A Regression analysis***Appendix

To provide further evidence on the effect of the availability of announcements, we run linear probability regressions both with and without individual characteristics gleaned from the questionnaire. To avoid problems related to multicollinearity—being male and the measure of cognitive abilities (the CRT score) are significantly positively correlated—, we drop the CRT score from our analysis.[31] Similarly, many trust measures are significantly correlated. As our purpose is to control for the attitude towards banks, we keep the corresponding variable and drop the remaining ones. In all specifications, standard errors are clustered on the individual level. In Table 4, we present the results of the regressions for the pooled data, but section G in the Online Appendix contains the same regressions separately for the two dates. We control for the date when the experiment was run using the dummy *Date 1*. The dummy *Baseline* is 1 for the baseline and 0 for the public treatment.

The dependent variable is 1 if the subject decided to withdraw and zero otherwise. We choose as a benchmark the information set when nothing is observed as it is the least informative, and then study how different pieces of information affect decisions relative to this case. The *Baseline* dummy in the interaction terms indicates whether there is any difference in withdrawal rates in the different information sets that are common to both treatments. The coefficients indicate the percentage point differences in the withdrawal rates relative to the benchmark of observing nothing in the public treatment. For instance, compared to when nothing is observed, the withdrawal rate is 18.7 percentage points higher in the information set when one withdrawal is observed in the public treatment (that is, 33.3%+18.7%=52%), and the interaction term *Obs. 1 withdrawal x Baseline* shows that in the baseline treatment the rate is even 2.7 percentage points higher. The interaction terms are not significant at the conventional levels. Similarly to the statistical tests, the regression analysis does not reveal a clear treatment effect when considering the information sets that coincide in both treatments.

From the regressions, we can see that the use of announcements makes the difference. Withdrawal rates decrease significantly, *ceteris paribus*, when two announcements or two announcements and one withdrawal are observed.[32] Not surprisingly, after observing two withdrawals and one announcement, this is not the case since the dominant strategy is then to withdraw. When the effect of announcements is significant, then the probability of withdrawal decreases by 20-23 percentage points, *ceteris paribus.* Similarly to the tests seen before, the information sets with one announcement do not have a significant mitigating effect.

These findings confirm our previous conclusions: while the availability of announcements has only a moderate effect by changing behavior in the coinciding information sets, it helps to create information sets that contain announcements and show subsequent depositors that previous ones have kept their money in the bank.

Moreover, in both treatments, withdrawals are more frequent after one withdrawal—even though this could be due to the impatient depositor—than when observing nothing, and the difference is statistically significant, as can be seen in Table 4. The fact that observed withdrawals spark more withdrawals has been observed in other experiments.[33]

None of the individual characteristics that we consider affect significantly the withdrawal decisions.

[31] Including the CRT score does not change the regression as it is insignificant and does not affect substantially the other coefficients.

[32] For the analysis of the two separate dates see section G in the Online Appendix.

[33] For example, Davis and Reilly (2016); Garratt and Keister (2009); Kiss et al. (2014a); and for empirical studies see Grada and Kelly (2000); Starr and Yilmaz (2007); Iyer and Puri (2012).

VARIABLES	(1) Both treatments Linear probability model Pooled	(2) Both treatments Linear probability model Pooled
Obs. 1 withdrawal	0.187**	0.187**
	(0.0755)	(0.0757)
Obs. 2 withdrawals	0.387***	0.387***
	(0.0806)	(0.0808)
Obs. 3 withdrawals	-0.120*	-0.120*
	(0.0686)	(0.0688)
Obs. Nothing x Baseline	-0.0267	-0.0290
	(0.0771)	(0.0779)
Obs. 1 withdrawal x Baseline	0.0267	0.0243
	(0.0821)	(0.0829)
Obs. 2 withdrawals x Baseline	-0.0533	-0.0557
	(0.0757)	(0.0766)
Obs.3 withdrawals x Baseline	0.0133	0.0110
	(0.0685)	(0.0697)
Obs. 1 announcement	-0.0533	-0.0533
	(0.0599)	(0.0601)
Obs. 2 announcements	-0.200***	-0.200***
	(0.0602)	(0.0604)
Obs. 1 announcement, 1 withdrawal	0.0800	0.0800
	(0.0868)	(0.0871)
Obs. 1 announcement, 2 withdrawals	0.333***	0.333***
	(0.0746)	(0.0748)
Obs. 2 announcements, 1 withdrawal	-0.227***	-0.227***
	(0.0675)	(0.0677)
Date 1	-0.0391	-0.0431
	(0.0348)	(0.0362)
Male		-0.00295
		(0.0358)
Age		-0.00289
		(0.00325)
Stud. Econ & Business		0.0370
		(0.0555)
Family income		0.000447
		(0.00891)
Trust in banks		0.000866
		(0.00777)
Overconfidence		0.00127
		(0.0136)
Constant	0.351***	0.407***
	(0.0606)	(0.109)
Observations	975	975
R^2	0.172	0.174
Prob > F	0	0

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 4: Linear probability models

B The model***Online Appendix

The consumption of depositor $i \in I$, where $I = \{1, ..., N\}$ for $N > 2$, in period $t = 1, 2$ is denoted by $c_{t,i} \in \mathbb{R}^0_+$, and her liquidity type by θ_i. The set of liquidity types is $\Theta = \{1, 2\}$. If $\theta_i = 1$, i is *impatient* and only cares about consumption at $t = 1$, while i is *patient* if $\theta_i = 2$. Let $\theta^N = (\theta_1, ..., \theta_N)$ be the sequence of depositors called the liquidity type vector.

For $\theta_i \in \{1, 2\}$, depositor i's utility function is given by $u_i(c_{1,i}, c_{2,i}, \theta_i)$.

It is assumed to be strictly increasing, strictly concave, twice continuously differentiable and to satisfy the Inada conditions. The relative risk-aversion coefficient, $-c_i u_i''(c_i)/u_i'(c_i)$, is assumed to be strictly larger than 1, for all $c_i \in \mathbb{R}_+$, and all $i \in I$.

Each depositor deposits one unit of a homogeneous good in the bank which has access to a constant-return-to-scale technology that pays a gross return of one unit for each endowment liquidated at $t = 1$, and a fixed return of $R > 1$ for each endowment liquidated at $t = 2$.[34] It offers a simple demand deposit contract which pays c_1^* to any depositor who withdraws at $t = 1$, as long as there are funds left, and the same pro rata share of funds available to all depositors who keep the money deposited until $t = 2$.

There are $p \in \{1, ..., N\}$ patient depositors and the remaining ones are impatient. Both numbers are constant and commonly known. However, each depositor's type is only realized at $t = 1$. Given $\Theta^N = \{1, 2\}^N$, the set of sequences of length N with p patient depositors is given by

$$\Theta^{N,p} = \{\theta^N \in \Theta^N : \sum_{i=1}^{N} (\theta_i - 1) = p\}.$$

There are $\binom{N}{p}$ possible type vectors. At $t = 1$, one is selected randomly. Under imperfect information, the realized liquidity type vector is neither observed by the other depositors nor by the bank.

