Supplementary Materials (SM) to Intertemporal Choice and Income Regularity: Non-Fungibility in the Timing of Income among Kenyan Farmers

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S1. Introduction

This document includes the supplementary materials that accompany the paper ‘Intertemporal choice and income regularity: Non-fungibility in the timing of income among Kenyan farmers. The supplementary materials provide a detailed description of the experimental tasks that were conducted during the first round of our experiment, which we use as a robustness check to understand the mechanisms leading to our main results. Next, we present a number of robustness analyses that aim at ruling out alternative explanations to our main results, including the role of front-end delays and magnitude effects, trust, transaction costs, and order effects. The supplementary materials conclude with a number of figures and tables.

S2. Design: Experimental Tasks in Round 1 used as a Robustness Check

The experiment elicited a number of milk payment allocations also during the first round, which we use as a robustness check. These allocations differ from second-round allocations in a number of respects. To start, participants allocated a payment between the end of the week and the eleventh of the next month for two weeks instead of one week. This means that every allocation applies to a two-week period instead of only one week.

Further, first-round allocations varied the return on deferred payments by varying the price for milk that participants chose to be paid for on the earlier payment date. Given that the price for milk paid on the regular (later) payment date was fixed at the prevailing Metkei price, a decrease in the earlier milk price increases the return on deferred payments. In first-round allocations, the earlier milk price was either (1)
identical to the prevailing Metkei price, that is, a zero return on deferring payments; (2) KSh 2 (about 7 percent) higher, that is, a negative return on deferring payments; or (3) KSh 2 lower, that is, a positive return on deferring payments.

First-round participants made choices for each of the three scenarios for two offers: a short-duration offer, in which participants could receive weekly payments over the next two weeks (and thus over only one two-week period), versus a long-duration offer, in which they could receive weekly payments in each of the next four two-week periods. At the end of the first-round interview, we randomly selected a price, and either the short-duration or the long-duration offer, for which the allocations were implemented by Metkei during the period between the first and the second round.1

We started with this more complex design with the aim of assessing under which parameters farmers are interested in weekly payments. In addition, we aimed to create exogenous variation in the take-up of weekly payments in order to be able to assess the impacts of weekly payments on the quantity of milk that farmers deliver to the cooperative. However, as we will show, the demand for weekly payments was very limited, irrespective of the milk price for early payments or the duration of the offer. We therefore simplified the second-round design, and included the allocation of a gift in order to assess whether the strong preference for deferred payments observed in the first round generalizes to other, less regular, income types.

S3. Participant characteristics

Table S3 describes participant characteristics. Panel A focuses on time-invariant demographic characteristics, while Panels B and C summarize time-varying characteristics during the first and second round, respectively. Columns 1 and 2 present statistics for all participants in a given round. Columns 3 and 4 provide summary statistics for the 327 suppliers who participated in both rounds. Column 5 tests for statistically significant differences between the full sample and the balanced panel included in both rounds.

[Table S3 about here]

The average participant was 45 years old and had around 14 years of experience with
dairy farming. Fewer than half of the participants were women. Nearly 80 percent had completed primary school but less than half had completed secondary school. For the vast majority, dairy farming was the main daily activity and main source of income, often along with crop farming.

During the first round, few participants (18 percent) reported delivering afternoon milk to Metkei. Participants had on average fewer than three lactating cows producing around 13 kilograms of milk the day before the interview. They reported using this mainly for home consumption (48 percent), or supplying it to Metkei (46 percent). Participants reported selling only a small share of their milk (5 percent) to other buyers, potentially due to underreporting of side-selling. Indeed, based on administrative data on suppliers’ daily deliveries, farmers delivered only 36 percent of self-reported production to Metkei the day before the interview, meaning that participants over-stated the share delivered to Metkei by about 10 percentage points (assuming unbiased consumption figures). Metkei offered on average KSh 33.7 per kilogram of milk, net of transportation costs, or KSh 1.7 more than the local market.

