

Prepared by Sam Sims



Summary

- Low income families often run out of money and food towards the end of the month.
- These cyclical food shortages result in child injuries and harm educational achievement.
- Paying benefits half way through the month, rather than at the start, mitigates the severity of food shortages and their negative consequences.

Recommendations

The UK government should pilot and evaluate the effect of moving Universal Credit payments to the middle of the month or paying Universal Credit fortnightly instead of monthly.

The importance of benefit payment dates

Living in poverty negatively affects children's health and education outcomes (Cooper & Stewart, 2020). One reason for this - recently highlighted in the UK by footballer Marcus Rashford - is that families on low incomes often cannot afford enough food to last the month.

The most direct method of addressing child food poverty would be to provide poor families with additional income. For the time being, however, the UK government appears reluctant to do this.

An alternative policy response relies on changing the timing, rather than the value, of benefit payments. While the date of payment might seem like an administrative detail, research from the US suggests it matters. This briefing note reviews the evidence to explore how children in the UK might be affected by the timing of their benefit payments.

For context, the UK government is currently switching claimants of six separate benefits onto a single 'Universal Credit' (UC) benefit. Consequently, UC households will now receive a single payment on a given day each month, rather than receiving multiple benefits, paid to different individuals, on different days. The move to UC therefore makes the timing of that single payment particularly important.

Why might benefit payment dates affect children?

Research suggests that US families on very low incomes tend not to consume food evenly over the the course of the month. Instead, they tend to eat less at the end of the the monthly benefit payment cycle, as food dwindles (Kuhn, 2018; Sharpiro, 2005; Todd, 2015). As a result, families are more likely to report having insufficient food and having to use foodbanks towards the end of the cycle (Gassman-Pines & Schenk-Fontaine, 2019; Schenk-Fontaine et al., 2017). Crucially, the US states on which these studies are based disburse 'SNAP' benefit payments on a date determined by the recipient's Social Security Number. Since this number is essentially random, this helps isolates the SNAP payment timing as the cause of this cyclical hunger.

These cyclical shortages have psychological consequences. In general, acute scarcity of resources such as food causes people to become highly focused on the thing which they lack. This taxes cognitive capacity (Kaur et al., 2021; Mani et al., 2013), meaning they pay less attention to other things, acting "as if their mind is elsewhere" (Shafir, 2017, p.133). In extreme scarcity, this can lead to erratic behaviour, including parenting (Mullainathan & Shafir, 2013). In addition to this, rigorous experimental research shows that hunger impedes children's ability to retain new learning - directly harming their education (Galioto & Spitznagel, 2016). In sum, cyclical food shortages are likely to affect both children's home life and readiness for school.

Evidence on benefit timing and child health

Some eligible households receive both SNAP payments and wages at the start of the month: 'aligned payments'. Others receive SNAP payments up to two weeks after their wages: 'staggered payments'. Since food shortages are more severe at the end of longer payment cycles (Aguila et al., 2017), those who receive aligned payments likely experience more severe shortages at the end of the month. Building on the idea that lack of food may lead to increased conflict in the home, two papers have used this observation to test whether benefit timing results in harm to children.

Cotti et al. (2020) use data from South Carolina and find that Emergency Room (ER) admissions are indeed slightly higher (0.5 percent) at the end of the month for those who receive aligned SNAP payments. Heflin et al. (2020) focus specifically on ER attendance for childhood injuries and find a stronger effect: the probability of ER attendance for childhood injuries is lower (by approximately 1.6 percentage points) for those who receive staggered payments. Again, since both states disburse SNAP payments on dates determined essen-tially at randomly, these studies are isolating the effect of benefit payment timing on child injuries.



Evidence on benefit timing and school

Two studies have examined the effect of SNAP date on exam results using data from North and South Carolina - both states with essentially random timing of SNAP payments. Gassman-Pines and Bellows (2018) use data on North Carolina to show that pupils whose end-of-grade exams fall 3-4 weeks after their last SNAP payment score 0.01-0.02 standard deviations lower. Cotti et al. (2018) go a step further by showing that pupils in South Carolina score 0.03-0.05 standard deviations lower in years in which their end of grade exams fall more than three weeks after their last SNAP payment, relative to years in which the same pupil's exams fall closer to their SNAP payments.

These effects on exam results are arguably quite small. However, small differences in high-stakes exams can have important consequences where they affect admission to subsequent stages of education. Bond et al. (2021) examine the effect of benefit timing on SAT scores across seven states with essentially random SNAP payment dates. They find that disadvantaged pupils who take the college entrance test in the latter half of their SNAP payment cycle score 0.06 standard deviations lower. Crucially, they also find that this corresponds with a slightly lower probability of attending a four-year college (university) and that those who do go to college end up attending less competitive (prestigious) institutions.

Summary

Taken together, these findings suggest that the timing of benefit payments matter for children's education and health. Of course, what really matters is the lack of income. Among children living on low incomes, however, the timing of payments affects the extent to which low income translates into inferior outcomes. As a result of these findings, calls have been made to move SNAP payments toward the middle of the calendar month. This policy would likely lead to small improvements in child outcomes at close-to zero cost to the government, implying a high cost-benefit ratio for the reform.

In principle, the same arguments apply to the new once-per-month Universal Credit payments in the UK.

0.06 standard deviations lower college entrance exam score for disadvantaged pupils

score for disadvantaged pupils who take their exam in the second half of their benefits cycle



However, three caveats should be kept in mind:

- First, the evidence is more mixed on whether adults benefit from aligned or staggered benefit payments (Carr & Packham, 2019; Carr & Packham, 2020).
- Second, the severity of end-of-month food shortages depends on the overall level of benefit payments, including free school meals, which differs in the UK (Kuhn, 2018; Todd, 2015).
- Third, payments should not be spread too thinly in order to avoid undermining households' ability to access bulk purchase discounts (Zaki & Todd, 2019).

Nevertheless, given the potentially high net benefit of the reform, the UK government should pilot and evaluate the effect of moving UC payments to the middle of the month or paying UC fortnightly instead of monthly.

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Prepared by: Sam Sims

Contact for further information: Centre for Education Policy and Equalising Opportunities (CEPEO)

<u>www.ucl.ac.uk/ioe/cepeo</u> email: cepeo@ucl.ac.uk Date: February 2021