A social planner could maximize the sum of depositors' utilities (which are assumed to be identical, except for the liquidity type) with respect to $c_{1,i}$ and $c_{2,i}$ subject to a resource constraint and to the commonly known number of patient and impatient depositors, p and $N - p$, respectively. This yields the first best or Pareto efficient allocation:

$$\max_{c_{1,i}, c_{2,i}} (N - p)u_i(c_{1,i}) + p u_i(c_{2,i}) \quad \text{s. t. } (N - p)c_{1,i} + \frac{p}{R} c_{2,i} = N.$$

The solution is $u'(c_1^*) = Ru'(c_2^*)$ which, as in Diamond and Dybvig (1983), implies that $R > c_2^* > c_1^* > 1$: all impatient depositors consume c_1^* at $t = 1$, and all patient ones c_2^* at $t = 2$. Hence, in the first best any patient depositor consumes more than an impatient one.

B.1 Strategies and equilibrium concept

A sequential service constraint holds at $t = 1$: the depositors contact the bank in the order given by θ^N, and as long as it has resources, it pays c_1^* to each withdrawing depositor. This is publicly observed. However, if i keeps the money deposited, then this is only observable if i makes her decision public, denoted by pb. The corresponding announcement space is given by $\Sigma \equiv \{pb, npb\}$ and let $\Sigma^N = \{pb, npb\}^N$.

Formally, depositor i's strategy is defined as $\mathbf{s}_i \in \Theta \times \Sigma$. Yet, since withdrawals are always publicly observed, $\mathbf{s}_i$ is always an element in $\{1, 2pb, 2npb\}$; that is, i announces a type from Θ,—1 for withdrawal and 2 for keeping—and in the second case, whether to make this public or not.

We assume that making public the decision to keep the money in the bank is either costly, or free, or subsidized by the bank, that is, there is a cost $\xi \in \{-\bar{\xi}, 0, \bar{\xi}\}$. In any case, $\bar{\xi}$ is small, and at $t = 1$, withdrawal does not dominate publicizing: formally, $u_i(c_{2,i}^* - \xi) > u_i(c_{1,i}^*)$. If $\xi = -\bar{\xi}$, then publicizing is subsidized and this is equivalent to an increase in c_2^*.

Let h_i^t denote the history observed perfectly by the bank and depositor i when it is her turn to decide. It contains t observations of withdrawals and announcements sent by depositors who keep their money deposited. By observing h_i^t, i knows that her position in the queue is at least $t + 1$, though she could be at a later position if some depositor before her kept the money without announcing this.

Anonymity is assumed, that is, depositor i's index does not reveal any information about her position in the queue.

Depositor i's strategy is conditional on i's type and the history h_i^t. Following Ennis and Keister (2016), it is formally defined as $\mathbf{s}_i : \boldsymbol{\Theta} \times \boldsymbol{\Theta}^{i-1} \times \Sigma^{i-1} \to \Theta \times \Sigma$.

[34] Following the literature (Diamond and Dybvig, 1983; Green and Lin, 2003; Ennis and Keister, 2009a), we assume no fundamental uncertainty about the return.

Slightly abusing notation, let $\mathbf{S} = \{1, 2pb, 2npb\}^N$ be the game's strategy space, and let $\mathbf{s} = (\mathbf{s}_1, ..., \mathbf{s}_N) \in \mathbf{S}$ be a strategy profile. In order to emphasize depositor i's strategy, $\mathbf{s}$ is sometimes written as $(\mathbf{s}_i, \mathbf{s}_{-i})$.

Given strategy profile $\mathbf{s} \in \mathbf{S}$, depositor i's consumption is specified by $c_i = (c_{1,i}; c_{2,i})$, where $c_{1,i} : \mathbf{\Theta}^i \to \mathbb{R}^0_+$, and $c_{2,i} : \mathbf{\Theta}^N \to \mathbb{R}^0_+$. The depositors' consumption is feasible if $\sum_{i=1}^N (c_{1,i} + \frac{c_{2,i}}{R}) \leq N$. Depositor i's first period consumption is then defined as

$$c_{1,i} = \begin{cases} c_1^*, & \text{if } s_i = 1 \text{ and } N - \sum\limits_{j=1}^{i-1} (2 - s_j) c_1^* \geq c_1^*, \\ y, & \text{if } s_i = 1 \text{ and } 0 < N - \sum\limits_{j=1}^{i-1} (2 - s_j) c_1^* < c_1^*, \\ 0, & \text{otherwise,} \end{cases}$$

where $y = N - \sum_{j=1}^{i-1}(2 - s_j)c_1^*$: until the bank runs out of funds, any depositor that withdraws receives a positive consumption c_1^* or y.

Let $\eta \in \{0, ..., p\}$ be the number of depositors who keep the money deposited at $t = 1$.

Given $\eta = \sum_{i=1}^N (s_i - 1) \geq 0$, all of them obtain the same consumption at $t = 2$, namely,

$$c_2(\eta) = \max\{0, \frac{R(N - (N - \eta)c_1^*)}{\eta}\}.$$

If $\eta = p$, only impatient depositors withdraw at $t = 1$, and $c_2(\eta) = c_2^* > c_1^*$. Then, patient depositors enjoy a higher consumption than impatient ones.

Given $\mathbf{s} \in \mathbf{S}$, any depositor i's utility $u_i(\mathbf{s})$ maps $\mathbf{S}$ to $[-\xi, \infty)$. Let the tuple $(I, \mathbf{S}, u)$ be the *bank run game*, where $u = (u_1, ..., u_N)$.

Depositor i observes the history, knows her type and the commonly known parameters p and N. However, she neither knows her position in the queue nor observes the realized type vector, and thus, forms beliefs about both. Let $\mu_i \equiv \mu_i(\theta^N \mid h_i^t, \theta_i)$ denote i's belief conditional on the history and her type. Depositor i updates her belief according to Bayes' rule when possible.

Definition 1 Given a bank run game, strategy profile $\mathbf{s} \in \mathbf{S}$ and belief system $\mu = (\mu_1, ...\mu_N)$ are a Perfect Bayesian Equilibrium (PBE) if and only if, for all $i \in I$, given θ_i, h_i^t and any $\tilde{\mathbf{s}}_i \in \{1, 2\}$,

$$\sum_{\theta^N \in \Theta^N} \mu_i(\theta^N \mid h_i^t, \theta_i) u_i(\mathbf{s}) \geq \sum_{\theta^N \in \Theta^N} \mu_i(\theta^N \mid h_i^t, \theta_i) u_i(\tilde{\mathbf{s}}_i, \mathbf{s}_{-i}),$$

where $\mu_i(\theta^N \mid h_i^t, \theta_i)$ is consistent with Bayes' rule whenever possible.