From the first to the second round, the proportion of participants selling afternoon milk to Metkei reduced, especially among the sample that participated in both rounds. In addition, during the second round, Metkei was no longer offering a higher price; on average, participants reported receiving about KSh 3 (11 percent) more per liter of milk sold outside of the cooperative. The number of lactating cows and production did not change substantially. The quantity of milk delivered to the cooperative however increased between the two rounds due to a reduction in milk consumption, as many children who were at home during the first round had gone back to (boarding) school during the second round.

**S4. Results: Ruling out alternative explanations**

Although the allocations of milk payments and the gift were comparable in many ways, choices also differed in a number of aspects. First, there were differences in front-end delays and experimental stakes. Second, there could be differences in trust and transaction costs. Third, the gift allocation was made at the end of the interview, after participants had already made their milk payment allocation, and this may have
introduced order effects. We will now argue that these factors are unlikely to explain our results.

**S4.1. Front-end delays and magnitude effects**

To rule out that our findings are driven by differences in front-end delays and magnitude effects, Table S5 assesses the robustness of the design of the two experimental tasks. Treating every choice as one observation, the table regresses the share allocated to the early date on a binary indicator for allocations of milk payments (using gift allocations as a base), controlling for other choice attributes. Standard errors are clustered by participant. Columns 1–4 focus on second-round allocations only. Columns 5 and 6 include both first-round and second-round allocations. Odd-numbered columns display the results of regressing the share of a budget allocated to the early payment date on a binary variable indicating milk payments and other controls as shown in the table. Even-numbered columns estimate the same model including participant fixed effects.⁴

[Table S5 about here]

Columns 1 and 2 show that participants allocated on average 85 percentage points less of their milk budget than of their gift to the earlier payment date. Columns 3–4 show that the low demand for early milk payments cannot be explained by longer front-end delays or by variation in the delay between the two payment dates.⁵ Moreover, we do not find evidence of a magnitude effect (Andersen et al., 2013) since the share of the milk budget allocated to the earlier payment date does not depend on the milk budget size.⁶

One possible concern is that the available ‘milk budget’ can differ from the marketable milk budget because households consume a significant share of the milk, or because they plan on selling their milk outside Metkei. Because we define the milk budget as 50 percent of expected production instead of the expected quantity of milk sold to Metkei, we may overstate the milk budget and hence understate the share of milk income that is allocated to early payments. Therefore, Table S5 also controls for the self-reported share of milk production consumed on the day prior to the interview.
This variable is unrelated to the share of income allocated to the early payment date.

Many participants chose a corner allocation, that is, to allocate their entire budget to either the early or the later payment date but not to both. We therefore also estimate a logit model for binary dependent variables in Table S6, coding choices as binary variables. In Columns 1–3, the dependent variable takes a value of 1 if at least part of the budget is allocated to the early payment date. In Columns 4–6, it takes a value of 1 if the entire budget is allocated to the early date. The estimated difference between the two allocation types remains large and significant in all specifications. This is consistent with the findings obtained in Table S5. We hence conclude that our findings are robust to controlling for front-end delays and magnitude effects, and to using logit instead of OLS.

[Table S6 about here]

S4.2. Trust

Next, we consider whether the share of the gift allocated to the early payment date was high due to distrust. Participants may trust the experimenter to pay the gift only on the earlier date, not on the later date. This is a concern mainly in experiments that make the earlier payment during the interview itself, which participants will perceive as a guaranteed or more reliable payment, while the later payment involves the experimenter coming back at a later date, which participants may feel is not guaranteed to happen. In our experiment, the sooner payment was made a few days after the interview. This front-end delay makes trust less of a concern (Chabris et al., 2010). Moreover, 90 percent of participants had received a payout from a Binswanger-type lottery after the first-round interview, thus having seen the experimenters keep their promises. We therefore conclude that the preference for early payments of the gift cannot be explained by participants being concerned that they would receive the gift only when allocated to the earlier date.

