumstances and covers households across the UK. It is more representative, and more reliable than survey data because it reports verified information from the DWP.

Our sample of 70,000 UC households covers 1.5% of all UC households in the UK. The table below shows how our UC sample compares to the national UC population.

Table 1.1: Comparing the households on UCDS to all households on UC

Demographics	Sample dataset	All households on UC	Coverage
All households	71,894	4,712,796	1.5%
In work	42,998	1,496,874	2.9%
Out of work	29,896	3,215,922	0.9%
Single households	56,513	3,904,541	1.5%
Couple household	13,659	805,895	1.7%
Has children	19,698	2,162,023	0.9%
Carer's element of UC	7,173	454,969	1.6%
Disability element of UC	14,541	941,754	1.5%

Our sample covers a subset of the UC population because it shows only the households on UC *and* Council Tax Support, or those on UC who have noted interest in claiming Council Tax Support. This has a few implications on the coverage of the dataset.

Since most households on the UCDS are claiming CTS, the cohort represented in the data is skewed towards those with a Council Tax liability. Similarly, there are more non-dependent adults who do not have a Council Tax liability on UC, who may not be captured on the UCDS because they are not liable for Council Tax.

The table below shows the coverage of our sample across the number of UC households in the participating councils in April 2022. Our sample captures 46% of all UC households on average, which is nearly half of UC claimants in these areas.

Table 1.2: Comparing the number of households in the UCDS across councils

Demographics	Sample dataset	All households on UC	Coverage
All seven local authorities	71,894	156,935	46.5%
Council 1	13,251	21,735	61.0%
Council 2	10,414	30,476	34.2%
Council 3	23,455	29,311	80.0%
Council 4	9,127	32,683	27.9%
Council 5	2,611	8,151	32.0%
Council 6	9,936	13,970	71.1%
Council 7	3,100	20,605	15.0%
In London LAs	24,774	75,409	32.9%
In non London LAs	47,120	81,522	57.8%

Despite the high overall coverage, there are differences across councils due their different CTS schemes, as seen in the variation in Council 6 and Council 7.

Council 6 changed their CTS scheme in April 2022, which is likely to have generated change of circumstances records for most households in April. We are continuing to query the coverage rates with Council 7.

Appendix 3: Calculating income volatility

Here we explain how we calculate income volatility throughout our report.

Absolutes £ variations from the household average by income type

First we calculate the average monthly income amount a household receives across the year. We do this by taking the mean of all income received across the 12 assessment periods. We then calculate how income from a specific assessment period compares to the average mean amount.

Here is an example to demonstrate.

A household typically earns £962.88 each month. In April 2022 they earn £832.61. Their monthly £ variation in their earned income is -£130.28 in April 2022 because they earned £130.28 less than they typically receive each month.

We show the distribution of average monthly positive and negative £ variations by income type. The absolute change describes the magnitude of the £ change between income from a specific assessment period and the average mean amount.

Absolute percentage variation from the household average by income type

First, we calculate the average monthly income amount a household receives across the year. We do this by taking the mean of all income received across the 12 assessment periods.

Literature on volatility opts for the arc percentage rather than a standard percentage change. This is to avoid double counting instances of income volatility when there is an unusual rise or fall in income, they use the median income of three months, or the average monthly income for the household. We use the average monthly income across 12 assessment periods.

We then calculate how income from a specific assessment period compares to the average mean amount. The percentage change is the ratio comparing the £ change between income from a specific assessment period and the average income amount. The equation below shows how we calculated this.

$$\text{Percentage change} = (\text{current income} - \text{average monthly income} / \text{average monthly income})$$

We report this value in positive, negatives and absolutes. The absolute percentage change is the magnitude of the ratio comparing the change between income from a specific assessment period and the average mean amount, and the average monthly income.

Appendix 4: Measuring income using the Universal Credit Datashare

The Universal Credit Datashare gives us many useful values for measuring the different types of income UC households receive. This box details how we operationalise each model using the Universal Credit Datashare.

1. **Model one** Measuring earned income

The UCDS tells us a household's net earnings. Net earnings are any salary a household receives from work after taxes. This value is used to calculate the UC Award and to determine eligibility for other benefits outside of UC like Council Tax Support, Free School Meals, Healthy Start or Free NHS Prescriptions.

2. **Model two** Measuring UC awards not including deductions, sanctions or alternative payment arrangements to the landlord

The UCDS tells us the UC elements a household receives such as the standard allowance, LCW/LCWRA, child disability, childcare and housing elements. We sum the elements a household receives, and then remove net earnings and any income a household receives outside of UC from things like child maintenance, benefits like Carer's Allowance or Bereavement Allowance etc. The remaining amount is the household's UC award without any deductions, sanctions or payments to landlords.

3. **Model three** Measuring earnings and UC award combined

We calculate this amount manually to isolate how UC responds to changes in earnings. This is the sum of the earnings and the UC award from points one and two.

4. **Model four** Measuring income from benefits outside of UC

The UCDS tells us the amounts a household receives from income or benefits outside UC such as Carer's Allowance, Bereavement Allowance, Widow's Pension, Widowed Parents Allowance, Non UK benefits and other income, and Child Maintenance payments. We add these values to the combined earnings and UC award value from model three, in model four to show the impact of income from other benefits on income volatility.

5. **Model five** Measuring UC award including deductions, sanctions and alternative payment arrangements to landlords

The UCDS tells us the total UC payment awarded to a household after deductions and sanctions. The data also tells us the amount that is deducted for a landlord to safeguard a household's tenancy. We sum the values of the UC award with sanctions and deductions, the payment to the landlord, net earnings and income from other benefits outside of UC to calculate a household's income for model five.

About Policy in Practice

Policy in Practice is a social policy software and analytics company that helps hundreds of thousands of people each year to access nationally administered benefits, local support including Council Tax Support, a range of discretionary support schemes, support offered by the Scottish, Welsh and Northern Ireland devolved administrations, and a wide range of social tariffs offered by companies in regulated industries.

We believe it should be easy for people to access support.

We built the award winning Better Off platform to close the unclaimed support gap we identified. It makes it easy for organisations to build the income of their customers and reduce their costs. Each tool is powerful alone and they're even better together.

Better Off Calculator

A smart, easy calculator to help you maximise your customers' income, increase engagement and save time and resources

Low Income Family Tracker

Intelligent data analytics software to help you maximise your resident's income and reduce your costs

Multi Agency Safeguarding Tracker

Simply clever software to help safeguarding professionals securely share headline data and make more informed safeguarding decisions

Policy analysis

Essential expert social policy analysis to help you make better evidenced decisions