The belief system of all depositors together with a strategy profile is a Perfect Bayesian Equilibrium (PBE) if no depositor can deviate profitably after any history. Kinateder and Kiss (2014) define PBE formally for this bank run game. A strategy profile and belief system are a PBE if, and only if, the strategy is sequentially rational given the belief for all players and the belief is consistent with the strategy (see Myerson, 1997).[35]

B.2 Theoretical results

The simple demand deposit contract defined above yields the Pareto efficient allocation (see Diamond and Dybvig, 1983). Our goal is to show that this allocation is the unique PBE outcome of the bank run game.

Given p, N and c_1^*, we determine the minimum number of patient depositors that have to keep their money deposited at $t = 1$ for this to be optimal for all of them. In Lemma 1, part of this threshold is derived,[36] namely, $\bar{\eta}$, such that $c_{2,i} > c_1^*$ for every patient depositor i who does not withdraw at $t = 1$. If some patient depositor declares herself to be impatient, then the bank outlays funds that could have been kept until $t = 2$.

Lemma 1 *Given p, N and c_1^*, there is a unique $\bar{\eta}$ such that $1 \leq \bar{\eta} \leq p$, and for every patient depositor i for whom $\mathbf{s}_i = 2$, $c_{2,i}(\eta) \leq c_1^*$, for all $\eta \leq \bar{\eta}$, and $c_{2,i}(\eta) > c_1^*$, for all $\eta > \bar{\eta}$.*

Lemma 1's proof follows immediately from Kinateder and Kiss (2014).

Lemma 1 also yields the number of withdrawals that need to be observed such that withdrawing is a dominant strategy at $t = 1$ for any depositor.

[35] Moreover, there are consistency requirements on the beliefs that arise from the fact that p and N are commonly known, the history is commonly observed, and an impatient depositor's dominant strategy is to withdraw.

[36] The other part is a technical detail derived in Kinateder and Kiss (2014).

Proposition 1 *Given any bank run game, the Pareto efficient allocation is the unique PBE outcome.*

The proof of Proposition 1 is based on the proof of Proposition 2 in Kinateder and Kiss (2014) and we refer to them as K&K.

Proof Consider that $\xi = \bar{\xi}$. Then, it follows from K&K that any strategy profile which results in a bank run is not a PBE in our setup either: they show that there is a type vector in which a patient depositor who is first in the queue is prescribed to withdraw; yet, by keeping the money—which is perfectly observed in their case—and making this public—in this paper—the depostior brings the game onto an off-equilibrium path on which any patient depositor i is strictly better off keeping the money deposited as well as long as $c_{2,i} > c_1^*$. Thus, all of them do so.

In this case, the players update their beliefs about the type vector as follows: a patient player believes that there was at least one patient depositor before her (the one who kept the money and made this public) and a number of impatient depositors equal to the number of observed withdrawals. Summing both numbers, she believes herself to be in the position thereafter or in any other subsequent position in the queue and assigns equal weight to all such type vectors. By sequential rationality, she anticipates that any patient depositor behind will apply an analogous reasoning and keep the money deposited upon observing this off-equilibrium path history. Thus, said depositor is strictly better off keeping the money deposited.

Consider next any strategy profile in which all patient depositors are asked to keep the money deposited and some of them to make this public. It follows from K&K that no patient depositor has an incentive to withdraw. Moreover, the last patient depositor who is asked to keep the money and make this public has a profitable deviation to save the cost of publicizing even if she keeps the money deposited. Hence, this is no PBE. The depositors' belief system is identical to the one mentioned in the previous paragraph.

Finally, suppose that all patient depositors are asked to keep the money but not to make this public. Since it is commonly known that the number of patient depositors is equal to or larger than the number of depositors that need to keep the money deposited in order for a bank run not to occur, none of the patient depositors has a profitable deviation (the payoff received by withdrawing would be lower, i.e., $c_1^* < c_2^*$).

A depositor believes that she is at least at one position higher than the number of withdrawals she has observed and at most at position N. Each such position gets assigned an equal weight in the depositor's belief and expected payoff, yielding an expected payoff of c_2^*. Since there are never more withdrawals than impatient depositors, there is no bank run on the equilibrium path. On any off-equilibrium path on which there were enough withdrawals for the bank to go bankrupt any player would withdraw the corresponding funds (this part and the corresponding belief system are identical to those derived in the proof of Proposition 2 in K&K and therefore not restated here), but in equilibrium such a path is never reached.

Hence, the player's strategy is sequentially rational given the belief and the belief is consistent with the strategy and the observed history. So no bank run is an equilibrium outcome.

Similarly, for $\xi = 0$, there are multiple strategy profiles in which some players are asked to make public that they kept the money and others are not. Since this has no cost, none of them has a profitable deviation, yet all of them keep the money deposited. This follows immediately from the reasoning of the previous paragraphs. Finally, if $\xi = -\bar{\xi}$, that is, the players are paid to make public that they kept the money deposited, then it is a dominant strategy for each of them to do so on the equilibrium path. Since none of them has a profitable deviation—using similar arguments as before—the unique PBE outcome in this case is also no bank run.

Uniqueness of the no bank run as equilibrium outcome then arises since any strategy profile in which a bank run occurs is not a PBE. ■

B.3 Without announcements only withdrawals are observable

When patient depositors cannot announce that they are keeping the money deposited, the game's nature is equivalent to a simultaneous move game for those patient depositors who keep the money deposited. A no bank run equilibrium arises and its analysis is identical as before (its proof follows directly from K&K). Withdrawing is only optimal for a patient depositor after observing more withdrawals than the number of impatient depositors. Otherwise, the patient depositor sticks to her strategy and is rewarded with a higher consumption at $t = 2$, and thus, a larger payoff.

However, without announcements, there is another equilibrium in which all depositors withdraw since the patient ones cannot coordinate in keeping the money deposited. Suppose that all depositors are asked to withdraw. Then, the game reaches an off-equilibrium path if any patient depositor keeps the money deposited, yet the other patient depositors do not observe this and are better off withdrawing. They cannot distinguish this from the equilibrium path in which all depositors withdraw, and thus, cannot be induced to keep the money deposited.

C Instructions ***Online Appendix

Here we reproduce the instructions, translated from Spanish. In the instructions, we used the word *wait* instead of keeping the money deposited.

***Baseline* Treatment**
Welcome to the experiment!
Thanks for participating in the experiment. In this experiment, we study how individuals solve decision-making problems, and we are not interested in your particular decision, but in the average behavior of individuals. That is why you will be treated anonymously during the experiment and nobody in this room will ever know the decisions that you make. Next, you will see the instructions that explain how the experiment goes. These instructions are the same for all participants and it is of utmost importance that you understand them well because your earnings will depend to a large extent on your decisions. If you have any doubt or question during the experiment, raise your hand and remember that you are not allowed to speak during the experiment.
What is the experiment about?
At the beginning of the experiment, you will be endowed with 80 ECUs that will be deposited in a bank of which you are a depositor. The bank consists of 4 depositors and consequently has a total of 320 ECUs (80 ECUs from each depositor). Three of the depositors are individuals from this room and the fourth one will be simulated by the computer.