We also consider whether a lack of trust could explain the low demand for early milk payments. The study was carefully designed to ensure that participants trusted Metkei to make the early payment. Metkei made both milk payments, not only the regular
(later) payments; endorsed the study to the participants; and enjoyed high trust from participants.\textsuperscript{9} Further, the few participants who opted to receive early payments in the first round had received these payments, improving their trust in implementation, and potentially the trust of their neighbors witnessing these payments. A lack of trust in receiving the early payments was indeed never mentioned as a reason for rejecting the early payments, let alone as the main reason for doing so (Table 2 in the manuscript).

Although a number of participants (9.4 percent) expressed a worry that the early payments might harm the cooperative and hence future prices, only 0.3 percent of participants reported this as the \textit{main} reason for not taking early payments. Participants’ distrust, or a preference to comply with cooperative rules, may have been stronger in the first round, since they had not yet seen the cooperative committing to early payments at that time. Nonetheless, first-round demand for early milk payments was 2.7 percentage points \textit{higher} than second-round demand (see Table S5). These findings provide further indication that distrust or a preference for complying with cooperative rules do not explain the strong demand for deferred milk payments.

\textit{S4.3. Transaction costs}

The study was designed to minimize transaction costs associated with receiving early milk payments. We offered participants the option to receive their weekly payments directly via mobile money at no extra charge, and 60 percent chose the mobile payment. Despite that option, most participants did not opt for weekly payments even in the higher-price scenario (Figure S1). Moreover, in Table S7, we show that even self-deliverers—who lived near the collection points and could pick up their weekly payment at no additional cost when delivering their milk—were not significantly more likely to select weekly payments. Consistent with this limited role played by transaction costs, Table 2 from the manuscript shows that only 3.3 percent of farmers state a too small payment amount as their main reason for rejecting weekly payments. This also speaks against the interpretation that participants chose to defer their cooperative milk payment because of their preference to receive their milk payment in bulk, not because of their preference to save their milk payment for future needs.
Another concern could be that participants may prefer receiving the full gift on the early date in order to receive a payment only once. Because participants received a payment of KSh 65 (about US$0.65) at both the early and the later date, regardless of their allocation of the KSh 250 budget over both dates, transaction costs were equal for the two payment dates, and there was no penalty for being paid on both dates. If motives related to transaction costs rather than discounting were driving the gift allocations, participants should have been indifferent between allocating all income to either the early or the later date. Hence, allocations to the later payment date should have been equally likely as allocations to the early payment date. Nonetheless, only 6.8 percent chose to receive the entire gift on the later date (see Table 1 in the manuscript), speaking against transaction costs or a preference for bulky payments being the sole factor driving the gift allocation.

S4.4. Order effects

A final concern is that the allocations are influenced by order effects. We informed participants about the gift, and elicited the gift allocation, only at the end of the interview, with an intentional break of survey questions between the two allocation types. Thus, milk payments will not have been influenced by the gift allocation. At the same time, participants may have allocated the gift to the earlier payment date because they had already deferred their milk payment. If payments from the two income sources were treated as substitutes, we should observe a negative correlation between the share of the gift and the average share of milk payments allocated to the earlier payment date.

This is however not what we find: In manuscript Table 1, there is no correlation between these two variables, indicating that the two income sources are not treated as perfect substitutes for one another, and that order effects are unlikely to explain our results. Substitution possibilities were greatest for the 81 participants whose late gift payment date fell on a late milk payment date. Also for this subsample, we however
find a statistically insignificant correlation between the average share of milk payments and the share of the gift allocated to the early payment ($\rho = 0.09, p = 0.43$).