Your role is to choose between withdrawing the money from the bank in period 1, or wait until period 2, considering that your earnings in each case depend not only on your decision, but also on which options other depositors of your bank choose to take. It is important to know that the computer always withdraws the money from the bank, so your earnings depend on your decision and on those of the other two participants in your bank.

Depositors go to the bank in a sequential order, but nobody knows her position in the queue. You may observe how many depositors (that have decided before you) have chosen to withdraw their funds, but you cannot observe if somebody decided to keep her funds deposited.

For instance, if you have to decide whether to withdraw or wait when you have not observed anybody withdrawing her funds, then you may think that you are the first one in the queue, or that one (or two) depositor(s) have chosen to wait.

Similarly, if you observe that a depositor withdrew her funds, then you may believe that you are the second one to decide in the queue and the first one chose to withdraw, or you may believe to be the third/fourth one to decide and that one of the depositors withdrew the money, but (the) other(s) chose to wait.

We ask you to take a decision to withdraw or to wait in all possible scenarios (there are 4), that differ in terms of how many depositors you may observe to have withdrawn their money.

At the end of the experiment, we will determine randomly the sequence of decisions (including the position of the computer that will withdraw for sure) and we use the decisions in the corresponding positions to calculate your earnings.

The payoffs are defined in experimental currency units (ECUs) that will be converted into euros at the end of the experiment, using the conversion rate of 100 ECU = 10 euro. Let us look at the payoffs (in ECU), according to the possible decisions of the depositors and their position.

- If three depositors (all but the computer) decide to wait until period 2, then each of them receives 125 ECUs, corresponding to the initial deposit and the interest earned during period 1.
- If only two depositors decide to wait, then each of them receives 70 ECUs. In this case, the depositor who withdraws receives 100 ECUs.
- If only one depositor decides to wait, then she receives 70 ECUs. In this case, the depositors who withdraw, each will receive 100 ECUs.
- If everybody withdraws the money from the bank, then the first three receive 100 ECUs, while the last one receives 60 ECUs.

Hence, your earnings can be summarized as follows: If you withdraw your money and you are the first / second / third depositor to do so, then you earn 100 ECUs. If you are the fourth depositor who withdraws, then you earn 60 ECUs. If you wait and in total three depositors wait, then you earn 125 ECUs. If you wait and in total two depositors wait, then you earn 70 ECUs, and if you wait and nobody else waits, then you earn 70 ECUs.

When all participants have decided, the program determines randomly the sequence of decisions and using the decisions calculates the final payoff of each participant. Before finishing the experiment, we ask you to fill in a short questionnaire.

To see if you understood the game, please answer the following questions.

1. If you observe that a depositor of your bank has already withdrawn her funds and you decide to withdraw, then what is your payoff?
2. If you have observed two withdrawals, which is the maximum amount of money that you may earn if you decide to wait?

3. If you have observed two withdrawals, which is the maximum amount of money that you may earn if you decide to withdraw?

***Public* Treatment**

Welcome to the experiment!

Thanks for participating in the experiment. In this experiment, we study how individuals solve decision-making problems, and we are not interested in your particular decision, but in the average behavior of individuals. That is why you will be treated anonymously during the experiment and nobody in this room will ever know the decisions that you make. Next, you will see the instructions that explain how the experiment goes. These instructions are the same for all participants and it is of utmost importance that you understand them well because your earnings will depend to a large extent on your decisions. If you have any doubt or question during the experiment, raise your hand and remember that you are not allowed to speak during the experiment.

What is the experiment about?

At the beginning of the experiment, you will be endowed with 80 ECUs that will be deposited in a bank of which you are a depositor. The bank consists of 4 depositors and consequently has a total of 320 ECUs (80 ECUs from each depositor). Three of the depositors are individuals from this room and the fourth one will be simulated by the computer.

Your role is to choose between withdrawing the money from the bank in period 1 or wait until period 2, or wait until period 2 and making this decision public, considering that your earnings in each case depend not only on your decision, but also on which options other depositors of your bank choose to take. It is important to know, that the computer always withdraws the money from the bank, so your earnings depend on your decision and on those of the other two participants in your bank.

Depositors go to the bank in a sequential order, but nobody knows her position in the queue. You may observe how many depositors (that have decided before you) have chosen to withdraw their funds, but you can only observe if somebody decided to keep her funds deposited (before you) if she makes it public, incurring an additional cost. If any depositor wants to make public her choice to wait, she will incur a cost of 10 ECUs that will be deducted from her final earnings.

For instance, if you decide whether to wait, wait and make it public or withdraw and you have not observed anybody withdrawing her funds, then you may think that you are the first depositor in the queue, or that one (or two) depositor(s) have decided to wait without making their decision public.

Similarly, if you observe that a depositor has withdrawn her funds, you may think that you are the second to decide and the first one in the queue has withdrawn, or that you are the third / fourth in the queue and one of the other two / three depositors has withdrawn her funds, but the other(s) have decided to wait without making it public.

For instance, if you observe that a depositor decided to wait and make it public and another one chose to withdraw, then you know that you are either in position 3 or 4 in the queue.

We ask you to take a decision to withdraw, to wait and make it public or to wait without making it public in all possible scenarios (there are 9), that differ in terms of what you may observe.

At the end of the experiment we will determine randomly the sequence of decisions (including the position of the computer that will withdraw for sure) and we use the decisions in the corresponding positions and situations to calculate your earnings.

The payoffs are defined in experimental currency units (ECUs) that will be converted into euros at the end of the experiment, using the conversion rate of 10 ECU = 1 euro. Let us look at the payoffs (in ECU), according to the possible decisions of the depositors and their position.

- If three depositors (all but the computer) decide to wait until period 2, then each of them receives 125 ECUs, corresponding to the initial deposit and the interest earned during period 1. Remember that 10 ECUs are deducted if you choose to make your decision of waiting public.
- If only two depositors decide to wait, then each of them receives 70 ECUs, but those who make this decision public have to incur a cost of 10 ECUs and end up with 60 ECUs. In this case, the depositor who withdraws receives 100 ECUs.
- If only one depositor decides to wait, then she receives 70 ECUs if she does not make her decision public. If she does make her decision public, then she will receive 60 ECUs. In this case, the depositors who withdraw each receives 100 ECUs.
- If everybody withdraws the money from the bank, then the first three will receive 100 ECUs, while the last one receives 60 ECUs.

Hence, your earnings can be summarized as follows: If you withdraw your money and you are the first / second / third depositor to do so, then you earn 100 ECUs. If you are the fourth depositor who withdraws, then you earn 60 ECUs. If you wait and make it public and in total three depositors wait, then you earn 115 ECUs. If you wait and make it public and in total two depositors wait, then you earn 60 ECUs. If you wait and make it public and nobody else waits, then you earn 60 ECUs. If you wait without making it public and in total three depositors wait, then you earn 125 ECUs. If you wait without making it public and in total two depositors wait, then you earn 70 ECUs. If you wait without making it public and nobody else waits, then you earn 70 ECUs.