Alternatively, participants may have allocated the gift to the early payment date because of fatigue and reduced self-control at the end of the interview. In that case, we would expect participants with a longer interview duration to allocate a larger share of their gift to the early payment date. In Table S8 Column 3, we test this hypothesis by regressing the gift allocation on a dummy variable indicating above-median interview duration. The amount allocated to the early payment date was not correlated with interview duration, suggesting that also fatigue or reduced self-control at the end of the interview cannot account for our result.

In sum, we show that differences in trust and transaction costs, front-end delays, magnitude effects and order effects are unlikely to account for our findings. Instead, it appears that dairy farmers apply different mental accounts to different sources of income. They earmark most of their regular milk income to save for lump-sum expenditures, whereas they have not developed this spending rule for the irregular windfall from participating in a survey. Participants’ strong demand for deferred milk payments suggests that they are satisfied with the timing of their cooperative milk payments, and that the cooperative plays an important role in providing farmers with a commitment savings device.

**Notes**

1. We implemented every choice with some probability in order to incentivize participants to state their preferences truthfully. At the end of the interview, after making their allocations for the three price scenarios for both short- and long-duration offers, we randomly assigned half of the participants to the first scenario, in which they had made choices for each of the next four two-week periods (an eight-week offer), and the remaining half to the two-week scenario. For the prices, we assigned 98 percent of the participants to the same-price scenario and 1 percent each to the higher- and lower-price scenarios.

2. In Kenya as well as other parts of eastern Africa, dairy farming is traditionally a female income-generating activity, but men have become increasingly involved as dairy farming has become more commercialized. Our share of female farmers was relatively low compared with the samples of other studies because we targeted the participants in the household who were in charge of making decisions about milk income, not necessarily those spending most time on activities related to dairy farming.

3. The front-end delay is the number of days between the interview and the early payment date. For interviews
conducted on a Thursday, the first week would start on Friday and the first possible weekly payment would take place on the next Friday, 8 days later. Interviews conducted on a Friday had the longest front-end delay: the first week would start on the subsequent Friday, and the first weekly payment would therefore be made on the Friday 14 days later. For the gift payment, the front-end delay was shorter. However, note that the front-end delay was still equal to at least 1 day, so that no participant could choose to receive the gift payment directly during the interview. The gift corresponded to about one third of the value of the weekly milk budget that the median farmer could allocate over time.

Because participants made intertemporal allocations of both milk payments and the gift, the main variable of interest, ‘milk payment’, is balanced across participants, and we do not need to control for participant characteristics such as age, gender, or relationship to the household head. In order to improve precision, the even-numbered columns nonetheless control for participant fixed effects.

This is also true when allowing the effect of front-end delays to differ for gift versus milk payment allocations (results available upon request).

To test for a magnitude effect, we convert the size of the gift into kilograms of milk using the median net milk price reported by farmers. Moreover, rather than being more impatient, participants with a milk budget of a similar size as the gift were even less likely to select weekly payments (results available upon request). In order to test for the potential existence of a relative magnitude effect, we also regressed the share of the gift allocated to the early payment date on the average milk budget size. The coefficient was small and statistically insignificant, suggesting that the size of the gift relative to a participant’s milk budget did not influence the results.

It could still be that trust depends on the time horizon, for instance if the late payment date is after the end of the main study period and participants worry that they then have less clout to enforce the gift payment. However, both proposed gift payment dates were within the four-week period for which the participants made milk payment choices, and farmers knew how to contact us if they did not receive an expected payment.

These payoffs ranged between KSh 125 and KSh 950 (about $1.25 to $9.50) and were sent via M-Pesa, in the same way we sent the second-round gift.

During the first-round survey, the Metkei cooperative received an average of 8.2 on a 10-point scale with 1 as the lowest and 10 the highest possible trust. The main alternative buyer for participants’ milk received a 5.0 on average.

In fact, for participants worried about M-Pesa withdrawal fees, which tend to be nonlinear and favor lumpy transactions, the participant should have preferred dividing the gift equally between the two dates, because that would reduce the cost of withdrawing the KSh 65 on both dates.