When all participants have decided, the program determines randomly the sequence of decisions and using the decisions calculates the final payoff of each participant. Before finishing the experiment, we ask you to fill in a short questionnaire.

To see if you understood the game, please answer the following questions.

1. If you observe that a depositor of your bank has already withdrawn her funds and you decide to withdraw, then what is your payoff?
2. If you have observed two withdrawals, which is the maximum amount of money that you may earn if you decide to wait without making your decision public?
3. And if you choose to withdraw?
4. If you observe that a depositor of your bank has already withdrawn her funds and you decide to keep your money deposited and make your decision public so that subsequent depositors can see it, which is the maximum amount of money that you may earn?

D Randomization ***Online Appendix

Tables 5, 6 and 7 represent the means and standard deviations of the personal characteristics of the participants for each treatment at each date of the experiment and overall.

	Baseline treatment	Public treatment
Male	45% (0.51)	48% (0.51)
Age	23.4 (7.2)	22.1 (3.3)
Risk aversion	3.4 (0.89)	3.6 (1.29)
Studies Econ&Business	30% (0.46)	18% (0.39)
Family income	4.3 (1.92)	4.8 (1.57)
Trust in banks	3.06 (2.26)	3.36 (2.56)
CRT score	1.33 (1.27)	1.52 (1.17)
Overconfidence	1.58 (1.39)	1.42 (1.15)

Standard deviations are in parentheses. For all variables in each treatment we have 33 observations, except for risk aversion for which we have only 5 observations in the baseline and 11 in the public treatment.

Table 5: Descriptive statistics of individual characteristics in October, 2015

For each variable, we carried out the t-test and the Wilcoxon ranksum test, except for *Male* and *Studies Econ&Business* for which we performed a test of proportions. For the first date (October, 2015), statistical tests reveal that we cannot reject the hypothesis that the variables are equal in both treatments, as we did not find in any case a significant difference at the conventional significance levels. This suggests that subjects were appropriately randomized across treatments. For the second date (July, 2017), we observe a significant difference in the share of Economics or Business students between treatments at the 5% significance level when considering any of the three tests that we carried out. Thus, in the baseline treatment, there were considerably more participants with a background of Economics or Business. The tests also reveal that those in the public treatment had a significantly higher Cognitive Reflection Test score.[37]

	Baseline treatment	Public treatment
Male	50% (0.51)	52% (0.51)
Age	22.6 (7)	21.8 (3.4)
Risk aversion (Holt-Laury)	4 (0.74)	4.1 (1.29)
Risk aversion (Ellsberg)	7.5 (3.41)	7 (3.6)
Studies Econ&Business	19% (0.4)	5% (0.22)
Family income	4.9 (2.29)	5.1 (1.67)
Trust in banks	2.81 (2.42)	2.38 (2.29)
CRT score	1.02 (0.95)	1.55 (1.27)
Overconfidence	1.74 (1.11)	1.43 (1.25)

Standard deviations are in parentheses. For all variables in each treatment we have 42 observations, except for risk aversion for which we have only 12 observations in the baseline and 10 in the public treatment.

Table 6: Descriptive statistics of individual characteristics in July, 2017

If we consider differences across dates but for a given treatment, then for the baseline treatment, there is no significant difference using any of the tests for any of the variables. In the public treatment, there is no significant difference using any of the tests for any of the variables at the 5% significance level. However, there are differences at the 10% significance level. All the tests reveal that there were more participants with an Economics or Business

[37] The t-test indicates a significant difference at the 5% significance level, while the Wilcoxon ranksum test does so only at the 10% significance level.

background on the first date. We also observe that participants had more confidence in banks on the first date, again at the 10% significance level.

	Baseline treatment	Public treatment
Male	48% (0.5)	51% (0.5)
Age	22.9 (7)	21.9 (3.4)
Risk aversion (Holt-Laury)	3.8 (0.81)	3.81 (1.29)
Studies Econ&Business	24% (0.43)	11% (0.31)
Family income	4.61 (2.14)	4.99 (1.62)
Trust in banks	2.92 (2.34)	2.81 (2.45)
CRT score	1.16 (1.1)	1.53 (1.22)
Overconfidence	1.67 (1.23)	1.43 (1.2)

Standard deviations are in parentheses. For all variables in each treatment we have 75 observations, except for risk aversion for which we have only 17 observations in the baseline and 21 in the public treatment.

Table 7: Descriptive statistics of individual characteristics for both dates

When studying pairwise correlations between the variables, at the 5% significance level, we find for both dates that males achieve higher CRT scores (in line with previous findings in the literature, see for instance Frederick, 2005), Economics and Business students trust banks more than other participants and higher CRT scores correlate significantly with lower overconfidence. When we pool the data from the two dates, then the same significant correlations remain valid, and we see additionally that older subjects (the youngest / oldest participant was 18 / 61 years old) tend to have less confidence in banks and males seem to be significantly less overconfident than females.

E Withdrawal decisions at different dates ***Online Appendix

Tables 8 and 9 show the withdrawal decisions in both treatments for the first and second date, indicating also the breakdown of the non-withdrawal decisions in the public treatment. Hence, these tables present the information contained in Table 2.

We carry out two types of analysis on these data. First, we investigate if across dates the withdrawal rates exhibit significant differences. Second, we study whether at a given date there are significant differences in the withdrawal rates in the coincident information sets.

Observed decisions	Baseline treatment Frequency of non-withdrawals	Public treatment Frequency of non-withdrawals	of which: announcement
Nothing	60.6%	72.7%	41.7%
1 withdrawal	39.4%	60.6%	25.1%
2 withdrawals (wi)	36.4%	33.3%	0.0%
3 withdrawals (k)	75.8%	75.8%	4.1%
1 withdrawal, 1 announcement	-	66.7%	13.6%
1 withdrawal, 2 announcements (k)	-	90.9%	20.0%
2 withdrawals, 1 announcement (wi)	-	33.3%	18.3%
1 announcement	-	84.8%	46.5%
2 announcements (k)	-	84.8%	21.5%

Table 8: Non-withdrawal decisions in each information set in both treatments on the first date

Consider first the baseline treatment across dates. When 2 or 3 withdrawals are observed, the withdrawal rates are very similar and indeed statistically not different. Withdrawal rates in the other two information sets (observing nothing, observing a withdrawal) seem lower on the second date, but the two-sided test of proportions does not detect significant differences.[38] However, in the public treatment, the same test indicates significant differences when one withdrawal or one announcement is observed. In both cases, on the second date, the withdrawal rate is higher.

We now compare the coincident information sets for a given date. On date 1, the two-sided test of proportions detects a significant difference at the 10% significance level when a withdrawal is observed. On date 2, there is no significant difference.

[38] If the alternative hypothesis is that the withdrawal rate is larger on date 1, then the difference is significant at the 10% significance level for the information set of observing nothing.

Observed decisions	Baseline treatment Frequency of non-withdrawals	Public treatment Frequency of non-withdrawals	of which: announcement
Nothing	76.2%	61.9%	30.7%
1 withdrawal	50.0%	38.1%	24.9%
2 withdrawals (wi)	30.9%	23.8%	10.1%
3 withdrawals (k)	78.6%	81.0%	3.0%
1 withdrawal, 1 announcement	-	52.4%	45.4%
1 withdrawal, 2 announcements (k)	-	88.1%	27.0%
2 withdrawals, 1 announcement (wi)	-	33.3%	35.7%
1 announcement	-	61.9%	65.4%
2 announcements (k)	-	88.1%	32.5%

Table 9: Non-withdrawal decisions in each information set in both treatments on the second date

F Rationality ***Online Appendix

In section 4, we studied whether participants chose the dominant strategy when one exists. We concluded that about 50% of the participants chose it in both the cases in which it is present and 6-7% never chose it. Hence, more than 90% of the participants are at least partially rational.

Are rational choices related to cognitive abilities that we proxy by using the Cognitive Reflection Test (CRT)? The sign is always positive (suggesting that better cognitive abilities lead to better choices) and the relationship is often significant.[39]

The use of announcements allows us to draw conclusions about rationality as well. For instance, a subject in the last position should not use announcements since nobody would see them. In general, announcements should not be used in information sets with a dominant strategy, that is, after observing two withdrawals, three withdrawals, two withdrawals and one announcement, two announcements and one withdrawal, or two announcements. For example, when observing two withdrawals or two withdrawals and one announcement, the dominant strategy is to withdraw, so a costly announcement is the worst possible choice. Yet we observe such a choice in 1.3% and 9.3% of the cases, respectively. Reassuringly, these numbers are quite low. In the other cases, the best response is to keep the money deposited without making an announcement, because the other two patient depositors have decided already. The worst decision is to withdraw, and making an announcement dominates withdrawal. After three withdrawals, the announcement rate is low (2.7%), however, it increases to beyond 20% for information sets that contain two announcements.

We measure the grade of irrationality of an announcement as follows: assigning two irrationality points to participants who make announcements when withdrawal is the dominant strategy, and one to those who make announcements when keeping the money without announcement is the optimal decision (yet making an announcement weakly dominates withdrawal). These points reflect that making an announcement is the worst choice in the first case, while in the second, it is not optimal, but at least better than withdrawal. Pairwise correlation between irrationality points and cognitive abilities is always negative (as expected) and in most cases at least marginally significant.[40] This suggests that cognitive abilities explain, at least partially, irrational announcements.

Subjects may also use announcements as an attempt to reduce uncertainty about the choice and position of patient depositors. Without announcements, bank runs may occur since a patient depositor does not know whether other patient depositors were before her. Similarly, participants may question the rationality of other participants and may prefer to make their decision public, even at a cost, in the hope that this induces subsequent patient depositors to keep their funds deposited. Since we do not ask participants' beliefs about other participants' rationality or choices, we study this issue only indirectly: we check whether such announcements, which we call persuasive announcements, are related to cognitive abilities or risk attitudes. In the public treatment, there are four information sets in which making such announcements may make sense: after observing nothing, one withdrawal, one announcement, one withdrawal and one announcement. For each participant, we construct a persuasive announcement index, ranging from 0 to 4, by adding up the times the participant makes an announcement in these information sets. This index exhibits a positive and significant correlation with cognitive abilities (captured by the CRT score).[41] This demonstrates that depositors with better cognitive abilities tend to make announcements more frequently. However, risk attitudes and persuasive announcements are not significantly related.[42]

We summarize our findings as follows. Most participants are at least partially rational, and bounded rationality correlates weakly with cognitive abilities. When we check the use of announcements as a measure of rationality, we find a significant negative correlation between irrational announcements and the cognitive abilities, and a significant positive correlation between the use of persuasive announcements and the cognitive abilities. No relationship is observed when considering risk attitudes.

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[39] For example, in the public treatment, choosing the dominant strategy is positively correlated with the CRT score. The coefficient is 0.3026 / 0.3072 / 0.2996 for the pooled / date 1 / date 2 observations with p-values of 0.0083 / 0.0820 / 0.0539, respectively. The corresponding numbers for the baseline treatment are: coefficient of 0.2722 / 0.2749 / 0.2718 for the pooled / date 1 / date 2 observations with p-values of 0.0182 / 0.1215 / 0.0817, respectively.

[40] The coefficient is -0.3091 / -0.7042 / -0.1762 for the pooled / date 1 / date 2 observations with p-values of 0.0965 / 0.0106 / 0.4843, respectively.

[41] The coefficient is 0.3082 / 0.3555 / 0.2760 for the pooled / date 1 / date 2 observations with p-values of 0.0071 / 0.0423 / 0.0768, respectively.

[42] We carry out this analysis only for date 2 as we had an issue with the risk measure on date 1. The finding holds also if we study correlation between the risk measurement and separate decisions in the information sets without aggregating them into an index.