References

Andersen, S., Harrison, G., Lau, M., and Rutström, E. (2013). Discounting behaviour and the magnitude effect: Evidence from a field experiment in Denmark. Economica, 80(320):670–697.
Figures and Tables Supplementary Materials

**Figure S1.** Sensitivity to the price of milk paid on the early payment date

*Notes:* Average share of the milk budget allocated to the early payment date (instead of the late payment date) during the first round, treating every choice as one observation \((N = 5,415)\). The milk budget in a given week is calculated as 50\% of the participant’s expected milk production for that week, unless the participant is among the few who delivered afternoon milk only to Metkei, in which case we calculate the budget for milk income allocations as 100\% of the participant’s expected milk production for that week.
| Sampling         | Sensitization, first round          | Second (main) round            |
|------------------|------------------------------------|--------------------------------|
| Oct 2015         | Nov - Dec 2015                      | Feb - Mar 2016                  |
| Administrative   | Information sessions at Metkei     | Interviews with the same       |
| data handling    | cooking plants                     | households                      |
|                  | Distribution of flyers             | Milk payment allocations        |
|                  | Interviews with milk payment       | for the next 4 weeks            |
|                  | allocations for 8 next weeks       | Allocation of gift for          |
|                  |                                    | participating in study          |
### Table S2. Overview of sample construction and attrition by round and milk delivery mode

| Panel A. Visited for interviews | Round 1 | Round 2 |
|--------------------------------|---------|---------|
|                                | Total   | Self    | Transporter | Total   | Self    | Transporter |
|                                | (1)     | (2)     | (3)         | (4)     | (5)     | (6)         |
| Potential subject pool before interviews* | 533     | 313     | 220         | 374     | 209     | 165         |
| Round 2 only: Household members added | -       | -       | -           | 21      | 13      | 8           |
| Total subject pool             | 533     | 313     | 220         | 395     | 222     | 173         |
| - Interviewed                  | 363     | 200     | 163         | 359     | 188     | 171         |
| - Household not found          | 156     | 103     | 53          | 3       | 1       | 2           |
| - Second Metkei member in household† | 3       | 1       | 2           | -       | -       | -           |
| - Refused or unavailable       | 7       | 6       | 1           | 10      | 8       | 2           |
| - No longer supplies milk to Metkei | 4       | 3       | 1           | 3       | 3       | 0           |
| - Cows will be dry the next 8 weeks | 0       | -       | -           | 20      | 12      | 8           |
| - Changed to transporter delivery | 0       | -       | -           | 10      | 10      | 0           |

| Panel B. Included in the analyses | Round 1 | Round 2 |
|--------------------------------|---------|---------|
|                                | Total   | Self    | Transporter | Total   | Self    | Transporter |
|                                | (1)     | (2)     | (3)         | (4)     | (5)     | (6)         |
| Excluded from analyses         | 6       | 5       | 1           | 4       | 2       | 2           |
| - Cows dry next 8 weeks        | 1       | 1       | 0           | 0       | 0       | 0           |
| - No longer supplies to Metkei | 1       | 0       | 1           | 3       | 1       | 2           |
| - Not authorized to decide on milk payments | 4       | 4       | 0           | 0       | 0       | 0           |
| - Interviewed someone else     | -       | -       | -           | 1       | 1       | 0           |
| Number of participants in analysis sample | 368     | 204     | 164         | 355     | 186     | 169         |
| - Subsample with administrative data | 346     | 196     | 150         | 319     | 164     | 155         |