VARIABLES	(1) Both treatments Linear probability model Date 1	(2) Both treatments Linear probability model Date 2	(3) Both treatments Linear probability model Both dates	(4) Both treatments Linear probability model Date 1	(5) Both treatments Linear probability model Date 2	(6) Both treatments Linear probability model Both dates
Obs.1 withdr.	0.121	0.238***	0.187**	0.121	0.238***	0.187**
	(0.130)	(0.0894)	(0.0755)	(0.131)	(0.0899)	(0.0757)
Obs. 2 withdr.	0.394***	0.381***	0.387***	0.394***	0.381***	0.387***
	(0.131)	(0.102)	(0.0806)	(0.132)	(0.103)	(0.0808)
Obs. 3 withdr.	-0.0303	-0.190**	-0.120*	-0.0303	-0.190**	-0.120*
	(0.112)	(0.0856)	(0.0686)	(0.112)	(0.0860)	(0.0688)
Obs. Nothing x Baseline	0.121	-0.143	-0.0267	0.125	-0.153	-0.0290
	(0.118)	(0.101)	(0.0771)	(0.121)	(0.102)	(0.0779)
Obs. 1 withdr. x Baseline	0.212*	-0.119	0.0267	0.216*	-0.130	0.0243
	(0.123)	(0.109)	(0.0821)	(0.119)	(0.112)	(0.0829)
Obs. 2 withdr. x Baseline	-0.0303	-0.0714	-0.0533	-0.0262	-0.0820	-0.0557
	(0.120)	(0.0987)	(0.0757)	(0.122)	(0.0995)	(0.0766)
Obs. 3 withdr. x Baseline	0	0.0238	0.0133	0.00412	0.0133	0.0110
	(0.108)	(0.0891)	(0.0685)	(0.105)	(0.0926)	(0.0697)
Obs. 1 ann.	-0.121	0	-0.0533	-0.121	0	-0.0533
	(0.0955)	(0.0766)	(0.0599)	(0.0962)	(0.0770)	(0.0601)
Obs. 2 ann.	-0.121	-0.262***	-0.200***	-0.121	-0.262***	-0.200***
	(0.0849)	(0.0843)	(0.0602)	(0.0855)	(0.0848)	(0.0604)
Obs. 1 ann.,1 withdr.	0.0606	0.0952	0.0800	0.0606	0.0952	0.0800
	(0.138)	(0.113)	(0.0868)	(0.139)	(0.113)	(0.0871)
Obs. 1 ann.,2withdr.	0.394***	0.286***	0.333***	0.394***	0.286***	0.333***
	(0.115)	(0.0986)	(0.0746)	(0.116)	(0.0992)	(0.0748)
Obs. 2 ann.,1withdr.	-0.182*	-0.262***	-0.227***	-0.182*	-0.262***	-0.227***
	(0.102)	(0.0910)	(0.0675)	(0.103)	(0.0915)	(0.0677)
Male				0.0837*	-0.0673	-0.00295
				(0.0466)	(0.0480)	(0.0358)
Age				-8.20e-05	-0.00377	-0.00289
				(0.00574)	(0.00531)	(0.00325)
Stud.Econ & Business				-0.0435	0.142	0.0370
				(0.0709)	(0.0914)	(0.0555)
Family income				-0.0204	0.0179	0.000447
				(0.0135)	(0.0108)	(0.00891)
Trust in banks				0.0217**	-0.0142	0.000866
				(0.0101)	(0.0102)	(0.00777)
Overconfidence				-0.000872	0.00751	0.00127
				(0.0193)	(0.0177)	(0.0136)
Date 1			-0.0391			-0.0431
			(0.0348)			(0.0362)
Constant	0.273***	0.381***	0.351***	0.268	0.423***	0.407***
	(0.0792)	(0.0762)	(0.0606)	(0.185)	(0.154)	(0.109)
Observations	429	546	975	429	546	975
R^2	0.171	0.194	0.172	0.193	0.213	0.174
Prob ¿ F	2.05e-09	0	0	4.18e-10	0	0

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 10: Determinants of withdrawal: Linear probability model for the different dates

G Linear probability model, dates considered separately ***Online Appendix

In Table 10, we complement Table 4 with the regressions run separately for the two dates. We leave the pooled data in the table for sake of comparison.

On date 1, we see a slight treatment effect with the expected sign at the 10% significance level: when a withdrawal is observed, in the baseline treatment the withdrawal rate is 21.2 percentage points higher than in the public treatment. Furthermore, on this date even though the withdrawal rates are lower in the public treatment, in most cases the difference fails to be significant.[43] We also see that males and those who trust banks more are more likely to withdraw on date 1, *ceteris paribus*. The regressions corresponding to date 2 are very similar to the regressions with the pooled data. The coefficients are somewhat different, but when there is a significant effect in the pooled data, we observe it also with the same sign for date 2.

[43] Note that when an announcement and two withdrawals are observed, then withdrawal is the dominant strategy, so it is no surprise to see a significant effect in this case.

H The likelihood of bank runs and expected payoffs ***Online Appendix

H.1 Forming banks

We illustrate the idea of recombinant analysis for the baseline treatment with four subjects that play the roles of patient depositors in banks formed by three patient and an impatient depositor (simulated by the computer and denoted as I). Consider participants A, B, C and D who can either keep their money in the bank (k) or withdraw it (w). Moreover, they may decide when observing nothing, (k), (w), (2k), (2w), (kw), (2kw), (2wk) and (3w), where k stands for keeping the money deposited and w represents withdrawal and the number before each action indicates how many such actions are observed.

Suppose that the impatient depositor is the last to decide. We want to form all possible banks. Suppose that subject A is depositor 1. She does not observe anything so we take her decision when nothing is observed. Assume that she decides to keep her money in the bank, a decision that cannot be observed by subsequent depositors. Now suppose that participant B is depositor 2 and since the decision of depositor 1 cannot be observed, we see what depositor B does when observing nothing. Had participant A in the role of depositor 1 decided to withdraw, then we should have picked the decision of participant B upon observing a withdrawal. Depending on the decisions of participants A and B, participant C can observe nothing, (w) or (2w) and we record her decision upon observing the actual information set. Note that the information sets that emerge are based on the participants' actual decisions.

To ensure independent banks, we restrict the decision of each participant to appear in each bank only once. With four participants and the impatient depositor being in the last position we have the following banks: ABCI, ABDI, ACBI, ACDI, ADBI, ADCI, BACI, BADI, BCAI, BCDI, BDAI, BDCI, CABI, CADI, CBAI, CBDI, CDAI, CDBI, DABI, DACI, DBAI, DBCI, DCAI and DCBI. That is, we can form 4*3*2=24 banks. For now the impatient depositor is always the last to decide. However, since she may be at any position, the number of possible banks becomes 4*24=96.

We turn now to the experiment. We do not match subjects from different dates, as they may have been exposed to different conditions. To form banks we need to assign positions to the decisions, but our observations are based on information sets. We do this as follows: being in the first position is compatible only with observing nothing. Hence, we take a participant's decision in this information set as the first choice in this bank (depositor 1), and then see what another participant (depositor 2) does when observing what depositor 1 did: nothing if she kept the money in the bank, one withdrawal or one announcement. Then we take another depositor and see what she does when observing depositors 1 and 2. We do this for the four depositors that form a bank assigning the impatient depositor to any position with probability $\frac{1}{4}$. With 33 / 42 participants on date 1 / 2, we have 4*33*32*31=130,994 / 4*42*41*40=275,520 independent banks. Since the observable characteristics of the participants are not significantly different at the different dates, we combine the treatments from dates 1 and 2. That is, we pool together the independent banks and end up with 130,994+275,520=406,414 independent banks.

H.2 Expected payoffs

To calculate the expected payoffs corresponding to keeping the money in the bank / using announcements in any of the four information sets considered in Table 3 in Section 4 we proceed as follows. We consider all possible banks and first select (using dummies) from among them those in which the corresponding information set is observed at that position. For example, consider the case when nothing is observed. We take the first depositor in all banks and see what she observes. All depositors 1 (except of those who are impatient) observe nothing. Hence, they will be marked as observing this information set. Note that in a given bank more than one depositor may observe the same information set. For instance, if depositor 1 keeps the money in the bank without using announcements, then depositor 2 observes nothing. Once we have selected all depositors in any position that have the information set that we are interested in, we mark (again using dummies) those who keep the money in the bank / decide to use announcements. Next, we calculate the individual payoffs of these depositors given the decisions of all depositors in a given bank. Based on the individual payoffs we also calculate the total payoffs.

First, we restrict our attention to the four information sets without a dominant strategy (observing nothing; one withdrawal with no or one announcement; one announcement), in which a persuasive announcement may result in larger payoffs. Table 3 in Section 4 shows the expected individual and total payoffs from keeping the funds deposited both without and with making this public in these information sets. The total expected payoff is the sum of the four depositors' payoffs that form a bank. For instance, when nothing is observed, we calculate a participant's expected payoff for all cases in which she keeps the money in the bank without announcing this, and then, for the same cases when she announces this.

When considering individual payoffs, keeping the funds deposited (without announcement) always yields a larger payoff, indicating that in the experiment, it did not pay off individually to use announcements, as the cost of doing so was not compensated by the increase in payoff. However, the sum of all four depositors' payoffs is higher when announcements are used. The differences in the payoffs in some cases seem minor, yet due to the large number of observations and banks formed, all differences are significant at 0.01% according to the Wilcoxon ranksum test and the Kolmogorov-Smirnov test.

Next we analyze the distribution of payoffs, taking into account all information sets and decisions (including those with a dominant strategy). Figure 1 does not reveal a clear treatment effect regarding realized payoff. The average total payoff of the depositors in a bank in the baseline treatment is 382.09, and 380.17 in the public one.

Both the Kolmogorov-Smirnov and the Wilcoxon ranksum tests reject the hypothesis that the realized payoffs in the two treatments are equal (p-value < 0.01). Hence, in our experiments, depositors earn more in the baseline treatment.

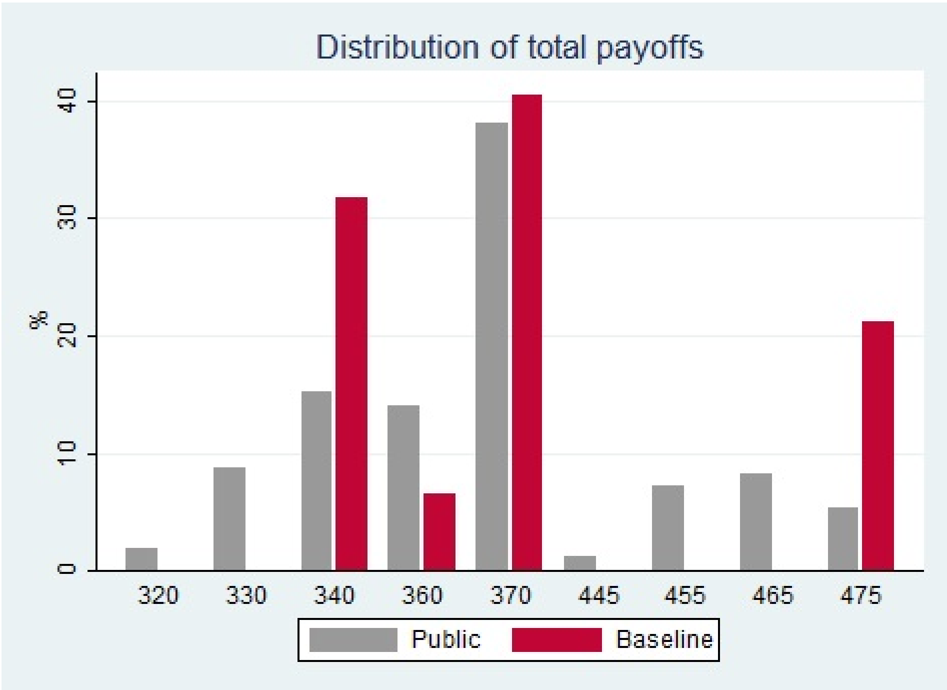

Fig. 1: Distribution of payoffs in the treatments

H.3 Bank runs

As has been previously explained, the use of announcements is closely related to the incidence of bank runs. In order to calculate the likelihood of bank runs in both treatments, we use again the banks generated with the recombinant method. A bank run occurs if, besides the impatient depositor, any of the patient ones withdraws her money. The higher the number of patient depositors who withdraw, the more severe the bank run is.

Considering all banks, in the baseline treatment, the frequency of no bank run is lower than in the public treatment (21.21% vs. 22.13%). The chi-square test indicates that this difference between treatments is statistically significant: the Wilcoxon ranksum test and the Kolmogorov-Smirnov test both yield p-values below 0.001. However, the economic relevance is debatable, as the difference in the frequency is less than 1 percentage point.

To explain the severity of bank runs, we study whether it varies with the implemented treatment. Table 11 depicts the corresponding data.

Table 11 shows that the frequency of bank runs of low severity (2 withdrawals) is lower in the public than in the baseline treatment, while for bank runs of high severity (3 or 4 withdrawals), the opposite holds. Using

Treatment	Bank runs of different severity		
	2 withdrawals	3 withdrawals	4 withdrawals
Baseline	40.24%	51.40%	8.36%
Public	33.20%	56.71%	10.09%

Table 11: Severity of bank runs

the chi-square test, we find a statistically significant relationship between treatment and the severity of bank runs (p-value < 0.001). If, for any number of withdrawals, we compare the frequencies of bank runs, we always find a statistically significant difference between treatments: carrying out the Wilcoxon ranksum test and the Kolmogorov-Smirnov test, we find always p-values smaller than 0.001.

We analyze next whether the position of the impatient depositor affects the probability and severity of bank runs. While theory is silent on who goes first to the bank, for policymakers it is relevant to know whether the probability of bank runs depends on the type vector: if any sequence of decisions is more likely to lead to bank runs, then decision makers should strive to implement measures that reduce its occurrence. Table 12 shows the probability of (no) bank runs according to the impatient depositor's position—the percentages add up to 100% in each column. For example, in the baseline treatment 11.25% of the no bank runs occurred when the impatient depositor was first in line.

Impatient depositor's position	Baseline treatment		Public treatment	
	No bank run	Bank run	No bank run	Bank run
1	11.25%	28.70%	14.15%	28.08%
2	18.11%	26.85%	21.02%	26.13%
3	28.18%	24.14%	29.43%	23.74%
4	42.46%	20.30%	35.40%	22.04%

Table 12: Probability of (no) bank run given the impatient depositor's position

We find that the impatient depositor's position systematically affects the occurrence of bank runs. In both treatments, bank runs are less likely the later the impatient depositor contacts the bank to withdraw.

For both treatments, the Wilcoxon ranksum and the Kolmogorov-Smirnov tests confirm at the 0.01% significance level that the likelihood of no bank run is higher as the position of the impatient depositor increases. The data also reveal that when the impatient depositor is not last in the queue, there are significantly fewer bank runs in the public than in the baseline treatment, while if she is in the last place, then the opposite holds. Again, the Wilcoxon ranksum and the Kolmogorov-Smirnov tests always yield p-values below 0.001.

This suggests that the order in which depositors make decisions affects the usefulness of the availability of announcements. It is more useful in environments in which impatient depositors are more likely to go to the bank early. This is intuitive because in these instances it is more important that other depositors observe that there are depositors who are opting to keep their money in the bank.