**Note:** HH = household. * The potential subject pool in the second round consisted of all respondents interviewed at baseline, plus household members who were not interviewed in the first round but who were responsible for dairy farming. † These are households with two household members registered with Metkei separately. Respondents who could not be matched with the administrative data did not deliver to Metkei in the study period.
### Table S3. Respondent characteristics

|                      | All respondents | Panel sample | Δ (1)-(3) |
|----------------------|-----------------|--------------|-----------|
|                      | mean (1) | s.d. (2) | mean (3) | s.d. (4) | p-value (5) |
| **Panel A: Demographics** |          |            |          |          |            |
| Age                  | 45.2     | 13.6       | 45.8     | 13.5     | 0.55       |
| Years of experience in dairy farming | 13.8      | 11.8       | 14.0     | 11.8     | 0.82       |
| Female (%)           | 46.2     | 49.9       | 41.6     | 49.4     | 0.21       |
| Primary schooling completed (%) | 79.3     | 40.5       | 79.2     | 40.6     | 0.97       |
| Secondary schooling completed (%) | 40.8      | 49.2       | 40.1     | 49.1     | 0.84       |
| Dairy farming main income source (%) | 81.4     | 39.0       | 83.5     | 37.2     | 0.46       |
| **Panel B: First round** |          |            |          |          |            |
| Delivers PM milk to Metkei | 17.7      | 38.2       | 16.5     | 37.2     | 0.69       |
| Number of currently lactating cows | 2.5       | 1.8        | 2.5      | 1.8      | 0.96       |
| Kg milk produced yesterday (survey) | 12.8     | 9.8        | 13.0     | 9.6      | 0.74       |
| - Sold to someone else (%) | 4.7       | 10.2       | 5.0      | 10.6     | 0.69       |
| - Consumed (%)        | 47.6     | 24.3       | 45.7     | 23.2     | 0.28       |
| - Survey: Delivered to cooperative (%) | 45.8     | 24.5       | 47.6     | 23.8     | 0.33       |
| - Admin.: Delivered to cooperative (%) | 36.3     | 30.5       | 37.6     | 30.6     | 0.58       |
| Net milk price cooperative (KSh) | 33.7     | 2.5        | 33.6     | 2.5      | 0.71       |
| Net milk price other buyer (KSh) | 32.0     | 5.3        | 31.6     | 4.5      | 0.59       |
| **Panel C: Second round** |          |            |          |          |            |
| Delivers PM milk to Metkei | 13.2      | 33.9       | 9.8      | 29.8     | 0.16       |
| Number of currently lactating cows | 2.7       | 1.8        | 2.6      | 1.8      | 0.65       |
| Kg milk produced yesterday (survey) | 13.1     | 10.2       | 13.2     | 10.2     | 0.93       |
| - Sold to someone else (%) | 5.4       | 11.6       | 4.3      | 9.6      | 0.21       |
| - Consumed (%)        | 38.7     | 20.4       | 38.7     | 19.7     | 1.00       |
| - Survey: Delivered to cooperative (%) | 53.4     | 21.4       | 54.8     | 19.5     | 0.37       |
| - Admin.: Delivered to cooperative (%) | 42.6     | 28.9       | 43.8     | 28.6     | 0.60       |
| Net milk price cooperative (KSh) | 28.2     | 2.1        | 28.2     | 2.1      | 0.94       |
| Net milk price other buyer (KSh) | 31.4     | 4.1        | 31.5     | 4.3      | 0.80       |

**Note:** KSh = Kenyan shilling. Admin.: Administrative data. Reported milk prices are averages among those respondents who sold either AM or PM milk to the cooperative or another buyer on the day prior to the interview, net of transport costs. Time-invariant characteristics other than gender are missing for four second round respondents.
Table S4. Expected expenditures and regular milk payment weeks

| Spending expected in week t (if expects bulky expenses) | All spending categories | Agricultural expenses | Dairy expenses | Schooling expenses |
|--------------------------------------------------------|------------------------|-----------------------|----------------|--------------------|
|                                                        | (1)                    | (2)                   | (3)            | (4)                |
| Week includes the eleventh                             | 0.138**                | 0.240**               | 0.041          | -0.049             |
|                                                        | (0.035)                | (0.038)               | (0.043)        | (0.056)            |
| Observations                                           | 1392                   | 1308                  | 904            | 484                |
| Number of respondents                                  | 348                    | 327                   | 226            | 121                |
| R-squared                                              | 0.012                  | 0.043                 | 0.001          | 0.002              |
| Mean dependent variable                                | 0.524                  | 0.290                 | 0.277          | 0.252              |

Note: Unit of observation is participant $i$ in week $t$ for the four weeks following the second-round interview. The dependent variable in Column 1 is a dummy indicating whether the participant expects bulky expenditure in week $t$ (conditional on expecting any bulky expenditures in the four weeks following the second-round interview). In Columns 2, 3 and 4, it is a dummy indicating whether the participant expects bulky expenditures on agriculture, dairy farming or schooling, respectively (again, conditional on expecting these expenditures in the next four weeks). Estimated using ordinary least squares with standard errors (in parentheses) clustered at the participant level. $^{1}p < 0.10$, $^{*}p < 0.05$, $^{**}p < 0.01$
Table S5. Controlling for potential confounds and testing alternative designs

| Dependent variable: Share of budget that participant allocates to the early payment date | Round 2 only | Round 1 and 2 |
|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) |
| Milk payment | -0.847** | -0.847** | -0.854** | -0.863** | -0.864** | -0.853** |
| | (0.017) | (0.017) | (0.024) | (0.026) | (0.022) | (0.020) |
| ... × budget size (100 kg) | 0.024 | 0.052 | 0.040 | 0.013 |
| | (0.026) | (0.056) | (0.036) | (0.025) |
| Days to early payment | -0.003 | -0.003 | 0.002 | 0.001 |
| | (0.004) | (0.002) | (0.002) | (0.001) |
| Days between payments | -0.010* | -0.010* | -0.002 | -0.005* |
| | (0.004) | (0.004) | (0.004) | (0.002) |
| Share of milk consumed | 0.088 | 0.077 | 0.002 | -0.031 |
| | (0.064) | (0.094) | (0.026) | (0.026) |
| Milk payment × 1st round | 0.027† | 0.027† |
| | (0.015) | (0.014) |
| ... × higher price | 0.004* | 0.004* |
| | (0.002) | (0.002) |
| ... × lower price | -0.036** | -0.036** |
| | (0.008) | (0.008) |
| ... × offer for 8 weeks | -0.024 | -0.014 |
| | (0.015) | (0.015) |

Respondent fixed effects

| Observations | 1,770 | 1,770 | 1,770 | 1,770 | 7,185 | 7,185 |
| Number of respondents | 355 | 355 | 355 | 355 | 396 | 396 |
| R-squared | 0.766 | 0.862 | 0.768 | 0.863 | 0.530 | 0.705 |
| Mean share of gift allocated to early date | 0.884 | 0.884 | 0.884 | 0.884 | 0.884 | 0.884 |

Note: Estimated using ordinary least squares with standard errors (in parentheses) clustered at the participant level. Base for comparison: Share of gift allocated to early payment date. Columns 1-4 contain one gift allocation and a maximum of four milk allocations per participant, resulting in a maximum of 1,775 allocations. Since a few participants expected their cows to be dry in some of the weeks, they made less than four milk income allocations, decreasing the sample size to 1,770. In columns 5-6, the samples also include up to 24 first round milk allocations by participant (4 periods × 3 prices × 2 duration scenarios). Days to early payment and between payments are expressed in multiples of 10. The mean share of the gift allocated to the early payment date (last row) does not change when including first-round allocations because the first-round allocations did not include allocations of a gift. In the specifications with respondent fixed effects, ‘R-squared’ indicates the explained variation in allocations within respondents. The coefficient on ‘Milk payment × budget size’ is identified in these specifications because the milk budget varies within respondents across the four weeks. † p < 0.10, * p < 0.05, ** p < 0.01
Table S6. Sensitivity of main results to the use of a logit model

|                  | Some early | All early |         |         |         |         |
|------------------|------------|----------|---------|---------|---------|---------|
|                  | (1)        | (2)      | (3)     | (4)     | (5)     | (6)     |
| Milk payment     | -0.868**   | -0.889** | -0.881**| -0.820**| -0.695**| -0.694**|
|                  | (0.019)    | (0.018)  | (0.019) | (0.020) | (0.235) | (0.173) |
| Controls         | ✓          | ✓        | ✓       | ✓       | ✓       | ✓       |
| First round allocations | ✓      | ✓        | ✓       | ✓       | ✓       | ✓       |
| Observations     | 1,770      | 1,770    | 7,185   | 1,770   | 1,770   | 7,185   |
| Number of respondents | 355     | 355      | 396     | 355     | 355     | 396     |

Note: Displayed are marginal effects, estimated using a logit model with standard errors (in parentheses) clustered at the respondent level. Controls are the budget size, the number of days to the early payment, the number of days between early and late payments, and the self-reported share of milk consumed yesterday as control variables. In addition, Columns 3 and 6 also control for dummy variables indicating first-round allocations, and dummy variables interacting this variable with the price scenario and an indicator for the eight-week offer. Columns 1-2 and 4-5 contain one gift allocation and a maximum of four milk allocations per participant, resulting in a maximum of 1,775 allocations. However, a few participants made less than four milk income allocations since they expected their cows to be dry in some of the weeks, decreasing the sample size to 1,770. In columns 3 and 6, the samples also include up to 24 first round milk allocations by participant (4 periods × 3 prices × 2 duration scenarios). † p < 0.10, * p < 0.05, ** p < 0.01.
Table S7. Exploring mechanisms: Income allocations of self-deliverers

| Dependent variable: Share of budget allocated to early payment date | (1) |
|---|---|
| Milk payment | -0.854** |
| | (0.027) |
| Self-deliverer | 0.025 |
| | (0.029) |
| ... × milk payment | 0.001 |
| | (0.034) |

Controls

| Observations | 1,770 |
| Number of respondents | 355 |
| R-squared | 0.769 |
| Mean share of gift allocated to early payment date | 0.884 |

Note: Estimated for second-round sample using ordinary least squares with standard errors (in parentheses) clustered at the respondent level. The Table presents the result of a regression of the share of the respondent’s budget allocated to the early payment date in a given choice on a dummy variable indicating whether that choice involves a milk payment (‘Milk payment’), on a dummy for allocations made by the 186 respondents who reported delivering their milk themselves to the collection point, and an interaction between both variables. Controls: Budget size, number of days to the early payment, number of days between early and late payments, and self-reported share of milk consumed yesterday. ⊹ p < 0.10, * p < 0.05, ** p < 0.01.
Table S8. Heterogeneity across allocations of the gift

|                                | Dependent variable: Share of gift allocated to early payment date |
|--------------------------------|---------------------------------------------------------------|
|                                | vs. all other allocations of a gift                          |
|                                | vs. early payment of gift on 12th                            |
|                                | vs. below-median interview duration                          |
| (1)                            | (2)                                                          |
| Late payment date for gift on the eleventh                      | -0.022 (0.035)                                               |
| Above-median interview duration                                    | 0.008 (0.047)                                               |
|                                | -0.036 (0.029)                                               |
| Observations                                                             | 355                                                          |
| R-squared                                                                 | 0.001                                                        |
| Mean gift early                                                          | 0.884                                                        |

Note: Estimated using ordinary least squares including only allocations of the gift. For base of comparison, we use all observations with the late payment date of the gift not being on the eleventh in Column (1), versus only those observations with the late payment date of the gift not being on the eleventh and the early payment date of the gift being on the 12th in Column (2), and all observations with below-median interview duration in Column (3). The median interview duration was 56:28 minutes. † p < 0.10, * p < 0.05, ** p < 0.01